

APPENDIX

1

RESULTS OF DoD HUMAN RADIATION EXPERIMENT RECORDS SEARCH

On 15 January 1994, Executive Order (EO) 12891¹ identified human radiation experiments (HRE) in the following manner:

- (1) Experiments on individuals involving intentional exposure to ionizing radiation. This category does not include common and routine clinical practices, such as established diagnosis and treatment methods, involving incidental exposures to ionizing radiation.
- (2) Experiments involving intentional environmental releases of radiation that (a) were designed to test human health effects to ionizing radiation; or (b) were designed to test the extent of human exposure to ionizing radiation.

Using the definitions in the EO, the Department of Defense (DoD) established guidance to search its records. The search criteria had three components that a project had to satisfy to be considered a possible human radiation experiment: (1) there had to be human subject involvement, (2) there had to be an experimental component, and (3) radiation had to be involved in some way. During the records search, if there was doubt as to whether a record completely satisfied all three of these components, the guidance was to err on the side of inclusion. Dr. Harold P. Smith, Jr., Assistant to the Secretary of Defense (Atomic Energy), stated,

For the purpose of this initial identification of possible experiments, organizations submitting reports should err on the side of inclusion. Reported activities that are outside the scope of the records search can then be excluded prior to actual records retrieval.²

Many of the records identified were not experimental but concerned projects that used radiation only as an evaluation or diagnostic tool.

The determination of whether a procedure was experimental was often difficult to make. In its Final Report, The Advisory Committee on Human Radiation Experiments (ACHRE) concluded:

In a medical setting, it is sometimes hard to distinguish a formal experiment designed to test the effectiveness of a treatment from ordinary medical care in which the same treatment is being administered outside a research project. The patient receiving the treatment may discern no difference between the two.... Similarly, in an occupational setting in which employees are put at risk, it is often difficult to distinguish formal scientific efforts to study effects on the health of employees from routine monitoring of employees' exposure to hazards in the work place for the purposes of ensuring worker safety.³

The boundaries among medical, clinical, occupational, and experimental exposures are often blurred and difficult to precisely discern. In compiling the list of possible radiation experiments, the DoD was often faced with the same dilemma of trying to discern a true experiment from medical treatment. For this reason, the policy to err on the side of inclusion was implemented to ensure that every possible experiment was identified and received close scrutiny in evaluating its true intent.

Approximately 2,600 projects and studies were initially identified and reported to the Radiation Experiments Command Center (RECC) and the

ACRONYMS AND DEFINITIONS USED IN THIS CHAPTER

ACHRE	Advisory Committee on Human Radiation Experiments
AFMPC	Armed Forces Medical Policy Council
AFRRI	Armed Forces Radiobiology Research Institute
DHEW	Department of Health, Education, and Welfare
DSWA	Defense Special Weapons Agency
DNA	Defense Nuclear Agency [now DSWA]
DoD	Department of Defense
HRE	Human Radiation Experiment
RECC	Radiation Experiments Command Center

ACHRE by the DoD. These projects occurred between 1944 and 1994 and were provided by the Army, Navy, Air Force, Defense Special Weapons Agency (DSWA), and the Armed Forces Radiobiology Research Institute (AFRRI). This appendix is a listing of approximately 2,400 projects and studies sponsored or conducted by the DoD. This lower number is the result of eliminating studies that were proposed but not performed as well as duplicate submissions from the original 2,600.

The list is arranged in two parts. The first part lists projects that took place between 1944 and 1974, and the second section lists projects that occurred between 1975 and 1994. This division is consistent with the approach taken by the DoD and the other represented agencies of the Human Radiation Interagency Working Group to focus the investigation on HRE conducted before the establishment of the Federal “Common Rule” (see appendix 2). The basic principles of the Common Rule were adopted by the Department of Health, Education, and Welfare (DHEW) in 1974.

WHAT INFORMATION IS DISPLAYED

1944 – 1974

These years define the period on which the Interagency Working Group and ACHRE focused to

determine the degree of governmental involvement in HRE. Approximately 500 projects have been identified that occurred during these years. The list in this section is organized by the sponsoring or conducting service, the facility, organization or location name where the projects were conducted, the start date, the RECC identification number, the project title, a brief abstract drawn from available information relating to the experiment, and a list of

documents obtained by the services that pertain specifically to the experiment. In some instances, a document associated with the project will be identified as an “event profile.” This is a summary developed by the reporting service/agency from their own records to describe the project. In other instances, a document associated with the project will be identified as a “search printout.” This is the result of online database searches for journal articles and reports related to specific studies. In some of the 1944 – 1974 projects, the RECC was unable to compile a complete description. In these instances, a notation has been made in the project entry that if this information becomes available, it will be provided in volume 2 to this publication.

1975 – 1994

Approximately 1,900 projects were reported to the RECC for these years as possibly involving human use in ionizing radiation experiments. This number is greater than the actual number of experiments due to DoD’s policy to err on the side of inclusion. Included are duplicate reporting, clinical investigations and treatments, and other routine uses of radiation that, on later examination, were determined to be appropriate nonexperimental uses of radiation. As opposed to the 1944-1974 listing, there are no abstracts. There is only a topical

description of the projects. This is outside the original search period but the projects are included here in order to provide full accounting of all reports provided the ACHRE.

3. Advisory Committee on Human Radiation Experiments, Final Report (Washington, D.C.: U.S. Government Printing Office, October 1995), pp. 10–11.

HOW TO FIND A SPECIFIC PROJECT

The approximately 2,400 projects from 1944 to 1994 reported here are the result of an intensive review of documents in many archives, records centers, libraries, medical centers, and other records repositories. To assist in finding a specific project, the information is listed as follows:

1. Alphabetically by service or agency which sponsored the project
2. Then alphabetically by site name (facility, organization or location name)
3. Lastly, chronologically by year.

Please note: Some projects were sponsored by one service or agency but conducted at another service's facility. For example, the Air Force reported a project that it sponsored but which was conducted at the Walter Reed Army Medical Center. This project is listed in the Air Force section since it was an Air Force project. However, a person looking for this project would look, logically, in the Army section since it was held at an Army facility. However, it would not be there. For this reason, if the project you are searching for is not found in one service section, it is suggested you search all the other sections.

NOTES

(To obtain copies of the following documents, see appendix 2.)

1. Executive Order 12891, "Advisory Committee on Human Radiation Experiments," 15 January 1994, p. 2.
2. Memorandum from Harold P. Smith, Jr., Assistant to the Secretary of Defense (Atomic Energy), 31 January 1994, attachment "Specific Direction for Locating Records of DoD Human Radiation Experiments," p.3.

1944 – 1974 HUMAN RADIATION EXPERIMENTS, PROJECTS, STUDIES AS REPORTED BY THE SERVICES AND DoD ORGANIZATIONS

AIR FORCE 1944-1974

Antioch College, Yellow Springs, OH

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	AF0094	Sizing system for high altitude gloves

Abstract: From 1956 until a presently undetermined date, researchers from Antioch College in Yellow Springs, OH; Wright-Patterson Air Force Base in Dayton, OH; and Lockbourne Air Force Base, OH collected x-rays of both left and right hands to construct a database of hand measurements for sizing high-altitude gloves. Four hundred eleven male active duty military personnel from Wright-Patterson and Lockbourne Air Force bases and thirty-eight civilians participated in this study. Results of this study are not available at this time.

Documents: Authors: James T. Barter; Milton Alexander. Title: A Sizing System for High Altitude Gloves. Document Type: Report. Date: December 1956

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1962	AF0093	X-ray anthropometry of the hand

Abstract: In 1962, researchers from Antioch College in Yellow Springs, OH, analyzed x-rays of both left and right hands to construct a database of hand measurements. Existing x-rays from 253 male active duty military personnel from Wright-Patterson and Lockbourne Air Force bases (91 percent) and civilians were examined. This retrospective study used existing x-ray films and did not involve new radiation exposure.

Documents: Author: Joan Haskell Vicinus. Title: X-Ray Anthropometry of the Hand. Document Type: Report. Date: September 1962

Arctic Village, AK

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	AF0011	Thyroid activity in men exposed to cold using I-131

(For further information see Chapter 4—"Iodine-131 Study Conducted by the Arctic Aeromedical Laboratory.")

Documents: Title: Human Acclimatization and Adaptation to Arctic Cold; with attached personnel roster. Document Type: Report. Date: 18 November 1955

Authors: Kaare Rodahl, M.D., Director of Research; Gisle Bang, D.D.S., Department of Physiology. Title: Thyroid Activity in Men Exposed to Cold, Technical Report 57-36. Document Type: Report. Date: October 1957

AIR FORCE 1944-1974 (CONTINUED)

Arctic Village, AK (continued)

From: Ann B. Cox, Ph.D., Research Physiologist, Radiofrequency Radiation Division. To: Larry Farlow, HSC/PA.
 Subject: "Thyroid Activity in Men Exposed to Cold" (TR 57-36). Document Type: Memorandum. Date: 25 January 1994

Authors: National Research Council, Institute of Medicine. Title: The Arctic Aeromedical Laboratory's Thyroid Function Study: A Radiological Risk and Ethical Analysis. Document Type: Book. Date: 1996

Baylor University College of Medicine, Houston, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1954	AF0031	Changes in proteolytic and antiproteolytic activity of the blood serum in man and animals following x-rays

Abstract: From 1954 to a presently undetermined date, researchers from Baylor University College of Medicine in Houston, TX examined the effects of x-ray irradiation on serum proteolytic and anti-proteolytic activity. Thirty-six cancer patients participated in the study; eight received local x-rays, and twenty-eight received whole-body irradiation while participating in a study at MD Anderson Hospital for Cancer Research in Houston, TX. Results of this study are not available at this time.

Documents: From: USAF SAM 3J. To: Commanding General, Air Materiel Command, Wright-Patterson Air Force Base. Subject: Negotiation of Cost Reimbursement Contract (for Project 21-47-002). Document Type: Memorandum. Date: 1 September 1950

Authors: Kenneth L. Burdon, Ph.D.; Rufus K. Guthrie, M.S. Title: Changes in the Proteolytic and Antiproteolytic Activity of the Blood Serum in Man and Animals Following Exposure to X-Rays. Document Type: Report. Date: February 1954

Title: Abbreviated Progress Report: Dose Response Relationships Between Morphine and N-Allylnormorphine Under Varying Conditions. Document Type: Report. Date: 3 May 1956

Brooke Army Medical Center, Houston, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	AF0057	Identification and significance of parotid fluid corticosteroids: tritiated cortisol & aldosterone

Abstract: From a presently undetermined date until 1963, this study was conducted at the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX. Researchers established a method for measuring 17-hydroxycorticosterone (17-OHCS) in saliva from the parotid gland. This method permitted noninvasive continuous assessment of adrenal hormone levels during studies evaluating adrenal response to stress. Eleven research participants included active duty military personnel, pregnant women, DoD dependents, and patients. Radiation exposures are unavailable at this time. Intravenously administered cortisol was shown to appear in parotid fluid

AIR FORCE 1944 – 1974 (CONTINUED)

Brooke Army Medical Center, Houston, TX (continued)

rapidly, and parotid 17-OHCS levels were reliable indicators of adrenal function. Studies with a patient with Cushing's syndrome and others with underactive adrenals supported this conclusion. Despite a large rise in plasma 17-OHCS in the third trimester of pregnancy, there was only a small (though significant) rise in parotid fluid 17-OHCS. Chemical and radioisotopic techniques showed cortisone to be the major parotid fluid 17-OHCS. Radioactive aldosterone, estrogens, and androgens also appeared in parotid fluid after intravenous injection.

Documents: Authors: F. H. Katz, Capt., USAF, MC; I. L. Shannon, Maj., USAF, DC. Title: Identification and Significance of Parotid Fluid Corticosteroids. Document Type: Report. Date: 1963

David Grant Medical Center, Travis AFB, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	AF0006	Noninvasive assessment of coronary artery disease: myocardial imaging with rubidium-81 and the scintillation camera

Abstract: From 1972 to 1975, researchers from the David Grant Medical Center at Travis Air Force Base, CA investigated imaging techniques useful in identifying significant coronary artery disease. Noninvasive myocardial imaging studies using potassium-43 and/or rubidium-81 were done at rest and during exercise. Four hundred eleven patients participated. This technique was superior to other contemporaneous techniques in its sensitivity and specificity. Refinements in technique and changes in the radionuclide used improved the overall sensitivity to 90 percent. Radiation exposures are not available at this time.

Documents: Authors: Peter J. Hurley et al. Title: KCl: A New Radiopharmaceutical for Imaging the Heart. Journal: Journal of Nuclear Medicine. Document Type: Journal Article. Date: Unknown

Authors: J. S. Clark, Col., USAF, MC, Deputy Commander. Subject: Additional Information (forwarding protocol "The non-invasive assessment of coronary artery disease...Patency). Document Type: Memorandum. Date: 10 March 1971

Authors: Benjamin R. Baker, Col., USAF, MC, Deputy Director of Professional Services, Office of the Surgeon General. Subject: Clinical Investigation Proposal #389: The Noninvasive Assessment of Coronary Artery Disease. Document Type: Memorandum. Date: 22 March 1972

Author: Barry L. Zaret, Maj., USAF, MC. Title: Interim Report: Clinical Investigation Proposal #389: The Noninvasive Assessment of Coronary Artery Disease. Document Type: Report. Date: 12 June 1972

Author: George E. Reynolds, Brig. Gen., USAF, MC, Director of Professional Services, Office of the Surgeon General. Title: Clinical Investigation Proposal #389, Phase II. Document Type: Report; Memorandum. Date: 28 September 1972

From: J. N. Steelman, Capt., USAF, Chief, Accounting and Finance Branch. To: Accounting and Finance Office. Subject: Letter of Authority, Number 73-19. Document Type: Letter. Date: 27 October 1972

Author: George E. Reynolds, Brig. Gen., USAF, MC, Director of Professional Services, Office of the Surgeon General. Subject: Clinical Investigation Proposal #389: Noninvasive Assessment of Coronary Artery Disease. Document Type: Memorandum. Date: 30 January 1973

AIR FORCE 1944 – 1974 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

Author: Evan W. Schear, Col., USAF, MC, Commander. Title: Interim Report and Phase III Proposal: Clinical Investigation Proposal #389—Noninvasive Assessment of Coronary Artery Disease. Document Type: Report; Proposal. Date: 30 January 1973

Authors: Maj. Barry L. Zaret, USAF, MC et al. Title: Noninvasive Regional Myocardial Perfusion with Radioactive Potassium. Journal: The New England Journal of Medicine, vol. 288, issue 16. Document Type: Journal Article. Date: 19 April 1973

From: Clifford R. Pollock, Col., USAF, MC, Deputy Director of Professional Services, Office of the Surgeon General. To: MAC/SGPE. Subject: Amendment to AF Permit 2-0008(173). Document Type: Memorandum. Date: 30 April 1973

Title: MPI Myocardial Scintigraphin. Document Type: Report. Date: April 1973

Title: Request for Amendment to AF Permit, Rubidium 81 [includes reference articles and two cover memorandums]. Document Type: Memorandum; Journal Article. Date: April 1973

From: Neil D. Martin, Col., USAF, MC, Chief Nuclear Medicine To: SGHRR/3098. Subject: Proposal for Clinical Investigation [Noninvasive Assessment of Coronary Artery Disease: Myocardial Imaging with Rubidium-81 and the Scintillation Camera. Includes Protocol]. Document Type: Memorandum. Date: 16 July 1973

Authors: Maj. H. William Strauss, USAF, MC et al. Title: Noninvasive Evaluation of Regional Myocardial Perfusion with Potassium 43. Journal: Radiology, vol. 108. Document Type: Journal Article. Date: July 1973

Authors: [Illegible]. Title: Proposal for Clinical Investigation: "Noninvasive Assessment of Coronary Artery Disease and Noninvasive Assessment of Coronary Artery Disease: Myocardial Imaging with Rubidium-81 and the Scintillation Camera." Document Type: Proposal. Date: 1 August 1973

Title: Clinical Investigation Protocol Progress Reports. Document Type: Log; List. Date: 1 August 1973

Authors: Ronald L. McGowan, Col., USAF, MC, Director, Professional Education. Title: Interim Report: Clinical Investigation Proposal 389—Noninvasive Assessment of Coronary Artery Disease—30 July 73. Document Type: Report. Date: 2 August 1973

From: George E. Reynolds, Brig. Gen., USAF, MC, Director of Professional Services, Office of the Surgeon General. To: [Illegible]. Subject: Request for Investigational Use of Drugs. Document Type: Memorandum. Date: 10 September 1973

Authors: Barry L. Zaret, Maj., USAF, MC et al. Title: Potassium-43 Myocardial Perfusion Scanning for the Noninvasive Evaluation of Patients with False-Positive Exercise Tests. Journal: Circulation, vol. XLVIII. Document Type: Journal Article. Date: December 1973

Authors: Neil D. Martin, Col., USAF, MC, Chief, Nuclear Medicine. Title: Proposal for Clinical Investigation: Non-Invasive Assessment of Coronary Artery Disease: Myocardial Imaging with Rubidium 81 and the Scintillation Camera. Document Type: Proposal. Date: 1973

From: Vincent T. Penikas, Lt. Col., USAF, BSC, Secretary, USAF Radioisotope Committee. To: SGPR. Subject: Clinical Investigation Proposal No. 389: The Noninvasive Assessment of Coronary Artery Disease. Document Type: Letter. Date: 14 February 1974

From: George E. Reynolds, Brig. Gen., USAF, MC, Director of Professional Services, Office of the Surgeon General. To: SGPA. Subject: Clinical Investigation Proposal No. 389: The Noninvasive Assessment of Coronary Artery Disease. Document Type: Memorandum. Date: 1 March 1974

From: Evan W. Schear, Brig. Gen., USAF, MC, Commander. To: HQ USAF/SGPA. Subject: Clinical Investigation Proposal No. 389: The Noninvasive Assessment of Coronary Artery Disease [Memorandum with Funding Request and Interim Report.] Document Type: Memorandum. Date: 13 March 1974

94 Appendix 1—Records Search

AIR FORCE 1944 – 1974 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

Authors: Barry L. Zaret, Maj., USAF, MC et al. Title: Rest and Exercise Potassium-43 Myocardial Perfusion Imaging for the Noninvasive Evaluation of Aortocoronary Bypass Surgery. Journal: Circulation, vol. XLIX. Document Type: Journal Article. Date: April 1974

Authors: Col. Neil D. Martin, USAF, MC et al. Title: Rubidium-81: A New Myocardial Scanning Agent. Journal: Radiology, vol. 111. Document Type: Journal Article. Date: June 1974

Authors: Col. Neil D. Martin, USAF et al. Title: Myocardial Imaging Using 43K and the Gamma Camera. Journal: Radiology, vol. 112. Document Type: Journal Article. Date: August 1974

From: Ronald L. McGowan, Col., USAF, MC, Chief, Nuclear Medicine. To: SG. Subject: Interim Report on Clinical Investigation Proposals #389 and #499 and Proposal for Incorporation into an Integrated Project. Document Type: Memorandum. Date: 15 April 1975

From: Evan W. Shear, Brig. Gen., USAF, MC, Commander. To: HQ USAF/GGPR. Subject: Interim Report on Clinical Investigation Proposals # 389 and #499 and Proposal for Incorporation into an Integrated Project. Document Type: Memorandum. Date: 15 April 1975

Authors: Ronald L. McGowan, Col., USAF, MC; Neil D. Martin, Col., USAF, MC, Chief of Nuclear Medicine. Title: Interim Report in Phase V Proposal: Incorporated Clinical Investigation Proposals #389 and #499, Noninvasive Assessment of Coronary Artery Disease by Radioisotopic Techniques. Document Type: Report. Date: 28 April 1975

From: [Illegible]. To: [Illegible]. Subject: Clinical Investigation Proposal #389 and 499. Document Type: Memorandum. Date: 10 June 1975

Author: Ernest J. Clark, Brig. Gen., USAF, MC, Director of Professional Services, Office of the Surgeon General. Subject: Clinical Investigation Proposals #389 and #499. Document Type: Memorandum. Date: 10 June 1975

Title: Final Report on the Incorporated Clinical Investigation Proposals #389, Noninvasive Assessment of Coronary Artery Disease, and #499, Noninvasive Assessment of Coronary Artery Disease: Myocardial Imaging with Rubidium-81 and the Scintillation Camera. Document Type: Report. Date: 14 September 1976

Authors: Ronald L. McGowan, M.D. et al. Title: Noninvasive Myocardial Imaging with Potassium-43 and Rubidium-81 in Patients with Left Bundle Branch Block. Journal: The American Journal of Cardiology, vol. 38. Document Type: Journal Article. Date: October 1976

Author: Clifford R. Pollock, Col., USAF, MC, Deputy Director of Professional Services, Office of The Surgeon General. Title: Clinical Investigation Proposal #389, Phase IV, The Noninvasive Assessment of Coronary Artery Disease. Document Type: Memorandum. Date: Unknown

Author: Clifford R. Pollock, Col., USAF, MC, Deputy Director of Professional Services, Office of the Surgeon General. Subject: Clinical Investigation Proposal #499: Noninvasive Assessment of Coronary Artery Disease Myocardial Imaging with Rubidium 81 and Scintillation Camera. Document Type: Memorandum. Date: Unknown

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	AF0007	Effects of perhexiline maleate upon regional myocardial perfusion and extent of transient myocardial ischemia assessed by potassium-43
Abstract:		From 1973 to 1975 researchers at David Grant Medical Center at Travis Air Force Base, CA investigated the effectiveness of perhexiline maleate (a coronary vasodilator) in improving blood

AIR FORCE 1944 – 1974 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

flow to the heart muscle. Nine patients with myocardial ischemia, identified by performing myocardial perfusion scans, participated. Drug effects were assessed by monitoring exercise capacity on treadmill stress tests and measuring the extent of myocardial ischemia by potassium-43 perfusion scans. Perhexiline reduced the frequency of anginal episodes by at least 50 percent in six of the nine subjects.

Documents: Authors: Maj. Barry L. Zaret, USAF; Lt. Col. M.D. Flamm, Jr., USAF, MC; Col. Neil D. Martin, USAF, MC. Title: The Effects of Perhexiline Maleate upon Regional Myocardial Perfusion and the Extent of Transient Myocardial Ischemia as Assessed by Potassium-43 Myocardial Perfusion Imaging. Document Type: Proposal. Date: 7 February 1973

Authors: Maj. Barry L. Zaret, USAF et al. Title: Noninvasive Regional Myocardial Perfusion with Radioactive Potassium; Study of Patients at Rest, with Exercise and During Angina Pectoris. Journal: New England Journal of Medicine, vol. 288, issue 16. Document Type: Journal Article. Date: 19 April 1973

Authors: Maj. H. William Strauss, USAF, MC et al. Title: Noninvasive Regional Myocardial Perfusion with Potassium-43, Technique in Patients with Exercise Induced Transient Myocardial Ischemia. Journal: Radiology, vol. 108. Document Type: Journal Article. Date: July 1973

From: Brig. Gen. Evan W. Schear, USAF, MC, Commander. To: MAC/SG; HQAMD/RD. Subject: Proposal for Clinical Investigation: The Effects of Perhexiline Maleate upon Regional Myocardial Perfusion and the Extent of Transient Myocardial Ischemia as Assessed by Potassium-43 Myocardial Perfusion Imaging. Document Type: Memorandum. Date: 3 August 1973

Author: Maj. Barry L. Zaret, USAF. Title: Potassium-43 Myocardial Perfusion Scanning for the Noninvasive Evaluation of Patients with False-Positive Exercise Tests. Journal: Circulation, vol. XLVIII. Document Type: Journal Article. Date: December 1973

From: Lieutenant Col. Melvin D. Flamm, Jr., USAF, MC, Chief, Cardiology Section. To: SG. Subject: Proposal for Clinical Investigation: The Effects of Perhexiline Maleate upon Regional Myocardial Perfusion and the Extent of Transient Myocardial Ischemia as Assessed by Potassium-43 Myocardial Perfusion Imaging. Document Type: Memorandum. Date: 1973 est.

Authors: Maj. Barry L. Zaret, USAF et al. Title: Rest and Exercise Potassium-43 Myocardial Perfusion Imaging for the Noninvasive Evaluation of Aortocoronary Bypass Surgery. Journal: Circulation, vol. XLIX. Document Type: Journal Article. Date: April 1974

Authors: Col. Neil D. Martin, USAF, MC et al. Title: Rubidium-81: A New Myocardial Scanning Agent; Noninvasive Regional Myocardial Perfusion Scanning at Rest and Exercise and Comparison with Potassium-43. Journal: Radiology, vol. 111. Document Type: Journal Article. Date: June 1974

Authors: Col. Neil D. Martin, USAF, MC et al. Title: Myocardial Imaging Using K-43 and the Gamma Camera. Journal: Radiology, vol. 112. Document Type: Journal Article. Date: August 1974

From: Col. Clifford R. Pollock, USAF, MC, Deputy Director of Professional Services. To: Lieutenant Col. Carter. Subject: Approval of Clinical Investigation Proposal #500: The Effects of Perhexiline Maleate upon Regional Myocardial Perfusion and the Extent of Transient Myocardial Ischemia as Assessed by Potassium-43 Myocardial Perfusion Imaging. Document Type: Memorandum. Date: 25 September 1975

Authors: Maj. Stephen V. Savran, USAF, MC et al. Title: Clinical Research Report on the Effects of Perhexiline Maleate upon Regional Myocardial Perfusion and the Extent of Transient Myocardial Ischemia as Assessed by Potassium-43 Myocardial Perfusion Imaging [includes forwarding memorandum]. Document Type: Report. Date: September 1975

AIR FORCE 1944 – 1974 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

Authors: Ronald L. McGowan, M.D., FACC; Thomas G. Welch, M.D., FACC; Barry L. Zaret, M.D., FACC; Andrew L. Bryson, M.D.; Neil D. Martin, M.D.; M. D. Flamm, M.D., FACC. Title: Noninvasive Myocardial Imaging with Potassium-43 and Rubidium-81 in Patients with Left Bundle Branch Block. Journal: The American Journal of Cardiology, vol. 38. Document Type: Journal Article. Date: October 1976

From: Monica Easley, Research Protocol Manager; Meade Pimsler, Maj., USAF, BSC, Acting Director, Clinical Investigation Facility. To: HQ AFMOA/SGPT. Subject: Advisory Committee on Human Radiation Experimentation [search for protocols before 1974 at the Clinical Investigation Facility]. Document Type: Memorandum. Date: 19 October 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	AF0005	Tumor localization using gallium-67 citrate

Abstract: From 1974 to 1976, researchers at the David Grant Medical Center at Travis Air Force Base, CA evaluated gallium-67 (Ga-67) citrate as a tumor imaging technique for cancer diagnosis. Sixty-seven cancer patients participated. Ga-67 citrate was used to reveal the extent of cancer, to determine the effectiveness of different chemotherapeutic agents, and to identify infection and abscess formation. No adverse reactions were noted. Ga-67 was approved as a drug for abscess and tumor imaging studies.

Documents: Author: Monte D. Miller, Col., USAF, MC. Title: Clinical Investigation of Gallium 67. Document Type: Proposal. Date: 16 October 1974

From: Ernest J. Clark. To: Capt. Wood. Subject: Change in Research Protocol. Document Type: Memorandum. Date: 20 October 1974

Author: Clifford Pollock, Col., USAF, MC. Title: Clinical Investigations Proposal #575: Tumor Localization Using Gallium 67. Document Type: Proposal. Date: 12 December 1974

Author: Monte D. Miller, Col., USAF, MC, Commander. Title: Progress Report on Clinical Investigation Proposal #575. Document Type: Report. Date: 1975

Author: Darryl T. Manland. Title: Change in Research Protocol. Document Type: Protocol. Date: 17 September 1976

Title: Final Close-out Summary of Clinical Investigation Proposal #575. Document Type: Report. Date: 1976

Eye Research Foundation of Bethesda, Bethesda, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	AF0043	Threshold for permanent functional and morphological visible damage in humans

Abstract: From 1969 to 1970 researchers from the Eye Research Foundation in Bethesda, MD and Walter Reed General Hospital in Washington, DC studied the effects of high-intensity light on the retina. Exposure to a xenon arc lamp, which provided a source of simulated solar radiation, was used to assess the energy density required to produce retinal burns visible with an ophthalmoscope.

AIR FORCE 1944 – 1974 (CONTINUED)

Eye Research Foundation of Bethesda, Bethesda, MD (continued)

Six patients who were having surgery to remove an eye for intraocular tumors participated in the study. Exposure to the xenon arc lamp lasted between 0.25 and 1.5 seconds. The thresholds for retinal burns for brown-eyed and blue-eyed patients were significantly different. Threshold burn data from the four brown-eyed patients seemed to fit one curve, while the data from the two blue-eyed patients showed that they both had a much higher burn threshold. Because burn thresholds are dependent on the degree of pigmentation of the RPE, this may suggest that iris color is an indicator of the degrees of RPE pigmentation.

Documents: Authors: Stephen Elgin, M.D.; David O. Robbins, Ph.D.; Carl R. Cavonius, Ph.D. Title: Threshold for Permanent Functional and Morphological Vision Damage in Human Retina Using Visible Radiation. Document Type: Report. Date: May 1971

Fort Sam Houston, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	AF0098	Effects of staging on the acute adaptation to high terrestrial elevations

Abstract: From 1973 until a presently undetermined date, researchers from the School of Aerospace Medicine in Colorado Springs, CO investigated methods of pretreatment for acute mountain sickness (AMS) at Fort Sam Houston in San Antonio, TX and Pikes Peak in Colorado Springs, CO. Sixty active duty military participants were staged at intermediate elevations before final ascent. Researchers also examined the development of AMS during short-term exposures in a hypobaric chamber. Chest x-rays were taken. Radiation exposures and results of this study are not available at this time.

Documents: Title: Effects of Staging on the Acute Adaptation to High Terrestrial Elevations. Document Type: Report. Date: 1973 est.

Frenchay Hospital, Bristol, England

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	AF0079	Clinical study of gastroesophageal reflux

Abstract: From 1966 to 1967, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX measured the backward flow of stomach and duodenal contents into the esophagus in an attempt to understand the normal and abnormal function of the gastroesophageal junction and remedy abnormal physiology. One hundred fifty patients from Frenchay Hospital in Bristol, England and Massachusetts General Hospital in Boston, MA, in addition to twenty-five patients from the USAF School of Aerospace Medicine and Wilford Hall USAF Hospital participated in this study. Intermittent fluoroscopy with x-ray exposures of less than two minutes (well within the safe limits) were used to observe nasogastric tube positioning.

AIR FORCE 1944 – 1974 (CONTINUED)

Frenchay Hospital, Bristol, England (continued)

Researchers felt that the best surgical principles for the restoration of the physiology of the gastroesophageal region included placement of an adequate length of lower esophagus in an intra-abdominal position and anchoring it, creating a gastroesophageal flap valve by making an exaggerated angle and restoring close approximation of the diaphragm to the lower esophagus.

Documents: Authors: Capt. David B. Skinner; Maj. Thomas F. Camp, Jr.; Capt. Donald J. Booth. Title: Evaluation and Treatment of Gastroesophageal Reflux. Document Type: Report. Date: 12 March 1968

Hospital Saint-Louis, Paris, France

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	AF0107	Control of secondary syndrome following whole-body irradiation treatment with bone marrow

Abstract: From 1964 until 1968 researchers from the Hospital Saint-Louis, Paris, France investigated secondary syndrome in mice and man to understand its mechanism and to develop preventive methodologies. During the study, twenty-four leukemic patients were administered bone marrow transfusion following irradiation exposure. All patients were suffering from acute lymphoblastic leukemia, some were in remission, others were in a visible phase. Patients were totally irradiated using cobalt-60, the first six patients with a source of 1,800 curies delivering three to four rads per minute, and others by two sources (3,000 or 4,000 curies) delivering between five and six rads per minute. The total dose was fractionated in two equal sessions separated by twenty-four hours. In seventeen cases, a viable bone marrow graft was demonstrated and seven cases did not show graft survival. Although all patients eventually died from leukemia and associated bacteriological or viral complications, investigators felt that the research did effectively demonstrate the effects on the use of immunosuppressive drugs and that the findings had definitive application in the field of organ transplantation.

Documents: Authors: L. Schwarzenberg; G. Mathe; J. De Grouchy; C. De Nava; M. J. De Vries; J. L. Amiel; A. Cattani; M. Schneider; J. R. Schlumberger. Title: White blood cell transfusions. Journal: Israel Journal of Medical Sciences, vol. 1, issue 5. Document Type: Journal Article. Document Date: September 1963

From: Georges Mathe, Director, Center for Cancerological and Radiopathological Research; Claude-Bernard Association To: European Office, Aerospace Research, US Air Force. Subject: Possibilities of control of the secondary syndrome complicating bone marrow transplantation for the treatment of whole-body irradiation. Document Type: Memorandum; Proposal. Document Date: 30 October 1963

Authors: G. Mathe. Title: Control of secondary syndrome following whole body irradiation treatment with bone marrow transplants (Progress report for period 01 - 31 July 1964). Document Type: Report. Document Date: August 1964

Authors: G. Mathe. Title: Control of secondary syndrome following whole body irradiation treatment with bone marrow transplants (Progress report for period 1 August 1964 - 31 December 1964). Document Type: Report. Document Date: 1964

Authors: G. Mathe. Title: Control of secondary syndrome following whole body irradiation treatment with bone marrow transplants (Annual summary report for period 1 July 1964 - 30 June 1965). Document Type: Report. Document Date: 31 July 1965

AIR FORCE 1944 – 1974 (CONTINUED)

Hospital Saint-Louis, Paris, France (continued)

Authors: G. Mathe. Title: Control of secondary syndrome following whole body irradiation treatment with bone marrow transplants. Document Type: Report. Document Date: 31 July 1965

Authors: G. Mathe; L. Schwarzenberg; M. J. De Vries; J. L. Amiel; A. Cattani; M. Schneider; J. L. Binet; M. Tubiana; C. Lalanne; V. Schwarzmann; R. Nordmann. Title: Les divers aspects du syndrome secondaire compliquant les transfusions allogéniques de moelle osseuse ou de leucocytes chez des sujets atteints d'hémopathies malignes: Journal: European Journal of Cancer, vol. 1. Document Type: Journal Article. Document Date: 1965

From: George S. Melville, Jr., Major, US Air Force, Chief, Modification Effects Unit To: SMBRX (Anderson); SMBR (Lieutenant Colonel Ballinger); SMB; SMSPP. Subject: Monitoring trip, contract AF61(052)816 (12 August 1964 trip report attached). Document Type: Report; Memorandum. Document Date: 26 July 1966

Authors: G. Mathe. Title: Control of secondary syndrome following whole body irradiation treatment with bone marrow transplants (Progress report for period 1 July 1965 - 30 June 1966). Document Type: Report. Document Date: 31 July 1966

Title: Summary of the work accomplished during the period of the report. Document Type: Report; Excerpt. Document Date: 1966 est

Authors: G. Mathe. Title: Control of secondary syndrome following whole body irradiation treatment with bone marrow transplants (Progress report for period 01 July 1966 - 31 December 1966). Document Type: Report. Document Date: 31 January 1967

Authors: G. Mathe. Title: Control of secondary syndrome following whole body irradiation treatment with immuno depressive substances (Progress report number 5). Document Type: Report. Document Date: 31 July 1967

Title: Progress report on study of secondary syndrome in human leukemia patients following total body irradiation (report period March 1965 - November 1967). Document Type: Report; Form. Document Date: 1967

Authors: G. Mathe. Title: Control of secondary syndrome following whole body irradiation treatment with immuno depressive substances (Final report, July 1968). Document Type: Report. Document Date: 31 July 1968

Title: Final report for completion of study on secondary syndrome and bone marrow transplantation in whole-body irradiation. Document Type: Report. Document Date: 07 October 1968

From: Donald R. Anderson, Contract Monitor To: SMSG, Attn: Ms. Reynolds. Subject: Completion of contract AF61(052)-816 to investigate in mice and human leukemia patients the secondary syndrome and its mechanisms in order to develop preventative methodologies. Document Type: Memorandum. Document Date: 30 October 1968

Title: Research and technology work unit summary: Final summary report for, "Control of secondary syndrome following whole body irradiation treatment with bone marrow". Document Type: Report. Document Date: 20 November 1968

Hospital Saint-Pierre, Brussels, Belgium

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1963	AF0109	The influence of acute exposure to cold on the thyroid function

Abstract: From 1963 to 1966, the Arctic Aero-Medical Laboratory in conjunction with the Air Force European Office of Aerospace Research sponsored the Department of Medicine and the Laboratory of Experimental Medicine at the University Libre de Bruxelles in Brussels, Belgium in a study of the influence of cold on thyroid uptake of radioactive iodine. Twelve male research participants from the faculty and staff at Hospital Saint-Pierre in Brussels took part in the study.

AIR FORCE 1944 – 1974 (CONTINUED)

Hospital Saint-Pierre, Brussels, Belgium (continued)

Fifty microcuries of iodine-125 or iodine-131 were administered. Organic iodine metabolism was evaluated and the effect of thyroid stimulating hormone on iodine metabolism was studied. Data were interpreted based on a new model of thyroid iodine metabolism. The most sensitive index for the detection of minimal thyroid stimulation was chosen.

Documents: Authors: A. M. Ermans; M. Camus. Title: Final report for Contract AF 61 (052-714): Research concerning the influence of acute exposure to cold on the thyroid function. Document Type: Report; Excerpt. Document Date: 15 February 1966

Keesler AFB Medical Center, MS

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	81MG008	Cisternography using ytterbium (Yb-169) DTPA (pentetate trisodium calcium Yb-169)

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	AF0008	Cisternography using ytterbium (Yb-169) DTPA

Abstract: From 1974 to 1976, researchers from the Keesler Medical Center at Keesler Air Force Base, MS evaluated ytterbium-169 pentetic acid (Yb-169 DTPA) for imaging cerebrospinal fluid-filled spaces. Six patients participated. Yb-169 DTPA was administered by intraspinal lumbar injection in the smallest reasonable dose possible (0.5 to 2.0 millicuries) consistent with the greatest value in terms of relevant diagnostic information for the patients. The isotope is absorbed into the blood from cerebrospinal fluid and excreted in urine.

Documents: From: Stephen J. Rudolph, Jr., Col., USAF, MC, Chairman, Clinical Radioisotope Committee. To: ATC/SG, HQ USAF/SGPR, HQ AFLC/SGPR. Subject: Investigative Proposal and Amendment of AEC By-Product Material License. Document Type: Memorandum. Date: 1 February 1974

Title: Appendix A—Plan of Investigation: Describing a Clinical Evaluation of Ytterbium (Yb-169) DTPA for Cisternography. Document Type: Protocol. Date: February 1974

From: Clifford R. Pollock, Col., USAF, MC, Deputy Director of Professional Services, Office of the Surgeon General. To: USAF Medical Center Keesler/SG. Subject: Clinical Investigation Proposal #542: Cisternography Using Ytterbium (Yb-169) DTPA (Pentetate Trisodium Calcium Yb-169). Document Type: Memorandum. Date: 8 April 1974

From: Thomas E. Schwark, Lt. Col., USAF, MC, Director, Professional and Technical Education. To: HQ USAF/SGPR. Subject: Progress Report—Clinical Investigation Proposal No. 542: Cisternography Using Ytterbium (Yb-169) DTPA (Pentetate Trisodium Calcium Yb-169). Document Type: Memorandum. Date: 7 August 1974

From: D. Glenn Pennington, Lt. Col., USAF, MC, Chief, Clinical Research Laboratory. To: Dr. McIndoe, Dept. of Nuclear Medicine. Subject: Six Month Progress Reports on Clinical Investigations. Document Type: Memorandum. Date: 9 June 1975

AIR FORCE 1944 – 1974 (CONTINUED)

Keesler AFB Medical Center, MS (continued)

From: Thomas E. Schwark, Lt. Col., USAF, MC, Director, Professional and Technical Education. To: HQ USAF/SGPR. Subject: Final Report—Clinical Investigation No. 542: Cisternography Using Ytterbium (Yb-169) DTPA (Pentetate Trisodium Calcium Yb-169). Document Type: Memorandum. Date: 23 January 1976

Author: Theodore F. Bolles, Ph.D., Manager, Nuclear Medical Laboratory, New Health Care Enterprises Dept., 3-M Company. Title: Letter to the Editors: Suitability of Yb-169 DTPA for Cisternography. Journal: Seminars in Nuclear Medicine, vol. VII, no. 2. Document Type: Journal Article. Date: April 1977

Title: Cisternography Using Ytterbium-169 (Yb-169) DTPA, SGO #542. Document Type: Event Profile. Date: 1994

Kelly AFB, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	AF0012	Pulmonary blood flow and ventilation distribution during weightlessness

Abstract: From 1967 to 1969, researchers from the School of Aerospace Medicine at Brooks Air Force Base and Kelly Air Force Base in San Antonio, TX studied blood flow and air movement in the lungs during weightlessness. This study contributed to the knowledge of physiological changes occurring during space flight. Ten active duty military personnel with F-100F aircraft experience participated. Xenon-133 was used to detect changes in blood flow and ventilation. The calculated radiation dose to the lungs was 6.47 millirems while the whole body dose was 0.256 millirem.

Documents: Author: D. H. Glaister. Title: Regional Ventilation and Perfusion in the Lung During Positive Acceleration Measured with Xe-133. Journal: Proceedings of the Physiological Society. Document Type: Journal Article. Date: 18 - 19 December 1964

From: James D. Rogge, Capt., USAF, MC, Acceleration Section, Biodynamics Branch. To: SMBDA/Maj. Brown, SMBD/Dr. Leverett, SMBS/Col. Davis. Subject: Submission of Experimental Protocol. Document Type: Memorandum. Date: 8 September 1967

From: James D. Rogge, Capt., USAF, MC, Acceleration Section, Biodynamics Branch. To: SMBS/Col. Davis. Subject: Protocol of Experiments Involving Human Volunteers: Pulmonary Blood Flow and Ventilation Distribution During Weightlessness. Document Type: Protocol. Date: 8 September 1967

From: James D. Rogge, Capt., USAF, MC. To: SMBS/Col. Davis. Subject: Addendum to Proposal. Document Type: Memorandum. Date: 1967

Authors: Capt. Anthony R. Dowell; Capt. Spencer Shropshire, Jr.; Michael McCally, M.D. Title: Ventilation and Pulmonary Gas Exchange During Headward (+Gz) Gradient Acceleration. Journal: Aerospace Medicine, vol. 39, issue 9. Document Type: Journal Article. Date: September 1968

Authors: Anthony R. Dowell et al. Title: Effect of Lower Body Negative Pressure upon Pulmonary Ventilation and Perfusion as Measured Using Xenon-133. Journal: Aerospace Medicine, vol. 40, issue 6. Document Type: Journal Article. Date: June 1969

Author: David H. Glaister. Title: Distribution of Pulmonary Blood Flow and Ventilation During Forward (+Gz) Acceleration. Journal: Journal of Applied Physiology, vol. 29, no. 4. Document Type: Journal Article. Date: October 1970

Authors: Edward D. Michaelson; Marvin A. Sackner; Robert L. Johnson, Jr. Title: Vertical Distributions of Pulmonary Diffusing Capacity and Capillary Blood Flow in Man. Journal: The Journal of Clinical Investigation, vol. 52, issue 2. Document Type: Journal Article. Date: February 1973

102 Appendix 1—Records Search

AIR FORCE 1944 – 1974 (CONTINUED)

Lackland AFB, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	AF0079	Clinical study of gastroesophageal reflux

(For abstract and documentation see Frenchay Hospital, Bristol, England.)

Ladd AFB, AK

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	AF0011	Thyroid activity in men exposed to cold using I-131

(For further information see Chapter 4—“Iodine-131 Study Conducted by the Arctic Aeromedical Laboratory.”)

(For abstract and documentation see Arctic Village, AK.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	AF0115	The metabolic and body temperature response of men exposed to an acute cold stress before and following an arctic bivouac

Abstract: From a presently undetermined date until 1958, researchers from the Arctic Aeromedical Laboratory at Ladd Air Force Base studied the metabolism and body temperatures of subjects during a standardized cold test before and after a twenty-four day arctic winter bivouac to determine if any changes that took place could be attributed to living in a cold environment. Six volunteers from among Ladd AFB personnel participated. Researchers studied body heat debt, total body heat loss, tissue and environmental insulation, and the vascular reactivity of certain skin areas. Basal metabolism and thyroid function using iodine-131 (I-131) uptake were also determined in each subject before and after the bivouac exposure. Thyroidal uptake was measured six, twelve, twenty-four, and forty-eight hours after ingestion of a capsule of fifteen microcuries of carrier-free I-131. Following the field exercise, a capsule of ten microcuries of I-131 was administered. Urinary elimination of I-131 was determined at the same intervals as uptake, by comparing the activity of a prepared urine sample with a standard solution of I-131 in a well-type scintillation counter. In addition, protein-bound I-131 was determined using a venous blood sample drawn twenty-four hours after I-131 ingestion. No significant change in basal metabolism or I-131 uptake was noted in any subject following the field exposure. Overall, no evidence was found for any generalized acclimatization involving altered metabolism.

Documents: Authors: Donald W. Rennie; Thomas Adams, First Lieutenant, USAF, Department of Physiology, Arctic Aeromedical Laboratory. Title: Arctic Aeromedical Laboratory: The Metabolic and Body Temperature Response of Men Exposed to an Acute Cold Stress Before and Following an Arctic Bivouac, Technical Report 57-37. Document Type: Report. Date: July 1958

AIR FORCE 1944 – 1974 (CONTINUED)

Lockbourne AFB, OH

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	AF0094	Sizing system for high altitude gloves

(For abstract and documentation see Antioch College, Yellow Springs, OH.)

Malcolm Grow Medical Center, Andrews AFB, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	AF0090	NEN gallium-67 citrate for intravenous administration

Abstract: In 1973, researchers from the Malcolm Grow Medical Center at Andrews Air Force Base, MD, proposed to evaluate New England Nuclear gallium-67 (Ga-67) citrate for clinical use. Researchers planned to use Ga-67 citrate for tumor localization, and in localizing abscesses and other areas of inflammation and infection. The proposal called for 100 patients with suspected bronchial, thyroid, gastric, or other carcinomas; metastases of unknown primary tumors; Hodgkin's disease; infections; or inflammations. Ga-67 citrate isotonic solution was to be administered intravenously, 2.0 to 5.0 millicuries per subject. The solution was to contain 2.0 millicuries per milliliter of activity, 2.0 milligrams per milliliter sodium citrate, and isotonic saline. Whole body dosimetry was estimated to be 0.69 rad per 3.0 millicurie dose. Results of this study are not available at this time.

Documents: From: Col. Clifford R. Pollock. To: Lt. Col. Carter. Subject: Request for Use of an Investigational New Drug. Document Type: Memorandum. Date: 1 October 1973

Massachusetts General Hospital, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	AF0079	Clinical study of gastroesophageal reflux

(For abstract and documentation see Frenchay Hospital, Bristol, England.)

Pikes Peak, Colorado Springs, CO

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	AF0098	Effects of staging on the acute adaptation to high terrestrial elevations

(For abstract and documentation see Fort Sam Houston, TX.)

AIR FORCE 1944 – 1974 (CONTINUED)

Randolph Air Force Base, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1953	AF0113	Study of orthodontic procedures in relation to aircrew effectiveness and oral health

Abstract: From 1953 until 1954, researchers from Randolph AFB, Randolph Field, TX studied orthodontic procedures in relation to aircrew effectiveness and the oral health of Air Force personnel. Investigators thought that the impairment of aircrew effectiveness, caused by poor fitting dental appliances, could be minimized through treatment by an orthodontist. Early orthodontic intervention was believed to curb the need for restorative appliances which often were an irritating distraction to flying servicemembers. An extensive survey of Randolph AFB military personnel resulted in the identification of seventy-two cases of dental problems which were possibly amenable to orthodontic treatment. Of these cases, twenty were crew members. Poor oral hygiene was a disqualifying factor for participation in this study. Cases were to be followed for approximately one year. Each case began with a full mouth x-ray, cephalometric head x-ray, cephalometric photographs, intraoral photographs, and casts. Of the seventy-two identified cases, approximately five cases of adjunct treatment by orthodontic measures were instituted in conjunction with operative and prosthodontic treatment and another two cases were treated by orthodontia eliminating the necessity of prosthodontic replacements. In conjunction with Dental Sciences Division, USAF School of Aviation Medicine, cephalometric measurements were made on several cases involving painful disturbances of the temporomandibular joint and excessively closed mandibular relationship. Each case was x-rayed and photographed pre and postoperatively, but was not subsequently followed. This study was ultimately terminated due to separation from the service of the principal investigator.

Documents: From: Paul W. Greiwe, Captain, US Air Force Dental Corps To: Commandant, Air Force School of Aviation Medicine. Subject: Report of clinical research project "A study of orthodontic procedures in relation to aircrew effectiveness and oral health of Air Force personnel". Document Type: Report; Memorandum. Document Date: 05 November 1953

From: Melvin G. West, Captain, US Air Force, Adjutant; John R. McGraw, Colonel, US Air Force, Deputy Commandant To: Commandant, School of Aviation Medicine, Randolph Air Force Base. Subject: Termination of project "Study of orthodontic procedures in relation to aircrew effectiveness and oral health". Document Type: Memorandum. Document Date: 19 August 1954

Subject: "Study of orthodontic procedures in relation to aircrew effectiveness and oral health", research and development project card [project termination]. Document Type: Report. Document Date: 15 September 1954

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	AF0114	[Lovelace] Laminography in otolaryngology

Abstract: From 1954 until 1957, researchers from Randolph AFB, Randolph Field, TX examined laminography as an effective eustachian tube visualization tool for use in the treatment of middle ear ventilation inadequacy. It is unclear whether any human subjects were involved in this study or if there was radiation exposure during participation. As aerotitis media affected many flight personnel and contributed to a significant number of man-flying days lost, investigators realized the importance of developing a refined technique for the qualitative and quantitative assessment of eustachian tube

AIR FORCE 1944 – 1974 (CONTINUED)

Randolph Air Force Base, TX (continued)

function. Researchers aimed to develop general physical and mathematical theory for laminographic technique and to apply the principles in clinical situations. Mathematical analyses of the blurring and magnification effects in various laminar settings were tabulated. Researchers had planned verification of the analyses in models, and subsequent application to techniques in picturing and measuring the eustachian canal, but this part of the study was not completed.

Documents: From: Allen F. Strehler, Headmaster, Department of Mathematics To: Commandant, Air Force School of Aviation Medicine, Randolph Air Force Base. Subject: Contract AF 18(600)-637 entitled "Laminography in otolaryngology" (mathematical models of laminography). Document Type: Letter. Document Date: 14 May 1954

Title: The use of laminography in otolaryngology. Document Type: Proposal. Document Date: 1954

Title: "Laminography in otolaryngology" - research and development project card (project termination). Document Type: Report. Document Date: 08 January 1957

School of Aerospace Medicine, Brooks AFB, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1961	AF0029	Reliable extrapolation of indicator-dilution curves without replotting

Abstract: From 1961 to 1963 researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX established a standard method for calculating cardiac output using indicator-dilution curves. The dilution of a radioactive tracer served as the indicator of cardiac output. Mathematical analysis of tracer dilutions created a series of indicator-dilution curves, which were used as standards for estimations in future analyses. Nineteen active duty military personnel participated. Each participant was intravenously administered 10 to 20 microcuries of radioisotope dilution containing iodine-131 labeled human albumin. The calculated total-body exposure was 10 to 20 millirems per administration.

Documents: Authors: R. J. Gorten; H. M. Hughes. Title: Reliable Extrapolation of Indicator-Dilution Curves without Replotting. Journal: American Heart Journal, vol. 67, issue 3. Document Type: Journal Article. Date: March 1964

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	AF0059	Cardiovascular deconditioning from space cabin confinement

Abstract: In 1964, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, assessed the influence of weightlessness on circulatory system changes in blood volume after cardiovascular deconditioning using established radioactive tracer dilution techniques. Cardiovascular deconditioning is a change in circulatory function after prolonged periods of weightlessness that results in water loss and decreased blood volume. This study contributed to the knowledge of physiological changes occurring during manned space flight. Deconditioning was produced by two weeks of space cabin simulator confinement for twenty-six subjects and thirty day confinement for ten subjects. Of the thirty-six active duty military personnel who participated, only 17 received radioactive tracer injections. Iodine-131 labeled

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

human albumin in two injections containing 5 microcuries of activity was used for the tracer. The total-body exposure per injection was 5 millirem. Researchers noted cardiovascular deconditioning similar to changes noted during bed rest and other immobilization studies.

Documents: Authors: Lawrence E. Lamb, M.D. et al. Title: Cardiovascular Deconditioning from Space Cabin Simulator Confinement. Journal: Aerospace Medicine, vol. 35, issue 5, pp. 420–428. Document Type: Journal Article. Date: May 1964

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	AF0060	Cardiovascular deconditioning during chair rest

Abstract: In 1964, researchers at the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, assessed changes in circulatory dynamics, including cardiovascular deconditioning, following a period of inactivity. Cardiovascular deconditioning is a change in circulatory function after prolonged periods of weightlessness that results in water loss and decreased blood volume. Subjects were studied in a simple experiment using strict chair rest with immobilization as a means of achieving inactivity. Six active duty military personnel participated. Blood volume was assessed using iodine-131 labeled human albumin in two administrations of 5 microcuries as a tracer. The expected total-body exposure per administration was 5 millirem. This study contributed to the knowledge of physiological changes occurring during manned space flight. Physical inactivity was shown to cause adverse changes in circulatory dynamics leading to syncopal reactions or circulatory collapse.

Documents: Authors: Lawrence E. Lamb, M.D.; Robert L. Johnson; Paul M. Stevens. Title: Cardiovascular Deconditioning During Chair Rest. Journal: Aerospace Medicine, vol. 35, issue 7, pp. 646-649. Document Type: Journal Article. Date: July 1964

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	AF0061	Effects of four weeks of absolute bed rest on circulatory function in man

Abstract: In 1964, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX studied various effects of four weeks of absolute bed rest on the circulatory system. Six active duty military personnel participated. Blood volume studies and tilt table tests were performed. Iodine-131 labeled human albumin in two injections containing 5 microcuries of activity was used as a tracer. The expected total-body exposure per injection was 5 millirem. The studies suggested that postural tolerance after landing from a thirty-day flight in the Manned Orbiting Laboratory may vary widely among different individuals. Researchers also suggested that an antigravity garment would aid in alleviating some of the effects of prolonged space flight.

Documents: Authors: P. B. Miller; R. L. John; L. E. Lamb. Title: Effects of Four Weeks of Absolute Bed Rest on Circulatory Function in Man. Journal: Aerospace Medicine, vol. 35, issue 12. Document Type: Journal Article. Date: December 1964

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	AF0062	Hypokinesia secondary to chair rest from 4 to 10 days

Abstract: In 1965, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, assessed changes in blood volume and red cell mass after cardiovascular

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

deconditioning using established radioactive tracer dilution techniques. Cardiovascular deconditioning is a change in circulatory function after prolonged periods of weightlessness that results in water loss and decreased blood volume. This study contributed to the knowledge of physiological changes occurring during space flight. Twenty-three active duty military personnel participated. Deconditioning was produced by chair rest for periods of four, six, eight, and ten days. Iodine-131 labeled albumin in two administrations containing 5 microcuries of activity was used for the tracer. The total-body dose per administration was 5 millirem. Overall, researchers inferred that deconditioning during manned space flight may be influenced by confinement with restricted body movement, independent of the effects of weightlessness.

Documents: Title: Hypokinesia Secondary to Chair Rest From 4–10 Days. Document Type: Report; Form. Date: August 1965

Authors: L. E. Lamb; P. M. Stevens; R. L. Johnson. Title: Hypokinesia Secondary to Chair Rest from 4 to 10 Days. Journal: Aerospace Medicine, vol. 36, issue 8, pp. 755–763. Document Type: Journal Article. Date: August 1965

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	AF0063	Influence of lower body negative pressure on the level of hydration during bed rest

Abstract: In 1965, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, studied how short-term lower body negative pressure (LBNP) altered circulatory dynamics to prevent changes during prolonged bed rest. The study examined fluid balance, body weight, hematocrit, and plasma volume and lasted twenty-three days. This study contributed to the knowledge of physiological changes occurring during manned space flight. Four healthy active duty military personnel participated. Decreasing atmospheric pressure on the lower body for eight hours per day prevented the shift in blood from the lower body to the thorax that accompanies deconditioning. Iodine-131 labeled albumin in six administrations of 5 microcuries was used for the tracer in studying plasma volume. The total-body exposure per administration was 5 millirem. Results indicated that LBNP, on a short-term basis, could restore the level of hydration and favorably influence circulatory dynamics during bed rest.

Documents: Authors: L. E. Lamb; P. M. Stevens. Title: Influence of Lower Body Negative Pressure on the Level of Hydration During Bed Rest. Journal: Aerospace Medicine, vol. 36, issue 12, pp. 1145–1151. Document Type: Journal Article. Date: December 1965

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	AF0064	Effects of 9-alphafluorohydrocortisone on dehydration due to prolonged bed rest

Abstract: In 1965, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, examined the effects of 9-alphafluorohydrocortisone (9-FF) on the metabolic effects of six days of bed rest. Investigators evaluated a drug to mitigate water loss and subsequent diminution in blood volume resulting from prolonged bed rest. Four healthy active duty military personnel participated. Iodine-131 labeled albumin in three administrations containing 5 microcuries of activity was used as a tracer in the blood volume studies. The total-body dose per

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

administration was 5 millirem. Results indicated that, in the course of continuous bed rest for six days, a significant loss of weight and plasma volume occurs along with increased urinary volume and sodium excretion. The administration of 9-FF during the last two days of bed rest increased subjects' body weight and decreased their urinary volume and sodium excretion.

Documents: Authors: P. M. Stevens; T. N. Lynch. Title: Effects of 9-Alphafluorohydrocortisone on Dehydration Due to Prolonged Bed Rest. Journal: Aerospace Medicine, vol. 36, issue 12, pp. 1151–1156. Document Type: Journal Article. Date: December 1965

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	AF0065	Effects of moderate physical exercise during four weeks of bed rest on circulatory functions in man

Abstract: In 1965, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, investigated the effects of mild physical exercise and bed rest on blood volume and red cell mass. This study contributed to the knowledge of physiological changes occurring during space flight. Six active duty military personnel participated. During four weeks of bed rest participants engaged in light to moderate exercise. Using established radioactive tracer dilution techniques, iodine-131 labeled albumin in six administrations of 5 microcuries of activity was used as a tracer in the blood volume studies. The total-body dose per administration was 5 millirem. Researchers observed that changes in plasma volume during and after bed rest paralleled changes characteristic of simple bed rest.

Documents: Authors: Lt. Col. Perry B. Miller; Lt. Col. Robert L. Johnson; Lawrence E. Lamb, M.D. Title: Effects of Moderate Physical Exercise During Four Weeks of Bed Rest on Circulatory Functions in Man. Journal: Aerospace Medicine, vol. 36, issue 11, pp. 1077–1082. Document Type: Journal Article. Date: November 1965

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	AF0066	Influence of long-term lower body negative pressure on the circulatory function of man during prolonged bed rest

Abstract: In 1965, researchers at the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, assessed changes in blood volume and red cell mass during cardiovascular deconditioning using established radioactive tracer dilution techniques. Cardiovascular deconditioning is a change in circulatory function after prolonged periods of weightlessness that results in water loss and decreased blood volume. This study contributed to the knowledge of physiological changes occurring during space flight. Twelve active duty military personnel participated. Deconditioning was produced by prolonged bed rest. Decreased atmospheric pressure on the lower body for eight hours per day prevented the shift in blood from the lower body to the thorax that accompanies deconditioning. Iodine-131 labeled albumin containing five microcuries of activity was used for the tracer. The total-body dose per administration was 5 millirem. Lower body negative pressure during four weeks of absolute bed rest was shown to maintain plasma volume.

Documents: Authors: P. M. Stevens; P. B. Miller; C. A. Gilbert; T. N. Lynch; R. L. Johnson; L. E. Lamb. Title: Influence of Long-Term Lower Body Negative Pressure on the Circulatory Function in Man During Prolonged Bed Rest. Journal: Aerospace Medicine, vol. 37, issue 4. Document Type: Journal Article. Date: April 1966

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	AF0079	Clinical study of gastroesophageal reflux

(For abstract and documentation, see Frenchay Hospital, Bristol, England.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	AF0096	Human volunteers in support of work units 7755-05-001 (normative laboratory data and aerospace crews) and 7755-05-003 (analytical techniques—research and development)

Abstract: In 1965, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, proposed to correlate total body water determinations obtained by deuterium oxide dilutions to results obtained using dilutions of radioactive tritium. To date, no information is available on the number of study participants. A predose sample of body fluid (urine, ten milliliters of blood or parotid fluid) was to be taken from each fasting subject. Deuterium oxide (ten to twenty milliliters) and tritium (250 microcuries) was to be administered orally, with additional samples of body fluid obtained at specific intervals following ingestion. Results of the study are not available at this time.

Documents: From: Marion J. Stansell, Capt., BSC, USAF, Chief, Clinical Pathology Section. To: SMKP, SMK, SMG. Subject: Request for Volunteer Human Research Subjects. Document Type: Memorandum. Date: 12 November 1965

Authors: Lt. Col. Irving Davis, USAF, BSC, Recorder; Mans G. Clamann, M.D.; Chairman. Title: Minutes of the USAF SAM Research Committee [includes memorandum requesting volunteer human subjects]. Document Type: Minutes. Date: 15 February 1967

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	AF0028	Determination of body water content using trace levels of deuterium oxide and infrared spectrophotometry

Abstract: From 1966 to 1967 researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX measured body water content using trace amounts of deuterium oxide in sixty-six male research participants. Deuterium (a nonradioactive isotope of hydrogen) was compared to tritium (a radioactive isotope of hydrogen) to establish a standard method for measuring blood volume.

Documents: Authors: M. J. Stansell; L. Mojica, Jr.; B. L. Plater. Title: Determination of Body Water Content Using Trace Levels of Deuterium Oxide and Infrared Spectrophotometry. Document Type: Report. Date: February 1968

Authors: Marion J. Stansell; Luis Mojica, Jr. Title: Determination of Body Water Content Using Trace Levels of Deuterium Oxide and Infrared Spectrophotometry. Journal: Clinical Chemistry, vol. 14, issue 11. Document Type: Journal Article. Date: 29 March 1968

110 Appendix 1—Records Search

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	AF0067	Effects of lower body negative pressure on physiologic changes due to four weeks of hypoxic bed rest

Abstract: In 1966, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, assessed changes in blood volume during cardiovascular deconditioning using established radioactive tracer dilution techniques. Cardiovascular deconditioning is a change in circulatory function after prolonged periods of weightlessness that results in water loss and decreased blood volume. Twenty-two active duty military personnel participated. Deconditioning was produced by prolonged bed rest. Decreased atmospheric pressure on the lower body for eight hours per day prevented the shift in blood from the lower body to the thorax that accompanies deconditioning. Iodine-131 labeled albumin in six injections containing 5 microcuries of activity was used for the tracer. The total-body dose per injection was 5 millirem.

Documents: Authors: P. M. Stevens; P. B. Miller; C. A. Gilbert; T. N. Lynch; R. L. Johnson; L. E. Lamb. Title: Effects of Lower Body Negative Pressure on Physiologic Changes Due to Four Weeks of Hypoxic Bed Rest. Journal: Aerospace Medicine, vol. 37, issue 5, pp. 466–473. Document Type: Journal Article. Date: May 1966

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	AF0082	Prevention of altitude sickness with acetazolamide

Abstract: From 1966 to 1967 researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX evaluated low-dose acetazolamide as a preventive medication for the symptoms related to altitude sickness. Forty-four active duty military personnel participated. Subjects were placed in a low-pressure chamber simulating atmospheric pressures at either 14,000 or 3,000 feet for twenty-four hours. Before entry, subjects took 750 mg of acetazolamide or a placebo. During their stay, subjects filled out a questionnaire designed to evaluate their state of well-being. Samples of arterial blood and cerebrospinal fluid were obtained and analyzed for pH, oxygen partial pressure, carbon dioxide partial pressure, carbon dioxide level, bicarbonate, and lactate to assess compensatory changes in respiration due to high-altitude exposure. X-rays of the lower back were also taken. Researchers found that pretreatment with acetazolamide was of sufficient clinical benefit to allow its recommendation prior to altitude exposure.

Documents: From: Richard S. Kronenberg, Capt., MC, USAF. To: SMBP, SME, SMG. Subject: Request for Human Subjects [for experiment entitled: The Prevention of Altitude Sickness with Acetazolamide (Diamox), Project 7758, Task 77580103]. Document Type: Memorandum. Date: 21 February 1966

From: Richard S. Kronenberg, Capt., MC, USAF. To: SMBP, SMB, SMG. Subject: Request for Human Subjects—Modification of Original Experimental Protocol. Document Type: Memorandum. Date: 21 March 1966

Authors: Capt. Richard S. Kronenberg, USAF, MC; Stephen M. Cain, Ph.D. Title: Hastening Respiratory Acclimatization to Altitude with Benzolamide. Document Type: Report. Date: October 1967

Authors: Richard S. Kronenberg, Capt., USAF, MC; Stephen M. Cain, Ph.D. Title: The Effects of Acetazolamide on Physiologic and Subjective Responses of Men to 24 Hours at 14,000 Feet. Document Type: Report. Date: 1967 est.

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

Authors: Richard S. Kronenberg; Stephen M. Cain. Title: Effects of Acetazolamide and Hypoxia on Cerebrospinal Fluid Bicarbonate. Journal: Journal of Applied Physiology, vol. 23, issue 1. Document Type: Journal Article. Date: January 1968

Authors: Capt. Richard S. Kronenberg, USAF, MC; Stephen M. Cain, Ph.D. Title: Hastening Respiratory Acclimatization to Altitude with Benzolamide (CL 11,366). Journal: Aerospace Medicine, vol. 39, issue 3. Document Type: Journal Article. Date: March 1968

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	AF0103	Hypokinetic studies

Abstract: In 1966, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, proposed to study the dose response effects of erythropoietin, a hormone that acts on bone marrow cells to stimulate red blood cell production. To date, no information is available on the number of study participants. Plasma erythropoietin was to be measured following a twenty-four-hour stay in an altitude chamber simulating an altitude of 14,000 feet. Several days later, the participants were to be returned to the chamber for a thirty-day period. Five to seven days after their return to sea level, the subjects were to receive small intravenous infusions of their plasma, which was obtained after their initial twenty-four-hour altitude exposure. A dose response curve relating the units of erythropoietin injected versus the absolute reticulocyte response was then to be constructed. Red cell mass was to be measured by a standard chromium-51 technique. Radiation doses and results of this study are not available at this time.

Documents: Authors: [Illegible]. Title: Hypokinetic Studies. Document Type: Proposal. Date: 17 May 1966

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	AF0105	Drug study for flight personnel to determine performance changes induced by antimalarials

Abstract: In 1966, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, proposed to determine performance changes induced by antimalarial drug treatment during normal and simulated flight conditions. Twenty active duty military personnel were wanted from Lackland AFB for the study. The radioisotope to be used was chromium-51. Radiation doses and research results are unavailable at this time.

Documents: From: Maj. Malcolm Lancaster. To: SMK, SMBS. Subject: Drug Study for Flying Personnel [includes Protocol for Psychomotor Testing (DDS Study)]. Document Type: Memorandum. Date: 15 December 1966

From: Malcolm Lancaster, Maj., USAF, MC, Chief, Internal Medicine Branch. To: USAF SAM (SMG). Subject: Drug Study for Flying Personnel [Study to Evaluate the Effects of Combined Anti-Malarial Prophylaxis Under Simulated Flight Conditions]. Document Type: Memorandum. Date: 15 December 1966

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	AF0012	Pulmonary blood flow and ventilation distribution during weightlessness

(For abstract and documentation, see Kelly AFB, TX.)

112 Appendix 1—Records Search

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	AF0014	Effects of acceleration on glomerular filtration rate and effective renal plasma flow
Abstract:	In 1967, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, proposed to study the effects of increased gravity on blood flow through the kidney and on the rate of urine formation (glomerular filtration rate). This study was designed to contribute to the knowledge of physiological changes occurring during space flight. The protocol called for ten active duty military personnel with proven ability to tolerate long-term acceleration. Radiation exposure was from single administrations of 50 microcuries iodine-131 orthiodonipurate and iodine-125 diatrizoate injections. Results of this study are unavailable at this time.	
Documents:	From: Maj. William K. Brown. To: Dr. Clamann. Subject: Protocol of Experiment Involving Human Volunteers, Entitled: Effects of Acceleration on Glomerular Filtration Rate and Effective Renal Plasma Flow. Document Type: Memorandum. Date: 31 May 1967	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	AF0015	The effect of total-body exercise on the metabolic and cardiovascular consequences of prolonged weightlessness
Abstract:	From 1967 to 1968, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX evaluated whole-body exercise on moderating the effects of prolonged weightlessness. A total-body exerciser had been developed that would mimic normal gravitational stresses on the musculoskeletal system when used in simulated zero gravity. This study determined whether this method prevented metabolic and cardiovascular changes occurring during weightlessness, and how much exercise or energy expended was required. Thirty-two active duty military personnel between the ages of 18 and 25 participated. Total radiation exposure from chromium-51, iodine-125, iron-59, and deuterium was 15.4 millirem (whole body) over a 16-week period. Results of the study are not available at this time.	
Documents:	Authors: Capt. John H. Triebwasser; Maj. Malcolm C. Lancaster; Maj. H. L. Brammell. Title: Protocol of Experiment Involving Human Volunteers: The Effect of Total-Body Exercise on the Metabolic and Cardiovascular Consequences of Prolonged Weightlessness. Document Type: Protocol. Date: 1968 est.	
	Authors: Malcolm C. Lancaster; John H. Triebwasser. Title: The Effect of Total-Body Exercise on the Metabolic, Hematologic, and Cardiovascular Consequences of Prolonged Bed Rest. Document Type: Transcript. Date: 1971	
	Author: Malcolm C. Lancaster, USAF School of Aerospace Medicine, Brooks Air Force Base. Title: Hematologic Aspects of Bed Rest. Document Type: Transcript. Date: 1971	

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	AF0046	Simultaneous determination of Fe-59, Cr-51, and I-125, using a gamma spectrometer

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	AF0047	Determination of five blood parameters using Fe-59

Abstract: From 1967 to 1968, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX investigated the modification of existing techniques for the measurement of blood parameters in ferrokinetics (the movement of iron in the body). Simplified methods for determining iron clearance from plasma, iron uptake by reticulocytes, direct measurement of plasma volume, and indirect measurements of blood volume and red cell mass were developed. To date, no information is available on the number of study participants. A ferric chloride solution containing iron-59 was used in the study. The solution had a specific activity of ten microcuries per milligram and contained thirty microcuries per milliliter. Each test required the use of twelve microcuries of activity, with approximately six microcuries used as a standard. The single total body dose using six microcuries was 131 millirem. Values were compared with those of other techniques. Researchers found the modified techniques to provide reliable estimates of ferrokinetics and iron metabolism.

Documents: Authors: Donald F. Logsdon; James F. Green. Title: Determination of Five Blood Parameters Using Fe-59. Document Type: Report. Date: June 1968

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	AF0048	Red cell mass, red cell survival, and total blood volume with chromium-51

Abstract: From 1967 to 1968 researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX developed a standard method for determining red cell survival curves, red cell mass, total blood volume, and plasma volume. A method for separating superimposed chromium-51 tagged red cell survival curves was also described. One individual participated. Single total-body dose was 5.3 millirem.

Documents: Authors: John W. Harper; James F. Green; Donald F. Logsdon. Title: Simultaneous Determination of Fe-59, Cr-51, and I-125, Using a Gamma Spectrometer. Document Type: Report. Date: May 1968

Authors: D. F. Logsdon; J. F. Green. Title: Red Cell Mass, Red Cell Survival, and Total Blood Volume with Chromium-51. Document Type: Report. Date: July 1968

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1967	AF0080	Human radiation sensing study
------	--------	-------------------------------

Abstract: In 1967, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, determined whether x-rays could be visually detected. Thirty-one patients participated in this study. After a period of dark adaptation, a series of sham or true skull/sinus x-rays were taken while the electrical activity of the retina was recorded. No evidence was found that radiation could be visually detected under standard clinical conditions.

Documents: Authors: Lewis J. Hellerstein, USAF School of Aerospace Medicine; Edwin R. Ballinger, USAF School of Aerospace Medicine. Title: A Study of Human Radiation Sensing and Dark Adaptometry Using X-Rays. Journal: Radiation Research, vol. 44 , pp. 629–636. Document Type: Journal Article. Date: 1970

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1967	AF0104	To quantitate the rate of erythropoiesis during bed rest
------	--------	--

Abstract: From 1967 until a presently undetermined date, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX measured the production of red blood cells during bed rest. The purpose was to quantify the rate of erythropoiesis during bed rest with the application of ferrokinetics and to test methods and techniques for trace metal balance studies. In addition, iron balance was also measured. Thirteen male active duty military personnel participated. Radioisotopic tracers employed for this study were chromium-51 and iron-59. Radiation doses and results of this study are unavailable at this time.

Documents: Author: Capt. Bernard S. Morse. Title: Erthrokinetic Changes in Man Associated with Bed Rest. In: School of Aerospace Medicine Lectures in Aerospace Medicine, 1967. Document Type: Chapter. Date: 1967

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1968	AF0016	The use of chlorothiazide under simulated flying conditions
------	--------	---

Abstract: In 1968, researchers from the School of Aerospace Medicine, Brooks Air Force Base in San Antonio, TX, proposed to measure changes in blood volume produced by chlorothiazide, a hypertension medication. The purpose of the experiment was to administer chlorothiazide to human volunteers and observe their psychomotor performance and physiologic responses under simulated flying conditions. Twenty-four volunteer aviators were needed as subjects to complete the study. This study represented an effort to demonstrate that this drug could be safely given to aviators as a means of controlling hypertension without suspension from flying duties. The parameters to be measured related to changes produced by the drug to the subject's blood volume. The radiation dose from chromium-51 and iodine-125 was expected to be 40 millirads over the course of the study. Results from the study are unavailable at this time.

Documents: Authors: Maj. John H. Triebwasser et al. Title: The Use of Chlorothiazide Under Simulated Flying Conditions. Document Type: Protocol. Date: 1968 est.

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1968	AF0034	Determining plasma volume, blood volume, and red cell mass with I-125
Abstract:	From 1968 until a presently undetermined date, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX determined a normal range for plasma volume using radioiodinated human serum albumin (RIHSA) labeled with iodine-125. To date no information is available on the number of study participants. Total-body dose from one RIHSA administration of 5.0 microcuries was 6.0 millirem. Typical plasma volume calculated with this tracer dilution technique is 37 ml/kg, within the normal range of 27.6 to 52.0. Total blood volume and red cell volume were also indirectly measured using this method.	
Documents:	Authors: Capt. Donald F. Logsdon, Jr.; Sgt. James F. Green. Title: Determining Plasma Volume, Blood Volume, and Red Cell Mass with I-125. Document Type: Report. Date: May 1968	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1968	AF0035	Reproducibility of repeated total-body water measurements with tritium
Abstract:	From 1968 to 1969, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX analyzed the reproducibility of a tritium tracer dilution technique for repeated measurements of total-body water (TBW). Six healthy males participated. Total-body dose equaled 19 millirem from 250 microcuries of hydrogen-3 (H-3). Results indicated the technique was dependent on the percent clearance of the isotope per week and the interval between measurements. A sample-to-background counting ratio of at least 2:1 was necessary to obtain reproducible results.	
Documents:	Authors: Capt. Donald F. Logsdon, Jr., USAF, BSC; M.Sgt. James F. Green, USAF; S.Sgt. John W. Harper, USAF. Title: Reproducibility of Repeated Total-Body Water Measurements with Tritium, Final Report August 1968–January 1969. Document Type: Report. Date: July 1969	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1968	AF0049	Measuring iron metabolism in hematopoietic centers using Fe-59 in the presence of 51-Cr and I-125
Abstract:	In 1968, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, investigated methods of detecting iron-59 (Fe-59) radioactivity in blood-forming tissues in the presence of iodine-125 (I-125) and chromium-51 (Cr-51). Iron metabolism was normally measured as part of a larger study of red blood cell kinetics and other blood parameters, and this method allowed two or more isotope studies to be conducted simultaneously. The study included eight research participants. Fe-59 concentrations in blood-forming tissues were accurately and reproducibly measured with a rate meter, a photomultiplier probe, and a scintillation crystal detection system. When the three isotopes were present, a lead filter screened out nearly all the Cr-51 and I-125 activity, while allowing 60 percent of the Fe-59 activity to pass.	
Documents:	Authors: D. F. Logsdon; J. F. Green; G. M. Strong. Title: Measuring Iron Metabolism in Hematopoietic Centers Using Fe-59 in the Presence of Cr-51 and I-251. Document Type: Report. Date: September 1968	

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1968	AF0050	Standard method for Fe-59 ferrokinetics
------	--------	---

Abstract: In 1968, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, developed simplified methods for measuring ferrokinetics (iron movement within the body) using iron-59 (Fe-59) as a tracer. This study combined several procedures used at the time. One individual participated. The single total-body dose using 6 microcuries of Fe-59 was 131 millirem. Methods for measuring plasma iron clearance, red cell iron uptake, and the movement of iron through hematopoietic tissues were presented. Formulas were given for calculating plasma and red cell iron turnover, hemoglobin synthesis, mean red blood cell life-span (including precursors), and mean effective red cell hemoglobinization time.

Documents: Authors: D. F. Logsdon, Jr.; J. F. Green; G. M. Strong. Title: A Standard Method for Fe-59 Ferrokinetics. Document Type: Report. Date: September 1968

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1968	AF0051	Simultaneous measurement of blood parameters using radiochromium-labeled red cells and radioiron-labeled plasma
------	--------	---

Abstract: In 1968, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, developed a single method to measure erythrokinetics (total red cell volume, rate of red cell production, and red cell life span) and blood volume. Separate procedures for these measurements were previously established. The method developed in this study allowed these parameters to be measured simultaneously, reducing the volume of blood and number of samples needed and decreasing artifactual variations. One individual participated. Radiochromium was used as the tracer. Radiation exposures are unavailable at this time. Values obtained were in agreement with those resulting from separate studies.

Documents: Authors: D. F. Logsdon. Title: Simultaneous Measurement of Blood Parameters Using Radiochromium-Labeled Red Cells and Radioiron-Labeled Plasma. Document Type: Report. Date: October 1968

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1968	AF0052	Modified Fe-59 ferrokinetic procedure
------	--------	---------------------------------------

Abstract: In 1968, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, modified a technique for studying ferrokinetics (iron movement within the body). To reduce the radiation dose from iron-59 (Fe-59), a procedure was developed that reduced the injection activity from 6 microcuries to 0.6 microcuries. One individual participated. The total-body exposure dose was reduced from 110 millirem to 11 millirem. Blood volume, plasma iron clearance, and red cell uptake measurements were within normal limits. Measurements of Fe-59 in the spleen, heart, liver, and sacrum by external counting produced curves similar to those found with higher doses.

Documents: Authors: D. F. Logsdon; J. F. Green; J. W. Harper. Title: A Modified Fe-59 Ferrokinetic Procedure. Document Type: Report. Date: April 1969

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1968	AF0083	Changes in right heart filling pressures (central venous) during simulated reentry profiles (transverse acceleration)

Abstract: In 1968, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, proposed to study blood pressure and flow through the heart during simulated space craft reentry profiles. Changes in right heart filling pressure were to be correlated to the incidence of abnormal heart rhythms commonly seen during transverse acceleration. Transverse acceleration was to be simulated in a centrifuge. Researchers proposed to study ten individuals who were experienced in riding the centrifuge. Catheter placement in the superior vena cava was to entail the use of 2 to 3 ml of 60 percent Renografin and a 20- to 30-second fluoroscopic exposure. This study was designed to contribute to the knowledge of physiological changes occurring during manned space flight. Results of this study are not available at this time.

Documents: Authors: Lt. Col. William K. Brown; Capt. George H. Cohen; Sidney D. Leverett, Jr., Ph.D. Title: Changes in Right Heart Filling Pressures (Central Venous) During Simulated Reentry Profiles (Transverse Acceleration). Document Type: Protocol. Date: 1968 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1968	AF0106	Insensible weight and water loss during simulated space flight

Abstract: In 1968, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, examined water balance and body weight during simulated space flight. The effects of confinement, gas composition, and a hypobaric environment on body weight, water and food consumption, urine and fecal excretion, body volume, and total-body water were investigated. This study contributed to the knowledge of physiological changes occurring during space flight. Twelve active duty military personnel participated. During the study, participants consumed dehydrated bite-sized and powdered formula foods. Insensible weight loss was calculated from body weight, food and water intake, and urine and fecal excretion. Insensible water loss was calculated from weight of body water, water intake, oxidative water, and urine and fecal water excretion. Total body water was measured once before, twice during, and once after exposure to the hypobaric environment. Tritium dioxide (250 microcuries) was administered orally in 25 grams of water. A ten milliliter blood sample was withdrawn prior to swallowing the tritiated water and another sample was obtained three hours later. Insensible weight loss was unaffected by the hypobaric environment and averaged 1.4 kg/man/day. Insensible water loss was greater in the hypobaric environment. No detrimental effects of the hyperbaric environment were observed during the exposure.

Documents: Authors: First Lt. George F. Gee; Capt. Richard S. Kronenberg; Capt. Roy E. Chapin. Title: Insensible Weight and Water Loss During Simulated Space Flight. Journal: Aerospace Medicine, vol. 39, issue 9. Document Type: Journal Article. Date: September 1968

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	AF0017	Hematologic responses to a continuous 30-day exposure to an atmosphere of hypobaric oxygen accompanied by exaggerated activity and inactivity followed by an acute exposure to transverse G forces

Abstract: From 1969 to 1971 researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, examined the effects of exposure to high oxygen concentrations at less than atmospheric pressure on red blood cells (RBCs). This study contributed to the knowledge of physiological changes occurring during space flight. Eight active duty military personnel, ages eighteen to twenty-five, participated. The study was carried out in three phases in an environmental chamber: a control period under normal atmosphere, an exposure period under hyperoxic hypobaric conditions followed by a simulated spacecraft re-entry profile, and a recovery period under normal atmosphere. Tests included glucose tolerance tests, chromium-51 measurements of RBC mass, plasma volume measurements using iodine-125 labeled albumin dilution calculations, testosterone clearance measurements with carbon-14 labeled testosterone (blood and urine tests), and carbon-14 glycine labeling to measure RBC survival. RBC mass alteration during hyperoxia was examined and correlated with hormone measurements. Total-body absorbed dose was 139.6 millirad for a 90-day period. During hyperoxia, there was a significant decline in RBC mass. After exposure to hyperoxia, osmotic fragility of erythrocytes increased, plasma hemoglobin levels increased, and reticulocyte counts and RBC survival decreased. The progressive decrease in RBC mass promptly halted on return to ground level atmosphere, and hematological changes returned to control levels within 116 days after exposure to hyperoxic conditions.

Documents: Title: Hematologic Responses to a Continuous 30 Day Exposure to an Atmosphere of Hypobaric Oxygen Accompanied by Exaggerated Activity and Inactivity Followed by an Acute Exposure to Transverse G Forces. Document Type: Proposal. Date: 1968.

Authors: 1st Lt. Tommy L. Love et al. Title: Glucose Intolerance in Man During Prolonged Exposure to a Hypobaric-Hyperoxic Environment. Journal: Diabetes, vol. 20, issue 5. Document Type: Journal Article. Date: May 1971

Authors: Edward C. Larkin; Stephen L. Kimzey. Title: The Response of Erythrocyte Organic Phosphate Levels and Active Potassium Flux to Hypobaric Hyperoxia. Journal: Journal of Laboratory and Clinical Medicine, vol. 79, issue 4. Document Type: Journal Article. Date: April 1972

Authors: Edward C. Larkin; J. D. Adams; William T. Williams; David M. Duncan. Title: Hematologic Responses to Hypobaric Hyperoxia. Journal: American Journal of Physiology, vol. 223, issue 2. Document Type: Journal Article. Date: August 1972

Authors: Edward C. Larkin; J. D. Adams; William T. Williams; David M. Duncan. Title: Hematologic Responses to Hypobaric Hyperoxia. Journal: American Journal of Physiology, vol. 223, issue 2. Document Type: Journal Article. Date: August 1972

Authors: William T. Williams, Ph.D.; Edward C. Larkin, M.D. Title: Red Blood Cell Density and Volume Changes in Men Exposed to Hypobaric Hyperoxia. Document Type: Report. Date: 13 November 1972

Authors: William T. Williams, Ph.D.; Edward C. Larkin, M.D. Title: Red Blood Cell Density and Volume Changes in Men Exposed to Hypobaric Hyperoxia. Document Type: Report. Date: December 1972

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	AF0036	Reduction of radiation hazard in tritium method of measuring total-body water

Abstract: In 1969, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, investigated the modification of a tritium dilution technique for the measurement of total-body water *in vivo*. To date, no information is available on the number of study participants. Extending the counting time in the procedure or increasing the amount of serum sampled allowed for a reduction in the total amount of tritiated water administered from 250.0 to 25.0 microcuries. Reducing the tritium activity to 25.0 microcuries lowered the exposure dose by a factor of ten—from 18.98 to 1.9 millirads.

Documents: Authors: Capt. Donald F. Logsdon, Jr.; Sgt. James F. Green; S. Sgt. John W. Harper. Title: Reduction of Radiation Hazard in Tritium Method of Measuring Total-Body Water; Attached DD Form 1473. Document Type: Report. Date: November 1969

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	AF0037	Modified 125-I plasma volume procedure

Abstract: In 1969, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, modified a technique for measuring plasma volume using radioactive iodinated serum albumin (RISA). To reduce radiation exposure from RISA I-125 (iodine-125), a procedure was developed that reduced exposure dose by a factor of ten. For a single administration containing 5.0 microcuries, the total-body dose was 5 millirem and for a single dose of 0.5 microcuries, the total-body dose was 0.5 millirem. Standard curves were presented that permitted use of a small plasma sample or low dose of RISA I-125. To date, no information is available on the number of study participants.

Documents: Authors: Capt. Donald F. Logsdon Jr., USAF, BSC; M. Sgt. James F. Green, USAF; Staff Sgt. John W. Harper, USAF. Title: A Modified 125-I Plasma Volume Procedure, Final Report May–July 1969. Document Type: Report. Date: October 1969

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	AF0077	Patient absorbed radiation: a comparative study of standard full mouth series opposed to panoramic radiography

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	AF0086	Central venous pressure changes during high +Gz maneuvers and weightlessness during flight

Abstract: From 1969 until a presently undetermined date, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, designed and tested a system for direct

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

measurement of intravascular pressures during high-performance flight and determined changes in cardiac filling pressure during high gravity and weightlessness. This study contributed to the knowledge of physiological changes occurring during space flight. Five active duty military personnel participated. A Teflon catheter was inserted into the left median basilic vein and advanced to the superior vena cava-right atrium junction using two to three cubic centimeters of 60 percent Renografin and a 45- to 60-second fluoroscopy exposure. Radiation exposures and results of this study are not available at this time.

Documents: Authors: Capt. George H. Cohen; Lt. Col. William K. Brown. Title: Central Venous Pressure Changes During High +Gz Maneuvers and Weightlessness During Flight. Document Type: Report. Date: 1969 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	AF0018	The relationship of the thyroid hormone metabolism and physical activity in United States Air Force crew personnel

Abstract: From 1971 to 1972 researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, studied the effects of physical activity on thyroid hormone metabolism. The turnover rates of thyroxine and triiodothyronine during different levels of physical activity were related to overall performance capabilities. Twenty-five active duty military personnel participated. The radiation exposure from iodine-125 and iodine-131 and results of this study are not available at this time.

Documents: Author: Maj. Alan Balsam. Title: Interim Report and Request for Additional Subjects: Measurement of Thyroxine and Triiodothyronine Turnover and Metabolism in Man. Document Type: Report. Date: 1972

Author: Maj. Alan Balsam. Title: The Relationship of Thyroid Hormone Metabolism and Physical Activity in USAF Aircrew Personnel. Document Type: Protocol. Date: 1972

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	AF0076	Potassium level in normal human subjects

Abstract: From 1971 to 1976 researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, determined normal clinical values for potassium levels using tritiated water (water molecules containing tritium, a radioisotope of hydrogen). Concurrent measurements of body water and body potassium in approximately 1,000 aeromedical consult patients generated a database of potentially correlative indexes of body composition. Computer analysis identified the extent of correlations among the indexes. Radiation exposures and results of this study are not available at this time.

Documents: Authors: Robert E. Tatsch; Capt. Robert C. Nelson, USAF. Title: Potassium Level in Normal Human Subjects. Document Type: Protocol. Date: 1971 est.

Authors: Robert C. Nelson; Jerry L. Moore; Richard C. McNee. Title: Correlations Among Body Weight Composition Indices, Potassium Content, Water Content and Density. Journal: Nutrition. Document Type: Abstract. Date: 1976 est.

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	AF0081	Relation of salt depletion and dehydration to +Gz acceleration tolerance and anti-G suit effectiveness

Abstract: In 1971, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, proposed to study anti-G suit protection on the effects of enhanced gravity, volume depletion, and salt deprivation. Additionally, the suppression of renin-aldosterone and negative sodium balance during prolonged acceleration was to be investigated in relation to increased central blood volume. This study was designed to contribute to the knowledge of physiological changes occurring during space flight. The proposal called for twenty-five active duty military personnel. A maximum of three standard chest x-rays were to be taken to evaluate changes in cardiac size during anti-G suit use. Results of this study are not available at this time.

Documents: Authors: Maj. Samuel J. Shubrooks, Jr.; Murray Epstein, M.D. Title: Relationship of Salt Depletion and Dehydration to +Gz Acceleration Tolerance and Anti-G Suit Effectiveness. Document Type: Proposal. Date: 1971 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	AF0084	Correlation of blackout threshold levels in human subjects to +Gz acceleration for sustained periods

Abstract: From 1971 until 1973, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, determined the physiological response to sustained positive acceleration via centrifuge and compared the effectiveness of two antigravity suits. Breathing methods to increase oxygenation during positive acceleration were also investigated. This study contributed to the knowledge of physiological changes occurring during space flight. EKG, heart mass movement during enhanced gravity, direct gastric and esophageal pressures, arterial blood gas and pH, and blood pressure (direct and superficial) measurements were made on fifteen active duty military personnel. Central venous pressure was monitored by an intravenous catheter. The position of the catheter tip was located by fluoroscopy. Chest x-rays were also taken.

Documents: Title: Correlation of Blackout Threshold Levels in Human Subjects to +Gz Acceleration for Sustained Periods. Document Type: Protocol. Date: 1971

Authors: S. D. Leverett, Jr., Ph.D.; R. R. Burton, D.V.M., Ph.D.; 1st Lt. R. J. Crossley, RAF; Lt. Col. E. D. Michaelson, USAF, MC; Maj. S. J. Shubrooks, Jr., USAF, MC. Title: Physiologic Responses to High Sustained +Gz Acceleration. Document Type: Report. Date: December 1972

Authors: Samuel J. Shubrooks Jr.; Murray Epstein; David C. Duncan. Title: Effects of an Anti-G Suit on the Hemodynamic and Renal Responses to Positive (+Gz) Acceleration. Journal: Journal of Applied Physiology, vol. 36, no. 3. Document Type: Journal Article. Date: March 1974

122 Appendix 1—Records Search

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	AF0019	Measurement of thyroxine/triiodothyronine turnover in relation to level of physical activity in man
Abstract:	In 1972, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, investigated the relationship between increased physical activity and thyroid metabolism. This study determined the physiologic response to submaximal exercise before and after a period of intense physical training and related the findings to overall performance capability. Fourteen active duty military personnel participated. Radiation exposure was from iodine-125 labeled thyroxine and iodine-131 labeled triiodothyronine. Radiation exposure levels and results of this study are not available at this time.	
Documents:	Author: Maj. Alan Balsam. Title: Measurement of Thyroxine and Triiodothyronine Turnover and Metabolism in Relation to Level of Physical Activity in Man. Document Type: Protocol. Date: 1972	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	AF0085	Effect of physical inactivity on myocardial performance and lipid metabolism in United States Air Force aircrew personnel
Abstract:	In 1972, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, studied the effects of inactivity on the heart and on lipid metabolism. Tritiated water (water molecules containing tritium, a radioisotope of hydrogen) was the tracer used for total-body water estimates. Sixteen active duty military personnel participated. The results of this study are not available at this time.	
Documents:	Authors: Dale A. Clark, Ph.D.; Kenneth A. Narahara, M.D.; Margaret F. Allen, M.S. Title: The Occurrence of Hyperlipidemia in Flying and Non-Flying Subjects of the USAF SAM Cardiovascular Disease Study. Document Type: Report. Date: 1970 est.	
	Title: Hormonal, Substrate and Mineral Levels in Chronic Physical Inactivity—Addendum to Protocol Entitled: The Effect of Physical Inactivity on Myocardial Performance and Lipid Metabolism in USAF Aircrew Personnel. Document Type: Protocol. Date: June 1972 est.	
	Authors: Dale A. Clark, Ph.D.; Margaret F. Allen, M.A.; Frederick H. Wilson, Jr., B.S. Title: The USAF SAM Cardiovascular Disease Follow-Up Study: 1972 Progress Report. Document Type: Report. Date: 1972 est.	
	Authors: Capt. Kenneth A. Nashara, USAF, MC; Dale A. Clark, Ph.D. Title: The Effects of Physical Inactivity on Myocardial Performance and Lipid Metabolism in United States Air Force Aircrew Personnel. Document Type: Protocol. Date: 1972 est.	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	AF0087	Roentgenographic evaluation of lung volume and distortion during +Gz acceleration
Abstract:	In 1972, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, developed a method for studying lung distortion and changes in lung volume under	

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

enhanced gravity. Up to sixteen chest x-rays taken during enhanced gravity were used to evaluate distortion. Twelve active duty military personnel participated. The maximum total dose from the x-rays was approximately 600 millirads. The results of this study are not available at this time.

Documents: Authors: Edward D. Michaelson; Marvin A. Sackner; Robert L. Johnson, Jr. Title: Vertical Distribution of Pulmonary Diffusing Capacity and Capillary Blood Flow in Man. Journal: The Journal of Clinical Investigation, vol. 52, issue 2. Document Type: Journal Article. Date: February 1973

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	AF0020	Metabolic responses to sustained high G accelerational stress in United States Air Force personnel

Abstract: In 1973, researchers from the School of Aerospace Medicine at Brooks Air Force Base in San Antonio, TX, surveyed the usefulness of biochemical measurements as predictive indexes of tolerance to enhanced gravity and acceleration stress. Thirty-two active duty military personnel participated. Metabolic responses to acceleration stress were quantified using radioisotopic tracers. Triiodothyronine secretion and plasma concentrations were measured, and 50 to 100 microcuries of iodine-131 labeled triiodothyronine were used as a tracer. Plasma cortisol and urinary glucocorticoid metabolite excretion were used to evaluate adrenal responses to gravitational stress.

Documents: Title: Metabolic Responses to Sustained High G Accelerational Stress in USAF Personnel [includes consent form]. Document Type: Protocol. Date: 1975 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	AF0057	Identification and significance of parotid fluid corticosteroids: tritiated cortisol & aldosterone

(For abstract and documentation, see Brooke Army Medical Center, Houston, TX.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	AF0058	Adrenal function during bed rest

Abstract: From a presently undetermined date until 1967, researchers from the School of Aerospace Medicine at Brooks Air Force Base, San Antonio, TX, studied the effect of bed rest on adrenal function. Adrenal function was measured in eleven healthy airmen. Cortisol secretion rates were measured using one administration of three microcuries of cortisol-1, 2 H³ (fifty microcuries per microgram). Isolated tritiated urinary metabolites were acetylated with carbon-14 labeled acetic anhydride. Aldosterone secretory rates were determined by using a single administration of three microcuries of d-aldosterone-1, 2 H³ (100 microcuries per microgram) in thirty milliliters of saline. Plasma 17-OH-CS levels as well as adrenal secretory rate of aldosterone and cortisol were measured before and during periods of bed rest. The circadian rhythm of plasma 17-OH-CS was well maintained during bed rest; however, following a period of ad lib activity, there was

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX (continued)

a diminuation of aldosterone secretory rate during a subsequent bed rest period. Inactivity from bed rest, therefore, did not appear to change adrenal cortisol production. Upon completion of the study, researchers were unable to draw significant conclusions regarding aldosterone production.

Documents: Authors: Fred H. Katz. Title: Adrenal Function During Bed Rest. Journal: Aerospace Medicine, vol. 35, issue 9, pp. 849–851. Document Type: Journal Article. Date: September 1964

School of Aerospace Medicine, Colorado Springs, CO

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	AF0098	Effects of staging on the acute adaptation to high terrestrial elevations

(For abstract and documentation, see Fort Sam Houston, TX.)

School of Aviation Medicine, Randolph AFB, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	AF0112	Temporomandibular joint physiology

Abstract: From a presently undetermined date until 1958, researchers from the School of Aviation Medicine, Randolph AFB, TX studied temporomandibular joint physiology. This project was a subtask of a larger study investigating new methods of dental diagnosis, which began in March 1952. This larger investigation focused on the need to improve the dental health of Air Force personnel and in particular the methods of dental diagnosis (i.e., more sophisticated and effective roentgenography, tomography, and panography), which were considered outmoded. The purpose of the subtask was to develop satisfactory methods of temporomandibular joint x-ray and develop a radiographic procedure that would permit serial radiographs to be made while the patient was in a postural upright position. To date, no information is available on the number of participants. The technique developed during this subtask incorporated a cephalometer that enabled accurate serial radiographs as treatment progressed. The cephalometric instrument was forecasted for use in other studies of the temporomandibular joint.

Documents: From: Clarence E. Laliberte, Chief Warrent Officer, Air Force, Adjutant To: Commanding General, Air University, Maxwell AFB. Subject: Submission of project proposal for approval and coordination, titled "Investigation of new and improved methods of dental diagnosis". Document Type: Memorandum; Proposal. Document Date: 28 January 1952

From: A.P. Gagge, Colonel, US Air Force, Chief, Aeromedical and Human Resources Division, Directorate of Research and Development To: Commandant, Air Force School of Aviation Medicine, Randolph Air Force Base. Subject: Approval for "Investigation of new and improved methods of dental diagnosis". Document Type: Memorandum. Document Date: 17 March 1952

Title: "Investigation of new and improved methods of dental diagnosis" research and development project card [progress report for period 7 May 1952 - 30 June 1952]. Document Type: Report. Document Date: 30 June 1952

AIR FORCE 1944 – 1974 (CONTINUED)

School of Aviation Medicine, Randolph AFB, TX (continued)

Title: "Investigation of new and improved methods of dental diagnosis" - research and development project card [progress report for period 30 June 1952- 07 May 1953]. Document Type: Report. Document Date: 07 May 1953

Title: "Investigation of new and improved methods of dental diagnosis" Air Force supplementary progress report card [progress report for period 7 May 1953- 7 November 1953]. Document Type: Report; Form. Document Date: 07 November 1953

Title: "Investigation of new and improved methods of dental diagnosis" - research and development project card [progress report for period 7 May 1953 - 7 May 1954]. Document Type: Report. Document Date: 07 May 1954

Title: Project #7756: Air Force clinical medicine, termination of task "Temporomandibular joint physiology" [subtask of "Investigation of new and improved methods of dental diagnosis"]. Document Type: Report. Document Date: 30 April 1958

From: Horace A. Corley, First Lieutenant, US Air Force, Research Publications Officer To: Commander, Air University, Maxwell AFB. Subject: Abbreviated progress report (copy of DD forms 613 on task 7756-14) [subtask of "Investigation of new and improved methods of dental diagnosis"]. Document Type: Report; Memorandum. Document Date: 05 May 1958

Southwest, United States

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1951	AF0040	Flash blindness studies

(For further information, see Chapter 7—"Human Aspects Research and U.S. Atmospheric Nuclear Weapons Testing.")

Documents: US Atmospheric Nuclear Tests, Nuclear Test Personnel Review. Title: SHOTS ABLE TO EASY, The First Five Tests of the BUSTER-JANGLE Series, 22 October–5 November 1951 (DNA 6024F). Document Type: Report. Date: June 1982

US Atmospheric Nuclear Weapons Tests, Nuclear Test Personnel Review. Title: OPERATION TUMBLER-SNAPPER 1952 (DNA 6019F). Document Type: Report. Date: June 1982

Author: Col. Victor A. Byrnes, USAF, MC. Title: Operation SNAPPER, Project 4.5, Flash Blindness, Report to the Test Director. Document Type: Report. Date: March 1953

Authors: Col. Victor A. Byrnes, USAF, MC; Capt. D. V. L. Brown, USAF, MC; H. W. Rose, M.D.; Paul A. Cibis, M.D. Title: Operation UPSHOT-KNOTHOLE, Project 4.5, Ocular Effects of Thermal Radiation from Atomic Detonation—Flash Blindness and Chorioretinal Burns. Document Type: Report. Date: 30 November 1955

St. Louis Children's Hospital, St. Louis, MO

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1951	AF0111	Study of diseases of the ear/external otitis

Abstract: From 1951 until 1955 researchers from the Washington University, St. Louis, MO and the St. Louis Children's Hospital, St. Louis, MO studied ear diseases. The purpose of the study was to

126 Appendix 1—Records Search

AIR FORCE 1944 – 1974 (CONTINUED)

St. Louis Children's Hospital, St. Louis, MO (continued)

investigate the pathological and biochemical changes occurring in the normal and abnormal skin of the external auditory canal for a better understanding of the origin and treatment of external otitis. The action of x-ray therapy on certain forms of bilateral external otitis was also studied. In each instance, one ear was treated, leaving the untreated ear as a control. Neither the patient nor the otologist was informed as to which ear received the treatment and which was exposed to the placebo. The number of participants and results of this study are not available at this time.

Documents: From: Ben H. Senturia, Project Director To: Commandant, US Air Force School of Aviation Medicine, Attention: Major James E. Lett. Subject: Informal progress report on Army Air Force external otitis project #21-32-026P014A covering the period of December 1, 1951 to February 15, 1952. Document Type: Report. Document Date: 18 February 1952

Subject: Outline for the formal progress report of AAF external otitis project number 21-32-026, contract AF 33(038) 28643, covering the period of December 1, 1951, through June 10, 1952. Document Type: Outline. Document Date: 10 June 1952

Authors: Ben H. Senturia. Title: External otitis: A brief review of some phases of the problem. Journal: Unknown. Document Type: Journal Article; Excerpt. Document Date: 1952

Title: Notice of research project [study of diseases of the external ear]. Document Type: Report. Document Date: March 1955

State University of New York, New York, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1963	AF0110	Human cold acclimatization

Abstract: In 1963, researchers from the State University of New York in New York, NY, studied human cold acclimatization. Three healthy female volunteers and one healthy male volunteer participated. Over a period of four months, physiologic reactions to multiple immersions in increasingly colder water were monitored. Basal metabolism, thyroid iodine-131 uptake, and maximal body insulation were measured to assess cold adaptation. Radiation exposure is not available at this time. It was determined that cold water immersion was an unsuccessful method for measuring cold adaptation.

Documents: Authors: Donald W. Rennie, Associate Professor of Physiology, Principal Investigator. Title: Human Cold Acclimatization, Final Report, Contract AF41(609)1718. Document Type: Report. Date: 30 September 1962

From: Gerald J. Merritt, Col., USAF, BSC, Chief, Clinical Investigation & Life Science Division, Air Force Medical Operations Agency, Office of the Surgeon General. To: RECC. Subject: Trip Report to Federal Personnel Records Center—St. Louis. Document Type: Memorandum. Date: 10 June 1994

University Libre de Bruxelles, Brussels, Belgium

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1963	AF0109	The influence of acute exposure to cold on the thyroid function

(For abstract and documentation see Hospital Saint-Pierre, Brussels, Belgium.)

AIR FORCE 1944 – 1974 (CONTINUED)

University of California School of Medicine, Los Angeles, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	AF0042	Use of chromosome aberrations to estimate x-ray and gamma-ray dose to man

Abstract: From 1965 to 1966 researchers from the University of California School of Medicine in Los Angeles, CA, investigated chromosome aberration frequency in lymphocytes as a means of estimating radiation exposure and absorbed dose. Researchers studied the chromosomes of four x-ray technicians, whose exposure to radiation resulted from the normal course of their duties, and one leukemia patient, who had previous radiation therapy. Optimal techniques for making chromosome preparations, numbers of aberrations as a function of dose and culture time, and numbers of chromosome fragments were given. The resulting estimate of dose was affected by lymphocyte culture time, sampling error, sampling time, size, rate, distribution, and quality of radiation dose.

Documents: Authors: Amos Norman, Ph.D.; Masao S. Sasaki, D.Sc.; Richard E. Ottoman, M.D.; Robert C. Veomett, A.B. Title: Use of Chromosome Aberrations to Estimate X-ray and Gamma-Ray Dose to Man. Document Type: Report. Date: December 1967

University of Michigan, Ann Arbor, MI

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1970	AF0095	Link system of the human torso

Abstract: From 1970 to 1971 researchers at the University of Michigan in Ann Arbor, MI developed a quantitative description of the mobility of the human torso. Seventy-two anthropometric measurements were taken on twenty-eight male engineering students from the University of Michigan. These data were statistically matched for stature and weight to a 1967 USAF anthropometric survey. Radiographs and photographs were taken from different viewing angles while participants did specific reaching motions. Only 22 of the 28 participants were included in the x-ray study. Each of the twenty-two participants received a maximum of nine x-rays. Prediction equations relating surface anatomy to bone reference points were developed for design of alternative linkage systems.

Documents: Authors: R. G. Snyder; D. B. Chaffin; R. K. Schutz. Title: Link System of the Human Torso. Document Type: Abstract. Date: August 1972

Authors: R. G. Snyder; D. B. Chaffin; R. K. Schutz. Title: Link System of the Human Torso. Document Type: Report. Date: August 1979

University of Texas, Galveston, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	AF0108	Study of the incidence of sickle cell trait and other hemoglobinopathies and the determination of the effect of high altitudes on people with such abnormalities

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

AIR FORCE 1944 – 1974 (CONTINUED)

University of Texas, MD Anderson Hospital and Tumor Clinic, Houston, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1951	AF0023	Systemic and clinical effects induced in 263 cancer patients by whole body x-irradiation with nominal air doses of 15 to 200 R

(For further information, see Chapter 2—“Total-Body and Partial Body Irradiation Studies.”)

Documents: From: Lt. Col. John M. Talbot. To: Commandant USAF School of Aviation Medicine. Subject: Trip Report [to University of Texas MD Anderson Cancer Clinic to explore ... making psychomotor observations of some patients undergoing radiotherapy]. Document Type: Memorandum. Date: 3 April 1950

From: 1st Lt. Lando M. Haddock. To: Commanding General Air Materiel Command, Wright-Patterson Air Force Base. Subject: Negotiation of Cost Reimbursement Contract [the University of Texas M. D. Anderson Hospital; includes Project Specifications, Budget, Obligation Authority]. Document Type: Memorandum. Date: 19 October 1950

From: USAF SAM 3J. To: Commanding General Air Materiel Command. Subject: Negotiation of Cost Reimbursement Contract. Document Type: Memorandum. Date: 19 October 1950

Author: Lt. Col. John M. Talbot, USAF, MC, Chief, Dept. of Radiobiology. Title: Trip Report of Visit to MD Anderson Cancer Hospital. Document Type: Report. Date: 22 December 1950

Authors: Maj. Seymour Shwartz, USAF, MC, Research Secretary; Col. Henry M. Sweeney, USAF, Acting Director of Research. Title: Minutes, Research Council Meeting, 14 January 1954. Document Type: Minutes; Excerpt. Date: 21 January 1954

Authors: Col. John E. Pickering, USAF; Maj. Seymour Shwartz, USAF. Title: Request Funds for a One Year Extension of Contract AF 33(038)-20493 with MD Anderson Hospital for: A Study of Intellectual, Perceptual, Psychomotor and Biomedical Status of Patients Following Exposures to Moderate Quantities of Ionizing Radiation. Document Type: Proposal; Contract. Date: 26 January 1954

Title: Minutes, Research Council Meeting, 29 August 1955. Document Type: Minutes; Excerpt. Date: 29 August 1955

Authors: William C. Levin, M.D.; Martin Schneider, M.D.; Herbert B. Gerstner, M.D.; Title: Initial Clinical Reaction to Therapeutic Whole-Body X-Radiation—Some Civil Defense Considerations. Document Type: Report. Date: 1956 est.

Authors: W. K. Sinclair, Ph.D.; A. Cole, M.S. Title: Technic and Dosimetry for Whole Body X-Irradiation of Patients. Document Type: Report. Date: March 1957

Authors: Lowell S. Miller, M.D.; Gilbert H. Fletcher, M.D.; Herbert B. Gerstner, M.D. Title: Systemic and Clinical Effects Induced in 263 Cancer Patients by Whole Body X-Irradiation with Nominal Air Doses of 15 to 200 R. Document Type: Report. Date: May 1957

Author: Herbert B. Gerstner, M.D. Title: Military and Civil Defense Aspects of the Acute Radiation Syndrome in Man. Document Type: Report. Date: November 1957

Author: Lt. Col. Robert B. Payne, USAF, MSC. Title: Effects of Ionizing Radiation upon Human Psychomotor Skills. Document Type: Report. Date: December 1958

Authors: Lowell S. Miller; Gilbert H. Fletcher; Herbert B. Gerstner. Title: Radiobiologic Observations on Cancer Patients Treated with Whole-Body X-Irradiation [includes abstract]. Journal: Radiation Research, vol. 4. Document Type: Journal Article. Date: 1958

AIR FORCE 1944 – 1974 (CONTINUED)

University of Texas, MD Anderson Hospital and Tumor Clinic, Houston, TX (continued)

Author: Lt. Col. Robert B. Payne, USAF MSC. Title: Effects of Ionizing Radiation on Human Psychomotor Skills. Journal: United States Armed Forces Medical Journal, vol. X, no. 9. Document Type: Journal Article. Date: September 1959

Author: Col. John E. Pickering, USAF, School of Aviation Medicine. Title: Testimony on the Biological and Environmental Effects of Nuclear War Conducted by Special Subcommittee on Radiation, Joint Committee on Atomic Energy, 22–26 June 1959. Document Type: Report. Date: 1959 est.

Author: Col. John E. Pickering, USAF, School of Aviation Medicine. Title: Recorded Testimony on the Biological and Environmental Effects of Nuclear War, Conducted by Special Subcommittee on Radiation, Joint Committee on Atomic Energy, 22–26 June 1959. Document Type: Transcript. Date: 1959 est.

Author: Col. Robert B. Payne, USAF, MSC, Operations Division. Title: Effects of Acute Radiation Exposure on Human Performance. Document Type: Report. Date: February 1963

Title: Aeromedical Review: Effects of Acute Radiation Exposure on Human Performance. Document Type: Report. Date: March 1963

From: Lester J. Peters, Professor and Head, Division of Radiotherapy. To: Col. Gerald J. Merritt, USAF, BSC. Subject: The Search for Records Concerning Human Radiation Experiments Sponsored by the Air Force [includes requesting memorandums and newspaper clippings]. Document Type: Letter. Date: 29 August 1994

Walter Reed General Hospital, Washington, DC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	AF0043	Threshold for permanent functional and morphological visible damage in humans

(For abstract and documentation, see Eye Research Foundation of Bethesda, Bethesda, MD.)

Washington University, St. Louis, MO

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1951	AF0111	Study of diseases of the ear/external otitis

(For abstract and documentation see St. Louis Children's Hospital, St. Louis, MO.)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	AF0079	Clinical study of gastroesophageal reflux

(For abstract and documentation, see Frenchay Hospital, Bristol, England.)

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	CIDD-1-66	Serial investigation of a variety of congenital deformities of the brain case and facial skeleton and the response to treatment

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1968	AF0091	Angiographic studies using technetium-99m pertechnetate

Abstract: From 1968 to 1969, researchers from Wilford Hall Medical Center at Lackland Air Force Base, TX, evaluated the use of technetium-99m (Tc-99m) pertechnetate in venous angiogram studies for the identification of suspected venous occlusion or other obstructive diseases. It was hoped that Tc-99m pertechnetate could substitute for radiopaque dyes in allergic patients. The proposal required forty patients for imaging studies using both routine venous angiographic dyes and Tc-99m. Tc-99m imaging preceded routine studies. The Nuclear Chicago PhoGamma Camera was used to take pictures every four to fifteen seconds after injection of Tc-99m. Radiation exposures and results of this study are unavailable at this time.

Documents: Author: Robert L. Young. Title: Angiographic Studies Using Technetium 99m-Pertechnetate. Document Type: Proposal; File. Date: 20 November 1968

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1968	CID0345	Bone marrow transplantation in refractory acute leukemia

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1968	CID37C	Effectiveness of various cancer chemotherapeutic agents

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1968	CIDC-3(68)	Treatment of liver cancer by prolonged hepatic artery infusion with chemotherapy

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	AF0001	Iodine-131 in cisternography using intrathecally administered radioactive human serum albumin
Abstract:	<p>From 1969 until a presently undetermined date, researchers from Wilford Hall Medical Center at Lackland Air Force Base, TX investigated the use of radioactive iodinated serum albumen (RISA) for imaging cerebrospinal fluid-filled spaces around and within the brain. Cisternography using intrathecally (below the dura mater, one of the meninges of the brain) administered RISA was used to evaluate suspected hydrocephalus, to follow the course of hydrocephalus, and to evaluate the flow of cerebrospinal fluid through surgically implanted ventricular shunts. Sixty-two patients participated. Unless contraindicated, all patients received SSKI before RISA to block thyroid uptake of radioiodine. Using 100 millicuries of iodine-131 RISA, the estimated radiation dose to the central nervous system was 1 rad and the total-body dose was 100 millirads. Results of this study are unavailable at this time.</p>	

Documents: Title: Iodine-131 in Cisternography Using Intrathecally Administered Radioactive Human Serum Albumin. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	CID0245	Intracorporeal blood irradiation
	<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>	

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1970	CIDC-5(70)	Hormonal and epidemiological studies in women with carcinoma of the breast
	<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>	

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1970	CIDC-9(72)	Spleen in malignancy
	<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>	

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1970	CIDI-12	Purification and radioimmunoassay of blood clotting factor IX
------	---------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1970	CIDI-15	Enzyme diagnosis of myocardial infarction (MI) after heart surgery
------	---------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1970	CIDI-8	Safety of intravenous contrast material for patients with previous reactions
------	--------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1971	CIDC-7(71)	Retrospective clinical and pathologic analysis of over five hundred patients with thyroid carcinoma
------	------------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1971	CIDD-3	Phase I—to investigate the bony changes in the skull incidental to the employment of a fixed maxillary expansion device attached to the posterior maxillary dentition & phase II...
------	--------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	CIDI-36	Radiomunoassay of human thyrotrophin (TSH)

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	AF0024	Role of thyrotropin in goiter and thyroid nodules

Abstract: From 1972 to 1975 researchers from Wilford Hall Medical Center at Lackland Air Force Base, TX, examined the relationship between thyroid-stimulating hormone (TSH) and goiter and thyroid nodules. Twenty patients with simple or nodular goiter or solitary thyroid nodules and five patients with thyroid carcinoma participated. Baseline TSH levels were determined, and thyroxine suppression of TSH secretion was studied to learn if abnormalities in TSH secretion accompanied thyroid disease. Radiation exposures and results of this study are not available at this time.

Documents: From: SGHME. To: SGS. Subject: Research Proposal, The Role of Thyrotropin (TSH) in the Pathophysiology of Goiter and Thyroid Nodules [includes consent form]. Document Type: Proposal. Date: 22 December 1971

From: Robert L. Young, Lt. Col., USAF, MC, Chief, Endocrine-Metabolism Service, Department of Medicine, SGHME. To: SGS (Dr. McPhaul). Subject: Semi-Annual Progress Report of Investigations (Your letter, 15 Nov. 72). Document Type: Report; Memorandum. Date: 6 December 1972

From: SGHME. To: SGS/Dr. McPhaul. Subject: Semi-Annual Progress Report on Investigation. Document Type: Report; Memorandum. Date: 29 May 1973

From: Lt. Col. Robert L. Young, USAF, MC, Chief, Endocrine-Metabolic Service. To: Dr. McPaul, SGS. Subject: Final Report on Project F-29(72), Effect of Thyrotropin Releasing Hormone (TRH) on Pituitary Secretion of Growth Hormone (HGH) and Thyrotropin (TSH) In Patients with Acromegaly [includes memorandums initiating study]. Document Type: Memorandum. Date: 19 February 1975

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	CIDE-3-72	Angiographic and hemodynamic findings in the young patient with coronary artery disease

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	CIDF-16-72	Measurement of thyroid hormone and thyroid stimulating hormone in pregnancy and early life
<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	CIDF-17-72	Use of 5-fluorocytosine in mycotic infections
<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	CIDF-21-72	Role of thyrotropin (TSH) in the pathophysiology of goiter and thyroid nodules
<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	CIDI-23	Evaluation of systemic immunocompetence in patients receiving local irradiation following radical mastectomy
<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	CIDI-38-72	Delineation of abscesses by gallium-67
<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>		

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	CIDI-39-72	Development of a radioimmunoassay (in vitro test) for serum triiodothyronine
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	CIDI-40-72	Radioimmunoassay of serum human follicle-stimulating hormone (FSH) and luteinizing hormone (LH)
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	CIDS-17-72	Controlled study to determine the clinical value of asanguineous hypothermic total-body perfusion (total-body washout or TBW) in the resuscitation and subsequent survival of patients in stage IV hepatic coma
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	AF0002	Technetium-99 in bone scanning as a screening test in breast cancer
Abstract:	From 1973 to 1976 researchers from Wilford Hall Medical Center at Lackland Air Force Base, TX, evaluated the diagnostic accuracy of technetium-99m (Tc-99m) bone scanning for metastatic breast cancer. Previous studies showed that if metastases could be identified before surgery, the morbidity and complications of radical surgery could be avoided. Sixty patients participated. A routine head-to-pelvis skeletal survey with Tc-99m polyphosphate or Tc-99m diphosphate was done before breast biopsy. Positive scans were followed with biopsies, laboratory tests, or x-rays, but scans with lesions that could not be biopsied or confirmed were not considered positive. Positive scan lesions not easily biopsied were followed with x-ray studies at three month intervals until confirmation, autopsy, or study end. Radiation exposures and results of this study are not available at this time.	
Documents:	From: George E. Reynolds, Brig. Gen., USAF, MC, Director of Professional Services, Office of the Surgeon General. To: Wilford Hall USAF Medical Center/SG, Lackland AFB, TX. Subject: Clinical Investigation Proposal #517: Bone Scanning as a Screening Test in Breast Cancer. Document Type: Memorandum. Date: 14 January 1974	

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

Title: Bone Scanning as a Screening Test in Breast Cancer. Document Type: Report. Date: 30 June 1974

From: Charles F. Shield, III, Maj., USAF, MC, Chief Resident, General Surgery Service. To: SGS/Lt. Col. Van Riper.
Subject: Semi-Annual Progress Report of Investigators, Project C-13 (73) Bone Scanning as a Screen Test in Breast Cancer, SGO-517. Document Type: Memorandum. Date: 13 December 1976

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	AF0027	Technetium-phosphate complexes in the radioisotope diagnosis of avascular necrosis

Abstract: From 1973 to 1975 researchers from Wilford Hall Medical Center at Lackland Air Force Base, TX, investigated the use of technetium-99m (Tc-99m) phosphate complexes in the early detection of femoral fractures having a high predisposition to develop avascular necrosis. Nine patients participated. The initial study was conducted within forty-eight hours of injury or at the time of diagnosis. X-ray examinations were given for diagnostic purposes. Repeat studies were done at two and five weeks and were repeated if necessary. Radiation exposures for the Tc-99m complexes are unknown at this time. Radiation exposures from the diagnostic x-rays were within the range of conventional x-rays. Results of this study are not available at this time.

Documents: From: George E. Reynolds, B.G., USAF, MC, Director of Professional Services. Subject: Clinical Investigation Proposal #513: Tc-Phosphate Complexes in the Radioisotopic Diagnosis of Avascular Necrosis. Document Type: Memorandum. Date: 19 November 1973

Title: Semiannual Progress Report: 1 July–31 December 1973. Document Type: Report. Date: 31 December 1973

Author: Ellis P. Couch, Maj., USAF, MC. Title: (SGO-513): Tc-Phosphate Complexes in the Radioisotopic Diagnosis of Avascular Necrosis. Document Type: Report. Date: 30 June 1974

Title: Tc-Phosphate Complexes in the Radioisotopic Diagnosis of Avascular Necrosis. Progress Report for July–December 1974. Document Type: Report. Date: 1975 est.

Title: Tc-Phosphate Complexes in the Radioisotopic Diagnosis of Avascular Necrosis. Progress Report for January 1975–June 1975. Document Type: Report. Date: 1975 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	AF0092	Use of sodium iodide I-123 to perform radioiodine uptake and scan

Abstract: In 1973, researchers from Wilford Hall Medical Center at Lackland Air Force Base, TX, proposed to evaluate thyroid metabolism. To date, no information is available on the number of study participants. Patients were to be given 100 to 400 microcuries of sodium iodide (I-123) by mouth. Scans were to be done at variable intervals to evaluate thyroid I-123 uptake. The researchers estimated that the radiation dose to the thyroid would be 0.1 rad and the whole body dose to be 0.1 millirad per 100 microcuries. Results of this study are not available at this time

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

Documents: From: William C. Harvey, Lt. Col., USAF, MC, Chief, Nuclear Medicine Service. To: SGS. Title: Use of sodium-iodide-iodine-123. Document Type: Proposal. Date: 1 November 1973

Title: Use of Sodium Iodine I-123 to Perform Radioiodine Uptake and Scan. Document Type: Memorandum. Date: 1973

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	CID0478	Development and testing of a new aortic valve prosthesis

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	CIDI-48	Radioimmunoassay of serum androgens: Testosterone, androstenedione, and dehydroepiandrosterone (DHA)

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	CIDI-52-73	Radionuclidic imaging of the pancreas

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	CIDI-54-73	Technetium diphosphonate as a bone scanning agent

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	CIDI-58-73	Tc-phosphate complexes in the radiosotopic diagnosis of avascular necrosis

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	CIDI-59-73	Use of sodium iodide I-123 to perform radioiodine uptake and scan
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	CIDI-60-73	Radioimmunoassay of plasma aldosterone
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	CID0550	Incidence of hypothyroidism following radiotherapy for lymphoma
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	CID0560	Combination immunotherapy and chemotherapy in sarcoma
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	CID0564	Use of providone-iodine in the prophylaxis of wound infection
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	CID0567	Incidence and manifestation of impotence in lymphoma and leukemia
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	CIDF-40-74	Comparison of continuous catheter spinal anesthesia with single dose spinal anesthesia for transurethral resection of the prostate

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	CIDI-70	Radiology of the pliable solid bolus (marshmallow swallow) as a diagnostic tool in evaluation of the esophagus

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	AF0057	Identification and significance of parotid fluid corticosteroids: tritiated cortisol & aldosterone

(For abstract and documentation, see Brooke Army Medical Center, Houston, TX.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	CID0049	Phase III trial to preserve the larynx: induction chemotherapy and radiation therapy versus concomitant chemotherapy and radiation therapy versus radiation, RTOG 91-11

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	CID0185	Surgical therapy of malignant melanoma with or without regional perfusion

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

Start Date Number Title

Unknown CID0463 Lymphocyte function in Hodgkin's disease: a prospective study

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Start Date Number Title

Unknown CID0517 Bone scanning as a screening test in breast cancer

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Start Date Number Title

Unknown CID0923 CACP in refractory epidermoid on carcinoma of the esophagus

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Start Date Number Title

Unknown CID37-4 Cis-platinum in refracted epidermoid carcinoma of the head and neck

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Start Date Number Title

Unknown CID37B Chemotherapy of advanced prostatic cancer

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Start Date Number Title

Unknown CID7701 CIA vs. ifosfamide alone in sensitive lung cancer

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	CID7756A	Aldosterone and angiotensin levels in hypertensive patients
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	CID7756C	Cisternography using intrathecally administered radioactive human serum albumin
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	CID7756F	Evaluation of the effects of several cancer chemotherapeutic agents on spermatogenesis and meiosis in man
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	CIDE-1	Myocardial infarction rehabilitation program
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	CIDS-419	Breast cancer and polyps of the colon
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

142 Appendix 1—Records Search

AIR FORCE 1944 – 1974 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	CIDS-6	Plasma protein denaturation during cardiopulmonary bypass and the influence of the reticuloendothelial system upon these changes

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Wright-Patterson AFB Medical Center, OH

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	AF0025	Clinical investigation of gallium-67 citrate

Abstract: From 1973 to 1976, researchers at the Wright-Patterson Air Force Base Medical Center in Dayton, OH, conducted an Investigational New Drug (IND) clinical program to approve New England Nuclear (NEN) gallium-67 (Ga-67) citrate as a tumor scanning agent. Two hundred fifty cancer patients participated. Ga-67 citrate was administered intravenously at a dose of 0.03 to 0.07 millicurie per kilogram of body weight. Scanning was performed forty-eight hours after administration. Whole body dosimetry was estimated to be 0.25 rad per millicurie dose. NEN Ga-67 became available for routine use in 1976.

Documents: Title: Proposal for Clinical Investigation, Clinical Investigation of Gallium-67 Citrate. Document Type: Proposal. Date: 1973

From: Joseph E. Wesp, Col., USAF, MC, Commander. To: HQ USAF/SGPAR. Subject: Report: Clinical Investigations of Soft Tissue Tumor Scanning with Gallium-67 Citrate (#488) and Indium-111 DTPA for CNS Cisternography (#489) [includes Clinical Investigation Proposal #488, #489; Clinical Investigation #488, #489]. Document Type: Report; Memorandum; Proposal. Date: 17 April 1974

Title: Clinical Investigation Proposal #489. Document Type: Proposal. Date: 17 April 1974

Title: Clinical Investigation Proposal #488. Document Type: Proposal. Date: April 1974

Title: Clinical Investigation #488. Document Type: Report. Date: July 1974 est.

Title: Clinical Investigation #489. Document Type: Report. Date: July 1974 est.

From: John J. Halki, Col., USAF, MC, Commander. To: HQ USAF/SGPR. Title: Progress Report: Clinical Investigation Proposal #488. Document Type: Report. Date: 18 March 1976

From: Maj. Samuel Sostre, USAF, MC, Chairman, Department of Nuclear Medicine. To: HQ USAF/SGPR. Subject: Final Report, Clinical Investigation Proposal #488, 67-Ga Citrate [includes related memorandums]. Document Type: Memorandum. Date: 20 September 1976

Authors: Maj. Samuel Sostre, MC, USAF; Maj. Harvey L. Handler, MC, USAF. Title: Bony Lesions in Systemic Mastocytosis, Scintigraphic Evaluation. Journal: Archives of Dermatology, vol. 113. Document Type: Journal Article. Date: September 1977

AIR FORCE 1944 – 1974 (CONTINUED)

Wright-Patterson AFB Medical Center, OH (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	AF0026	Evaluation of indium-111 DTPA for cisternography

Abstract: From 1973 to 1977 researchers from the Wright-Patterson Air Force Base Medical Center in Dayton, OH, evaluated the use of indium-111 pentetic acid (In-111 DTPA) as a tracer for examining cerebrospinal fluid dynamics. Eight patients participated in this study. In-111 DTPA was selected for use in cisternography because the radiation dose and risk of reactions were lower than with conventional radiopharmaceuticals. In-111 was used successfully in the diagnosis of low-pressure hydrocephalus, diagnosing the presence of arachnoid blocks and cysts, and in documenting the patency of ventricular shunts. In-111 was administered in the range of 0.2 to 0.5 millicurie. Whole-body dose was estimated to be 0.275 rad per 0.5 millicurie. Spinal cord dose was 6.10 rads per 0.5 millicurie.

Documents: From: George E. Reynolds, Brig. Gen., USAF, MC, Director of Professional Services, Office of the Surgeon General. To: SGPR. Subject: Approval of Clinical Investigation Proposal #489: Evaluation of In-111-DTPA for Cisternography. Document Type: Memorandum; Proposal. Date: 14 August 1973

Title: Proposal for Clinical Investigation: Evaluation of 111-In-DTPA for Cisternography [includes Memo, Amendment, Statement of Investigator, and Curriculum Vitae]. Document Type: Proposal. Date: 28 September 1973

From: Samuel Sostre, Maj., USAF, MC, Chairman, Dept. of Nuclear Medicine. To: HQ USAF/SGPR. Subject: Clinical Investigation Proposal #489. Document Type: Proposal. Date: 17 April 1974

From: Joseph E. Wesp, Col., USAF, MC, Commander. To: HQ USAF/SGPAR. Subject: Report: Clinical Investigations of Soft Tissue Tumor Scanning with Gallium-67 Citrate (#488) and Indium-111 DTPA for CNS Cisternography (#489). Document Type: Report; Memorandum; Proposal. Date: 17 April 1974

Title: Clinical Investigation Proposal #488. Document Type: Proposal. Date: April 1974

Title: Clinical Investigation #488. Document Type: Report. Date: July 1974 est.

From: John J. Halki, Col., USAF, MC Commander. To: HQ USAF/SGPR. Subject: Progress Report Clinical Investigation #489. Document Type: Report. Date: July 1974 est.

Authors: Stephen N. Wiener, M.D.; Phillip H. Weiss, M.D. Title: Radionuclide Imaging in the Care of the Critically Ill Patient. Journal: Surgical Clinics of North America, vol. 55, issue 3. Document Type: Journal Article. Date: 3 June 1975

From: Gunter R. Meng, Col., USAF, MC, Commander; Samuel Sostre, Maj., USAF, MC, Chairman of Dept. of Nuclear Medicine; John J. Halki, Col., USAF, MC, Commander. To: HQ USAF/SGPR. Subject: Clinical Investigation Proposal 489 [includes: two Progress Reports of Clinical Investigation Proposal #489, dated 20 September 1976 and 18 March 1976]. Document Type: Memorandum. Date: 29 September 1976

From: John J. Halki, Col., USAF, MC, Commander. To: HQ USAF/SGPR. Subject: Final Report: Clinical Investigation Proposal #489. Document Type: Memorandum. Date 12 April 1977

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	AF0094	Sizing system for high altitude gloves

(For abstract and documentation, see Antioch College, Yellow Springs, OH.)

ARMY 1944–1974

Aberdeen Proving Grounds, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	CBDCOM001	Attenuation of 1.2 MeV gamma radiation by Soviet and U.S. military vehicles and rail equipment

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Army Chemical Research and Development Laboratories, Army Chemical Center, Edgewood, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1958	MRDC021	Fate of atropine in man

Abstract: From 1958 to 1960, researchers from the Army Chemical Research and Development Laboratories in Edgewood, MD, and the Strong Memorial Hospital in Rochester, NY, analyzed atropine metabolism and excretion. One male patient aged 73 from Strong Memorial Hospital and one healthy male aged forty-three from the Army Chemical Center participated. Researchers injected a single two-milligram dose of carbon-14 labeled atropine intramuscularly. Both participants reported dryness of the mouth and slight confusion lasting one to one-and-one-half hours following atropine administration. One participant experienced mild tachycardia (abnormal heart rate acceleration). Eighty-five to 88 percent of radioactivity in the atropine dose was excreted in urine within the first twenty-four hours. Approximately half of the atropine remained intact. Researchers concluded that man does not metabolize atropine as extensively as laboratory animals.

Documents: Authors: R. E. Gosselin; J. D. Gabourel; J. H. Wills. Title: The Fate of Atropine in Man. Journal: Clinical Pharmacology and Therapeutics. Document Type: Journal Article. Date: 1960 est.

Army Institute of Surgical Research, Brooke Army Medical Center, Fort Sam Houston, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1953	MRDC009	Kinetics of radioiodide distribution in chronic renal disease studied by means of the artificial kidney

Abstract: From 1953 to 1954, researchers from the Army Institute of Surgical Research at Brooke Army Medical Center in Fort Sam Houston, TX, examined iodide distribution and kinetics using estimates of the thyroidal and renal clearances of iodide. Thirteen patients—eight with chronic renal disease and five with non-renal disease—participated. Research participants received, either orally or intravenously, three tracer doses of iodine-131 ranging from 5 to 200 microcuries.

ARMY 1944–1974 (CONTINUED)

Army Institute of Surgical Research, Brooke Army Medical Center, Fort Sam Houston, TX (continued)

Researchers demonstrated that it is possible to remove up to 70 percent of available iodine in vivo within a period of six hours with an artificial kidney.

Documents: Title: Research Progress Report, Annual Report, 01 July 1952–30 June 1953. Document Type: Report; Excerpt. Date: 30 June 1953

Authors: David V. Becker, M.D.; Lamont E. Danzig, M.D. Title: Kinetics of Radioiodide Distribution in Chronic Renal Disease Studied by Means of the Artificial Kidney. Journal: Transactions of the American Goiter Association. Document Type: Journal Article. Date: Unknown

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1962	MRDC010	Study of blood loss during excision of third degree burns

Abstract: From 1962 to 1963, researchers from the Army Institute of Surgical Research at Brooke Army Medical Center in Fort Sam Houston, TX, investigated blood loss during excision of burn wounds. Sixteen burn patients, both children and adults, participated. Blood volume was estimated before and after surgery using one to five microcuries of iodine-131 labeled albumin. The need for postoperative estimation of blood volume was the greatest in children.

Documents: Title: Study of Blood Loss During Excision of Third Degree Burns. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1963	MRDC011	Study of methods for measuring blood loss during surgery

Abstract: From 1963 to 1964, researchers from the Army Institute of Surgical Research at Brooke Army Medical Center in Fort Sam Houston, TX, evaluated five methods of estimating operative blood loss and the subsequent need for transfusion. Twenty adult female patients undergoing abdominal and vaginal hysterectomies participated. Each participant received four to five microcuries of iodine-131 labeled human serum albumin to estimate the plasma volume before and after the surgical procedure. All methods of direct measurement were found to be clinically useful and accurate. The blood volume, as measured in the Volemetron, was found to be the simplest and most practical method of measuring operative blood loss. In the absence of Volemetron, the gravimetric method was considered the most valuable and more useful than blood volumes determined in the standard manner. The colorimetric method was as accurate as the gravimetric, but it was not as practical unless the specific equipment for continuous measurement was available. The patient-weighting technique was of value only to validate other methods. Microhematocrits, when used alone, were misleading, but they were necessary for evaluation of blood volume determinations.

Documents: Authors: Robert C. Moore, Junior, Lt. Col., Medical Corps; Peter C. Canizaro; Capt. Robert B. Sawyer, Medical Corps; Joseph C. Darin; Lt. Col. John A. Moncrief, Medical Corps. Title: An Evaluation of Methods for Measuring Operative Blood Loss. Journal: Anesthesia and Analgesia—Current Researches. Document Type: Journal Article. Date: January–February 1965

ARMY 1944–1974 (CONTINUED)

Army Institute of Surgical Research, Brooke Army Medical Center, Fort Sam Houston, TX
(continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1965	MRDC012	Study of post-injury hemodynamics in burn patients
------	---------	--

Abstract: From 1965 to 1970, researchers from the Army Institute of Surgical Research at Brooke Army Medical Center in Fort Sam Houston, TX, studied changes in blood volume and hemodynamics during burn resuscitation. Ten burn patients participated in the study. Plasma volume was measured in each participant with tracer doses of iodine-131 labeled human serum albumin. Early obligatory plasma volume loss was identified, giving way to small obligatory gain after twenty-four hours. No significant correlation was found between volume restoration and the colloid concentration of replacement fluids. This study provided a foundation for recommending buffered saline replacement fluid for acute burn treatment on the battlefield. This was also one of the early studies supporting the present-day practice of buffered saline use during care of burn patients in the first twenty-four hours after injury.

Documents: Title: Study of Post-Injury Hemodynamics in Burn Patients. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1966	MRDC013	Study of the efficacy of buffered saline in replacing blood volume after measured blood loss in normal volunteers
------	---------	---

Abstract: From 1966 to 1967, researchers from the Army Institute of Surgical Research at Brooke Army Medical Center in Fort Sam Houston, TX, evaluated normal saline as a replacement fluid after blood loss. Thirty-three healthy volunteers participated. Plasma volume was measured before and at two time intervals after donating blood. Tracer doses of iodine-131 labeled human serum albumin were used to measure the plasma volume. Saline was an effective replacement fluid. Replacement volume was quantified and has become common practice.

Documents: Title: Study of the Efficacy of Buffered Saline in Replacing Blood Volume After Measured Blood Loss in Normal Volunteers. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1967	MRDC014	Study of the effects of salt ingestion during intense physical conditioning in a hot climate
------	---------	--

Abstract: From 1967 to 1968, researchers at the Army Institute of Surgical Research Unit at Brooke Army Medical Center in Fort Sam Houston, TX, investigated electrolyte metabolism during heat acclimatization. Twenty-four basic trainee volunteers participated in the study. Fifteen participants were intravenously administered one microcurie/kg of potassium-42 chloride for exchangeable potassium determination and a dose of aldosterone-2-tritium for assessment of secretory rate. Nine subjects were administered fifty microcuries of sodium sulfate (containing sulphur-35) for the determination of extracellular fluid volume. Results indicated that massive sodium loading during acclimatization, then a common practice in troops, may increase the

ARMY 1944–1974 (CONTINUED)

Army Institute of Surgical Research, Brooke Army Medical Center, Fort Sam Houston, TX (continued)

severity of potassium depletion and the risk of serious environmental heat injury and rhabdomyolysis, an acute and sometimes fatal disease characterized by the destruction of skeletal muscle. This study added to the knowledge of environmental heat injuries and impacted troop training practices in hot climates.

Documents: Authors: James P. Knochel et al. Title: Pathophysiology of Intense Physical Conditioning in a Hot Climate. Journal: The Journal of Clinical Investigation, vol. 51, issue 2, 1972. Document Type: Journal Article. Date: February 1972

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	MRDC015	Study of the applicability of xenon scan on the diagnosis of inhalation injury

Abstract: From 1971 to 1972, researchers from the Army Institute of Surgical Research at Brooke Army Medical Center, Fort Sam Houston, TX, evaluated the effectiveness of xenon-133 (Xe-133) lung scanning in the diagnosis of inhalation injury. Fifty burn patients participated in the study. The lung scan involved an injection of six to ten microcuries of Xe-133, dissolved in saline, into either the antecubital or femoral vein. The scan was found to facilitate early diagnosis and, in turn, early therapy for diagnosed injury, thus reducing secondary bacterial complications and the high mortality associated with inhalation injury.

Documents: Authors: Joseph A. Moylan et al. Title: Early Diagnosis of Inhalation Injury Using 133-Xenon Lung Scan. Journal: Annals of Surgery, vol. 176, issue 4. Document Type: Journal Article. Date: October 1972

Army Medical Nutrition Laboratory, Denver, CO

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	RECC001	Food irradiation program

(For further information, see Chapter 8—"Food Irradiation".)

Documents: From: Lorraine A. Schultz, Maj., QMC Adjutant. To: The Surgeon General, Department of the Army, Attn.: Research and Development Division (Lt. Col. William W. Cox), Through: The Quartermaster General, Department of the Army, Attn.: Research and Engineering Division. Subject: FEA 57029, Troop Acceptability of TTP Foods (Phase II). Document Type: Memorandum. Date: 10 July 1954

From: A. W. Harvey, Chairman, QMC-AMS Task Group. To: Col. T. E. Huber, Member, QMC-AMS Task Group, Office of the Surgeon General, Department of the Army. Subject: [forwarding of: Plan of Test for Preference for Irradiated Pork, FEA 57029, for concurrence]. Document Type: Letter. Date: 10 January 1958

Title: Statement of Work for the Establishment of a Laboratory to Conduct Research with Radiation Preserved Food Products at Fort Lee. Document Type: Statement; Contract. Date: 16 January 1958

From: Tyron E. Huber, Col., MC, Chief, Medical Research Branch, Research and Development Division. To: Dr. Arnold Lehman, Chief, Division of Pharmacology, Dept. of Health, Education and Welfare, Food and Drug Administration. Subject: [request for advisement regarding whether to follow up physical examinations at six months or three months for Fort Lee participants in irradiated foods tests]. Document Type: Letter. Date: 6 February 1958

ARMY 1944–1974 (CONTINUED)

Army Medical Nutrition Laboratory, Denver, CO (continued)

From: A. J. Lenman, M.D., Director, Division of Pharmacology, Bureau of Biological and Physical Sciences. To: Tyron E. Huber, Colonel, MC, Chief, Medical Research Branch, Research and Development Division, Department of the Army, Office of the Surgeon General. Subject: [opinion supporting follow up physical examination for food irradiation test at three months.]. Document Type: Letter. Date: 12 February 1958

From: A. W. Harvey, Chairman, QMC-AMS Task Group. To: Col. T. E. Huber, Member, QMC-AMS Task Group, Office of the Surgeon General, Department of the Army. Subject: [reply to letter of 6 February 1958 and concurrent review with regard to correction to protocol in order to avoid errors of interpretation and intent]. Document Type: Letter. Date: 14 February 1958

From: Tyron E. Huber, Col., MC, Chief, Medical Research Branch, Research and Development Division. To: The Surgeon General, Dept. of Army. Subject: Conversation with Mr. Skinner, Lederle Laboratory, Relative to Supply of Botulinus Antitoxin. Document Type: Memorandum. Date: 19 February 1958

From: Tyron E. Huber, Colonel, MC, Chief, Medical Research Branch, Research and Development Division. To: Dr. A. W. Harvey, Office of the Scientific Director, QM Research and Engineering Command. Subject: [reply to letter dated 14 February 1958 requesting concurrence in the Plan of Test and Scope of Work]. Document Type: Letter. Date: 24 February 1958

From: Tyron E. Huber, Col., MC, Chief, Medical Research Branch, Research and Development Division. To: Dr. A. W. Harvey, QM Research and Engineering Command. Subject: [reply to letter regarding amendment of paragraph to scope of work for: Plan of Test for Soldier for Irradiated Pork]. Document Type: Letter. Date: 6 March 1958

From: William W. Cox, Lt. Col., Medical Research Br. To: Memorandum for the Record. Subject: Telephone Conversation with Dr. A. Harvey, Natik, Mass., re: the Irradiated Food Acceptance Tests to be conducted at Fort Lee, VA. Document Type: Memorandum. Date: 12 March 1958

From: A. W. Harvey, Chairman, QMC-AMS Task Group. To: Col. T. E. Huber, Member, QMC-AMS Task Group, Office of the Surgeon General, Department of the Army. Subject: [reply to letter dated 7 March 1958, confirming implementation for projected soldier preference test schedule]. Document Type: Letter. Date: 13 March 1958

From: Carl J. Koren, Lt. Col., MSC, Commanding. To: Col. Ervin L. Kener, QMC, Commandant, Quartermaster Food and Container Institute. Attn.: Lt. Col. Robert Ryer, III, Medical Service Liaison Officer. Subject: Medical Protection Plan for the Irradiated Food Taste Panel. Document Type: Memorandum. Date: 20 March 1958

From: Lorraine A. Schultz, Maj., QMC, Adjutant. To: The Surgeon General, Department of the Army, Attn.: Research and Development Division (Col. T.E. Huber), Through: The Quartermaster General, Department of the Army, Attn.: Research and Engineering Division. Subject: FEA 57029, Troop Acceptability of TTP Foods. Document Type: Memorandum. Date: 21 March 1958

From: William W. Cox, Lt. Col., MC, Chief, Medical Research Branch, Research and Development Division. To: Dr. A. W. Harvey, Office of the Scientific Director, QM Research and Engineering Command. Subject: [concerns regarding postponement of test date, filming, and request for a task force meeting]. Document Type: Letter. Date: 25 March 1958

From: A. W. Harvey, Chairman, QMC-AMS Task Group. To: Lt. Col. William W. Cox, Office of the Surgeon General, Department of the Army. Subject: [reply to letter of 26 March, delay of start date for food preference test and plans to coordinate any changes or publicity]. Document Type: Letter. Date: 6 April 1958

From: William W. Cox, Lt. Col., MC, Chief, Medical Research Branch, Research and Development Division. To: Dr. Arnold Lehman, Chief, Division of Pharmacology, Food and Drug Administration, Dept. of Health, Education and Welfare. Subject: [forwarding of letter from Scientific Director, QM Research and Engineering Command Field Evaluation Agency, Fort Lee, re: preliminary report of test FEA 57029, Troop Acceptability of TTP Foods]. Document Type: Letter. Date: 26 May 1958

From: Howard W. Hembree, Scientific Director. To: Commanding General, QM R&E Command, US Army. Subject: Preliminary Report of Test FEA 57029, Troop Acceptability of TTP Foods—Phase II. Document Type: Report; Memorandum. Date: 30 June 1958

ARMY 1944–1974 (CONTINUED)

Army Medical Nutrition Laboratory, Denver, CO (continued)

From: Erwin O. Kruegel, Chief Applications Engineering Branch, Research and Engineering Division. To: The Surgeon General, Department of the Army, Attn.: Research and Development Division (Lt. Col. William W. Cox). Subject: FEA 57029, Troop Acceptability of TTP Foods (Phase II) [forwarding copies of test]. Document Type: Memorandum. Date: 10 July 1958

From: William W. Cox, Lt. Col., MC, Chief, Medical Research Branch, Research and Development Division. To: The Quartermaster, Department of the Army, Attn.: Chief, Research and Engineering Division. Subject: FEA 57029, Troop Acceptability of TTP Foods (Phase II). Document Type: Memorandum. Date: 21 July 1958

Authors: Edwin L. Bierman, Capt., MC, Surgeon General's Representative; Title: [completion of physical examinations of soldiers who participated in testing of irradiated food]. Document Type: Report. Date: 13 August 1958

From: Gustaf A. Engstrom, Col., QMC, Commanding. To: The Surgeon General, Department of the Army, Attn.: Lt. Col. William W. Cox, Chief, Medical Research Br., R&D Div. Subject: Physical Examination of Fort Lee Personnel Who Participated in the Conduct of FEA 57029, Troop Acceptability of TTP Foods. Document Type: Memorandum. Date: 26 August 1958

From: John B. Youmans, M.D., Technical Director of Research. To: For the Record. Subject: [meeting discussion regarding continuation of irradiated food tests at Fort Lee]. Document Type: Memorandum. Date: 6 October 1958

From: Edwin L. Bierman, Capt., MC. To: Lt. Col. William W. Cox, Chief, Medical Research Br., R&D Division, Office of the Surgeon General, Department of the Army. Subject: [Fort Lee Schedule for Irradiated Food Testing and Request to Transfer an M.D. for the Entire Test Period]. Document Type: Letter. Date: 27 October 1958

From: Edwin L. Bierman, Capt., MC. To: Lt. Col. William W. Cox, Chief, Medical Research Br., R&D Division, Department of the Army. Subject: [letter with enclosure of schedule for irradiated food testing at Fort Lee]. Document Type: Letter. Date: 27 October 1958

Author: Edwin L. Bierman, Capt., MC, Surgeon General's Representative. Title: Physical Examinations. Document Type: Report; Roster. Date: 31 October 1958

From: William W. Cox, Lt. Col., MC, Chief, Medical Research Branch. To: Commandant, Quartermaster Food and Container Institute, QM Research and Engineering Command, US Army, through the Quartermaster General, Department of the Army. Subject: Request Authority to Feed Beef, Flour, and White Potatoes for Test of Troop Acceptability of TTP Foods. Document Type: Memorandum. Date: 17 November 1958

Author: Chimer D. Moore, Jr., Capt., MC, Surgeon General's Representative. Title: Approved Volunteers for Consumption of Irradiated Food 1–8 December. Document Type: Report; Roster. Date: 28 November 1958

Author: C. D. Moore, Jr., Capt., MC, Medical Test Officer. Title: Human Consumption of Irradiated Food—Medical Aspects. Document Type: Report; Fact Sheet. Date: 22 January 1959

From: C. D. Moore, Jr., Capt., MC. To: Lt. Col. William W. Cox, Chief, Medical Research Branch, Research and Development Division, Office of the Surgeon General. Subject: [regarding procedure for keeping the records of volunteers on file according to Army procedures]. Document Type: Letter. Date: 27 January 1959

From: C. D. Moore, Jr., Capt., MC. To: Lt. Col. William W. Cox, Chief, Medical Research Branch, Office of the Surgeon General. Subject: [reports of laboratory study findings for human subjects involved in the last phase of QM FEA Test No. 58040]. Document Type: Letter. Date: 9 February 1959

From: John D. Martz, Jr., Col., QMC, Chief, Research & Engineering Division. To: C/R&D. Subject: Human Feeding of Irradiated Food. Document Type: Memorandum. Date: 28 October 1959

150 Appendix 1—Records Search

ARMY 1944–1974 (CONTINUED)

Army Medical Nutrition Laboratory, Denver, CO (continued)

From: William B. Levin, Lt. Col., Radiation Officer, Research & Engineering Division. To: The Surgeon General. Subject: Forwarding of Comment #2, Dated 28 October 1959, Re: Tests Involving Human Consumption of Irradiated Food at Fort Lee. Document Type: Memorandum. Date: 9 November 1959

Title: Comments on the Availability of Personnel at Fort Lee for Participation in Irradiated Food Tests; Organizational Activities (June through December 1958). Document Type: Report. Date: 1959 est.

Army Natick Research, Development, and Engineering Center, Natick, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	RECC001	Food irradiation program

(For abstract and documentation, see Army Medical Nutrition Laboratory, Denver, CO.)

Army Quartermaster School, Fort Lee, VA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	RECC001	Food irradiation program

(For abstract and documentation, see Army Medical Nutrition Laboratory, Denver, CO.)

Biomedical Laboratory, Edgewood, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	MRDC025	Measurement of central action of psychotropic agents by pupillometry

Abstract: From a presently undetermined date until 1973, researchers from the Biomedical Laboratory in Edgewood, MD, assessed the effects of mind-altering drugs in the central nervous system by measuring the diameter of the pupil. Six volunteers had cranial x-rays taken to measure calcium deposits in the pineal gland, a pine-cone shaped gland within the brain that secretes melatonin. The degree of calcification was correlated to blood melatonin levels. Of the six participants, only one showed any sign of calcification, but this finding was regarded as questionable.

Documents: From: Lt. Col. Samuel A. Cucinell, M.D., Chief, Clinical Research Branch. To: Director of Biomedical Laboratory. Subject: Volunteer Report for April 1973 [includes summaries of several clinical investigation tests]. Document Type: Memorandum. Date: 14 May 1973

ARMY 1944–1974 (CONTINUED)

Brooke Army Medical Center, Houston, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	ACIR56000-A	Platelet transfusion—efficiency and methods to improve current results in thrombocytopenia patients
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	ACIR64000	Survival rates of testis tumors (Army-wide investigational treatment study)
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-K	Conservative surgery following preoperative radiotherapy for lung cancer
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-L	Evaluation of gallium-67 as a scanning agent for malignant neoplasms
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-N	Seminoma of the testicle: prophylactic mediastinum irradiation vs. periaortic and pelvic irradiation alone
At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.		

ARMY 1944–1974 (CONTINUED)

Brooke Army Medical Center, Houston, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-O	Phase I protocol for the evaluation of combined radiotherapy and chemotherapy for stage IIb, IIIa, and IIIb Hodgkin's disease
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	ACIR73000-H	Clinical evaluation of cisternography utilizing 111-indium DTPA (1973)
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	ACIR73000-M	Use of fluorine-18 as a bone scanning agent in a variety of bone diseases
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-D	Evaluation of combined radiotherapy and chemotherapy for stages IIb, IIIa and IIIb Hodgkin's disease, SWOG 160
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-N	Clinical evaluation of the thyroid by in vivo radionuclidic studies utilizing iodide-123
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Charity Hospital, New Orleans, LA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	RECC002	Biological decay rates of chloride in normal and diseased man, determined with long-life radiochloride, Cl-36

Abstract: From a presently undetermined date until 1952, researchers from Tulane University in New Orleans, LA, studied the metabolism and biological decay of a long-lived isotope of chlorine (Cl-36). Six patients at Charity Hospital in New Orleans participated; two were controls, two had moderately severe chronic congestive heart failure, and two had severe chronic congestive heart failure. Cl-36 decay rates were determined both on a daily basis and long-term basis. Distribution equilibrium of Cl-36 was reached sometime after the first forty-eight hours and most probably by seventy-two hours following injection for the non-edematous patients. It was determined that five days might be required for detailed and accurate investigations based upon establishment of equilibrium of distribution, especially for subjects with edema.

Documents: Author: G. E. Burch. Title: Peripheral Blood Vessels, 01 October–31 December 1949. Document Type: Report. Date: 31 December 1949

Author: G. E. Burch. Title: Behavior of Peripheral Blood Vessels, 01 January–31 March 1949. Document Type: Report. Date: 1949 est.

Author: G. E. Burch. Title: Behavior of Peripheral Blood Vessels, 01 April–30 June 1949. Document Type: Report; Excerpt. Date: 1949 est.

Author: G. E. Burch. Title: Behavior of Peripheral Blood Vessels, 01 July–30 September 1949. Document Type: Report; Excerpt. Date: 1949 est.

Authors: G. E. Burch; S. A. Threefoot; C. T. Ray. Title: Rates of Turnover and Biologic Decay of Chloride and Chloride Space in the Dog Determined with the Long-Life Isotope, Cl 36. Journal: Journal of Laboratory and Clinical Medicine, vol. 35, issue 3. Document Type: Journal Article. Date: March 1950

Author: G. E. Burch. Title: Behavior of Peripheral Blood Vessels. Document Type: Report; Excerpt. Date: 11 April 1950

Author: G. E. Burch. Title: Peripheral Blood Vessels, 01 January–30 June 1950. Document Type: Report. Date: 30 June 1950

Author: G. E. Burch. Title: Peripheral Blood Vessels, 01 July–31 December 1950. Document Type: Report. Date: 31 December 1950

Author: G. E. Burch. Title: Peripheral Blood Vessels. Document Type: Report. Date: 30 June 1951

Title: Effects of Irradiation. Document Type: Report. Date: 1 November 1951

Author: G. E. Burch. Title: Peripheral Blood Vessels (Final Report). Document Type: Report. Date: 31 December 1951

Authors: C. T. Ray; G. E. Burch; S. A. Threefoot. Title: Biologic Decay Rates of Chloride in Normal and Diseased Man, Determined with Long-Life Radiochloride. Journal: The Journal of Laboratory and Clinical Medicine, vol. 39, issue 5. Document Type: Journal Article. Date: May 1952

Authors: George E. Burch, M.D.; John J. Walsh, M.D. Title: The Excretion and Biologic Decay Rates of Cl with a Consideration of Space, Mass, and Distribution in Dogs. Journal: Journal of Laboratory and Clinical Medicine, vol. 54, issue 1. Document Type: Journal Article. Date: July 1959

Title: Search of Nuclear Science Abstracts for Information on Tracer Techniques. Document Type: Search Printout. Date: 1994

ARMY 1944–1974 (CONTINUED)

Charity Hospital, New Orleans, LA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	RECC003	Urinary excretion and biological decay periods of radiomercury labeling a mercurial diuretic in normal and diseased man

Abstract: From a presently undetermined date until 1950, researchers from Tulane University in New Orleans, LA, analyzed the rate of urinary excretion of mercury-203 (Hg-203) and mercury-206 (Hg-206), in an organic mercurial diuretic. Problems associated with toxicity and biological decay rates were also investigated. Eighty-three patients at Charity Hospital in New Orleans participated. The diuretic was administered either intravenously or intramuscularly. The quantity of radioactive material administered varied from 10 to 100 microcuries depending on the time frame. Collections of urine and blood were made until there was no detectable radioactivity. Mercury was excreted rapidly when cardiovascular and renal functions were normal, one-half being excreted in approximately one to eight hours. The rate of excretion was slightly less rapid when the drug was administered intramuscularly than when administered intravenously. Chronic congestive heart failure tended to diminish the rate of excretion, although individual variations were large. The state and stage of congestive heart failure influenced the rate of excretion. The rate of excretion of radiomercury was considerably impaired by renal insufficiency; the degree of impairment may be great enough to result in accumulation of toxic quantities of mercury with frequent administration of the drug.

Documents: Author: G. E. Burch. Title: Peripheral Blood Vessels, 01 October–31 December 1949. Document Type: Report. Date: 31 December 1949

Author: G. E. Burch. Title: Behavior of Peripheral Blood Vessels, 01 January–31 March 1949. Document Type: Report. Date: 1949 est.

Author: G. E. Burch. Title: Behavior of Peripheral Blood Vessels, 01 April–30 June 1949. Document Type: Report; Excerpt. Date: 1949 est.

Author: G. E. Burch. Title: Behavior of Peripheral Blood Vessels, 01 July–30 September 1949. Document Type: Report; Excerpt. Date: 1949 est.

Author: G. E. Burch. Title: Behavior of Peripheral Blood Vessels. Document Type: Report; Excerpt. Date: 11 April 1950

Author: G. E. Burch. Title: Peripheral Blood Vessels, 01 January–30 June 1950. Document Type: Report. Date: 30 June 1950

Authors: George Burch et al. Title: The Urinary Excretion and Biologic Decay Periods of Radiomercury Labeling a Mercurial Diuretic in Normal and Diseased Man. Journal: The Journal of Clinical Investigation, vol. XXIX, issue 9. Document Type: Journal Article. Date: September 1950

Author: G. E. Burch. Title: Peripheral Blood Vessels, 01 July–31 December 1950. Document Type: Report. Date: 31 December 1950

Author: G. E. Burch. Title: Peripheral Blood Vessels (Final Report). Document Type: Report. Date: 31 December 1950

Authors: G. E. Burch. Title: Peripheral Blood Vessels. Document Type: Report. Date: 30 June 1951

ARMY 1944–1974 (CONTINUED)

Chemical and Radiological Laboratories, Edgewood, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1954	MRDC022	(Chemical Corps Research & Engineering Command at the Edgewood Area of Aberdeen Proving Grounds)

Abstract: From 1954 until a presently undetermined date, researchers from the Army Chemical Center, MD (which is now the Edgewood area of Aberdeen Proving Grounds), studied the excretion rates of atropine and its metabolic products. Ten healthy volunteers received parenteral injections of synthetic atropine labeled with radioactive carbon. Results revealed therapeutic uses for atropine and aided in the development of more persistent atropine analogs.

Documents: Title: (Chemical Corps Research & Engineering Command at the Edgewood Area of Aberdeen Proving Grounds). Document Type: Event Profile. Date: 1994

Cook County Hospital, Chicago, IL

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1970	MRDC018	Prediction of tissue loss in human frostbite with xenon-133

Abstract: From approximately 1970 until 1971, researchers from the Arctic Medical Research Laboratory, Fort Wainwright, AK conducted a study at Cook County Hospital, Chicago, IL using xenon-133 (Xe-133) to predict tissue loss in human frostbite. Blood flow in the digits of patients with severe frostbite was studied by the xenon clearance method. There were twenty male black and white participants, all accidental frost-bite victims presented at the Emergency Department. Approximately 0.03 to 0.05 cc of a saline solution of Xe-133, with an activity of less than fifty microcuries was injected into the cutaneous region of tissue. Fifty-six Xe-133 injections were made, forty in the hand and sixteen in the feet. Seven patients in the group lost a portion of two or more digits. Thirteen patients suffered no tissue loss. Flow in the viable digits averaged 4.6 milliliters per 100 grams per minute, while that of the digits which ultimately became necrotic, averaged only 0.6 milliliters per 100 grams per minute. In only one case did the flow in the necrotic group exceed one milliliter per 100 grams per minute. If this level of flow was chosen as a dividing line between viable and necrotic tissues, the accuracy of predicting the outcome of frostbitten tissues would have been seventy-five percent. Used only to predict viability, the test would have been ninety-seven percent accurate. The researchers noted that the reliability of the test could be improved by injecting smaller amounts of xenon, restricting injections to the proximal phalanges, and repeating the test after twenty-four hours when there was a low flow recording. Overall, the researchers observed depressed blood flow in severely frostbitten tissue and found Xe-133 generally useful in the prediction of tissue loss.

Documents: Authors: David S. Summer; John A. Boswick, Jr.; Thomas L. Cribblez; William H. Doolittle. Title: Prediction of tissue loss in human frostbite with xenon - 133. Journal: Surgery, vol. 69, issue 6. Document Type: Journal Article. Document Date: June 1971

ARMY 1944–1974 (CONTINUED)

Fitzsimons Army Medical Center, Aurora, CO

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1954	ACIR54000-A	Observations on the mechanism of the renal clearance of 131-I
------	-------------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1954	ACIR54000-B	Renal function and 131-I clearance in hyperthyroidism and myxedema
------	-------------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1959	ACIR59000	Evaluation of renal function utilizing radioiodine labeled Diodrast
------	-----------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1962	ACIR62000	Radioisotopes in pulmonary physiology and pathology (I-131 & Xe-133)
------	-----------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1967	ACIR67000-A	Detection of pulmonary emboli using 133-xenon and macroaggregated human serum albumin (MAAG) 131-I
------	-------------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1967	ACIR67000-B	Evaluation of technical factors of the brain scan and their relationship to diagnostic accuracy
------	-------------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Fitzsimons Army Medical Center, Aurora, CO (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	ACIR67000-C	Regional ventilation perfusion relationships of the lung, its measurement of 133-xenon and a linear scanner
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	ACIR67000-D	Value of rose bengal 131-I in evaluating jaundiced patients
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	ACIR67000-E	Ultrasound in placental localization
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1968	ACIR68000	Effects of selective coronary arteriography on myocardial blood flow in man
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	ACIR69000-A	Roentgenographic technique for measuring lung volume, FAMC 69/140
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Fitzsimons Army Medical Center, Aurora, CO (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	ACIR69000-B	Quantitative lung scanning in pulmonary tuberculosis, tuberculous pleural effusion and lung surgery for tuberculosis

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	ACIR71000-B	Joint imaging with 99m-technetium pertechnetate

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	ACIR71000-C	Placental imaging with 99m-technetium pertechnetate

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	ACIR71000-D	Postoperative treatment of women with stage III ovarian cancer by radiotherapy or chlorambucil either alone or in both sequences

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	ACIR71000-E	Sequential lung scanning of tuberculosis patients under treatment (I-131 and Xe-133)

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Fitzsimons Army Medical Center, Aurora, CO (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	ACIR71000-F	Diagnosis of functioning metastasis from thyroid carcinoma with 131-I and scintillation camera
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	ACIR73000-G	Scintigraphic evaluation of thyroid disorders—clinical evaluation of oral 123-I sodium iodide
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-C	Radiologic identification of common cardiac prosthetic valves and their associated complications, FAMC 74/105
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-J	Use of indium-111 DTPA for the study of cerebrospinal fluid pathways
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-V	Use of gallium-67 citrate in evaluation of patients with known or suspected tumors and pyogenic abscesses
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

160 Appendix 1—Records Search

ARMY 1944–1974 (CONTINUED)

Fort Lewis, WA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	RECC001	Food irradiation program

(For abstract and documentation, see Army Medical Nutrition Laboratory, Denver, CO.)

Foster D. Snell, Inc., New York, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1950	CBDCOM002	Removal of radioactive contaminants from skin

Abstract: From 1950 to 1953, researchers from Foster D. Snell, Inc., in New York, NY, with the support of the Army Chemical Corps, evaluated the ability of several soaps and detergents to radiologically decontaminate soldiers. One hundred eighteen healthy adults participated. Human testing was approved by the Atomic Energy Commission. An area on the outer side of each forearm was shaved. Wax pencil was applied to these spots and to the palms of the hands. Contaminants used were solids from Nevada testing grounds, carbon-labeled synthetic soil, neutron-irradiated synthetic soil, and fission product synthetic soil. Each contaminant was suspended in alcohol and applied to the wax-covered skin areas. Counts were taken with Geiger tube before and after washing. The efficiency of decontamination was calculated by determining the percentage of contamination removed.

Documents: Author: Foster D. Snell, Inc., Consulting Chemists and Engineers. Title: First Quarterly Progress Report to the US Army Chemical Corps, Chemical and Radiological Laboratories, Army Chemical Center, on Removal of Radioactive Contaminants from Skin, Contract Number DA18-108-CML-2597, Order Number 1-13034. Document Type: Report. Date: 28 September 1951

Author: Foster D. Snell, Inc., Consulting Chemists and Engineers. Title: Second Quarterly Progress Report to the US Army Chemical Corps, Chemical and Radiological Laboratories, Army Chemical Center, on Removal of Radioactive Contaminants from Skin, Contract Number DA18-108-CML-2597, Order Number 1-13034. Document Type: Report. Date: 31 December 1951

Author: Foster D. Snell, Inc. Title: Third Quarterly Progress Report to the US Army Chemical Corps, Chemical and Radiological Laboratories, Army Chemical Center, on Removal of Contaminants from Skin, Contract Number DA18-108-CML-1-13034. Document Type: Report. Date: 31 March 1952

Author: Foster D. Snell, Inc., Consulting Chemists Engineers. Title: Final Report to US Army Chemical Corps, Chemical and Radiological Laboratories, on Removal of Radioactive Contaminants from Skin, Contract Number DA18-108-CML-2597, Order Number 1-13034. Document Type: Report. Date: 30 June 1952

Author: Foster D. Snell, Inc., Consulting Chemists and Engineers. Title: Interim Report to the US Army Chemical Corps, Chemical and Radiological Laboratories, on Removal of Radioactive Contaminants from Skin, Contract Number DA18-108-CML-4747. Document Type: Report. Date: 31 December 1952

Author: Foster D. Snell, Inc., Consulting Chemists Engineers. Title: Final Report to U. S. Army Chemical Corps, Chemical and Radiological Laboratories, on Removal of Radioactive Contaminants from Human Skin under Contract No. DA 18-108-CML-4747. Document Type: Report. Date: 15 June 1953

ARMY 1944–1974 (CONTINUED)

Hahneman Medical College, Philadelphia, PA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	MRDC020	Clinical pharmacology of prophylactic and/or therapeutic compounds in volunteer subjects

Abstract: From 1969 to 1970, researchers from Hahneman Medical College and the Hospital of Philadelphia, PA, studied the effects of pralidoxime chloride (2-PAM Cl) and P₂S on whole blood oxime levels. Researchers administered 2-PAM Cl and P₂S in hard gelatin capsules to two volunteer groups; one older aged, one younger aged. The ten participants were fasting at the time they ingested the capsules. Blood samples were taken to determine whole blood oxime levels. Intravenous doses of 2-PAM Cl were also given to establish the hypertensive (high blood pressure) dose for each person. Significant differences in whole blood oxime levels were not apparent. Seven participants were administered tritiated 2-PAM Cl. The final material administered had a specific activity of approximately 0.124 microcurie per milligram. Each participant received approximately thirteen microcuries. Additionally, two participants each received a single 500 milligram oral administration of 2-PAM Cl in hard gelatin capsules containing 250 milligrams radioactive carbon-14 (C-14). The C-14 label had a specific radioactivity of 0.0647 microcurie per milligram. Each subject received approximately 16.2 microcuries. There was no evidence that 2-PAM Cl underwent a metabolic degradation when healthy volunteers took it in capsule form. A measurement of the plasma half-life of oxime showed that commonly used medications did not appear to alter the absorption, metabolism, and excretion of 2-PAM Cl in the younger group of volunteers. The increase in blood pressure produced by intravenous doses of 2-PAM Cl and P₂S appeared to be partially antagonized by the oral or intravenous administration of nerve fiber blocking agents.

Documents: Authors: Benjamin Calesnick, M.D.; Joseph R. DiPalma, M.D. Title: Unclassified Report No. 7, Clinical Pharmacology of Prophylactic and/or Therapeutic Compounds in Volunteer Subjects, Quarterly Progress Report, Contract No. DAAA15-69-C-0295. Document Type: Report. Date: 6 April 1969

Authors: Benjamin Calesnick, M.D.; Joseph R. DiPalma, M.D. Title: Unclassified Report No. 8, Clinical Pharmacology of Prophylactic and/or Therapeutic Compounds in Volunteer Subjects, Quarterly Progress Report, Contract No. DAAA15-69-C-0295. Document Type: Report. Date: 6 July 1969

Authors: Benjamin Calesnick, M.D.; Joseph R. DiPalma, M.D. Title: Clinical Pharmacology of Prophylactic and/or Therapeutic Compounds in Volunteer Subjects. Document Type: Report. Date: 1969 est.

Authors: Benjamin Calesnick, M.D.; Joseph R. DiPalma, M.D. Title: Report No. 10, Clinical Pharmacology of Prophylactic and/or Therapeutic Compounds in Volunteer Subjects, Final Comprehensive Report (January 1969 through April 1970), Contract No. DAAA15-69-C-0295. Document Type: Report. Date: 6 April 1970

Hospital of Philadelphia, Philadelphia, PA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	MRDC020	Clinical pharmacology of prophylactic and/or therapeutic compounds in volunteer subjects

(For abstract and documentation, see Hahneman Medical College, Philadelphia, PA.)

162 Appendix 1—Records Search

ARMY 1944–1974 (CONTINUED)

Ladd AFB, AK

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	MRDC017	Thyroid activity in men exposed to cold

(For abstract and documentation, see Air Force, Ladd AFB, AK, Number AF0011.)

Letterman Army Medical Center, San Francisco, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	RECC001	Food irradiation program

(For abstract and documentation, see Army Medical Nutrition Laboratory, Denver, CO.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	ACIR73000-H	Clinical evaluation of cisternography utilizing 111-indium DTPA (1973)

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	ACIR73000-L	Clinical evaluation of 123-I sodium iodide

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-AB	Clinical evaluation of cisternography utilizing 111-indium DTPA

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-K	Clinical evaluation of renal cortical imaging utilizing 99m-Tc-kidney scintigraphin—(2, 3-dimercaptosuccinic acid)

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Letterman Army Medical Center, San Francisco, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-Q	Phase I study of ICRF-159 (NSC 129943) given orally plus radiation therapy for the treatment of bronchogenic carcinoma

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Madigan Army Medical Center, Tacoma, WA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-R	Clinical trial of radiotherapy and chemotherapy (cyclophosphamide, vincristine, and acto dactinomycin) in managing non-metastatic Ewing's sarcoma, SWOG 7299

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-E	Radiotherapy, CCNU, and procarbazine in malignant gliomas of the brain, SWOG 7404

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-P	Technetium-99 macroaggregate

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74999-A	Chromosome changes after diagnostic radioactive iodine tests

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Madigan Army Medical Center, Tacoma, WA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74999-B	Determination of normal range for 6-hour radioactive iodine uptake using I-123 iodine in order to eliminate need for 24-hour RAIU
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74999-C	Development of radionuclide angiocardiology as a clinical diagnostic tool for the quantification of left to right cardiopulmonary shunts
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74999-D	Tc-m-AA for lung scanning
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74999-E	Use of emergency RISA studies on third trimester bleeding
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74999-F	Western oncology group: hydroxyurea + radiation + 2nd look craniotomy in brain tumors
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Madigan Army Medical Center, Tacoma, WA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74999-G	Western oncology group: preoperative hydroxyurea + radiation in osteosarcoma

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Marine Corps Installation, Okinawa, Japan

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	RECC001	Food irradiation program

(For abstract and documentation, see Army Medical Nutrition Laboratory, Denver, CO.)

Marshall Islands

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1954	MRDC030	Determination of internally deposited radioactive isotope in the Marshallese people by excretion analysis

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Medical College of Virginia, Richmond, VA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1949	RECC004	Medical College of Virginia burn studies

Abstract: From 1949 to 1950, researchers from the Medical College of Virginia in Richmond, VA, investigated thermal and radiation injuries. Over the course of the study, approximately 100 burn patients and sixty-four healthy staff members participated. Approximately seven of the 100 severely burned patients received nitrogen-15 tagged blood products; an undetermined number of severely burned patients received chromium-51 tagged red blood cells and phosphorus-32 tagged blood products. In a separate part of the study, forty-four caucasian and twenty African-

ARMY 1944–1974 (CONTINUED)

Medical College of Virginia, Richmond, VA (continued)

American staff members of the Medical College participated in flash burn simulations. No radiation was used on the participants of this aspect of the study. This study resulted in the development of the Evan's Formula for estimation of fluid requirements following thermal injury and a universal dressing for burns. The syndrome of pseudodiabetes of stress was described. The effects of burn injury plus total body radiation were defined. Comprehensive studies showed the cause of anemia in thermal burns. Light energy required to produce different depths of flash burn was characterized. Observations on the adrenocortical response to thermal injury characterized a syndrome of adreno-medullary insufficiency.

- Documents: From: Everett I. Evans, M.D. To: Dr. John Z. Bowers. Subject: Human Use of No More Than 500 Microcuries of P32 on One Patient Within a Six Month Time Period. Document Type: Letter. Date: 8 April 1948
- Author: Everett I. Evans, Ph.D., M.D. Title: Physical Agents and Trauma, Shock and Burns. Journal: Annual Review of Medicine, vol.1. Document Type: Journal Article. Date: 1950
- Authors: Everett I. Evans, Ph.D., M.D.; W. J. H. Butterfield, B.M. (Oxon.), M.R.C.P. Title: The Stress Response in the Severely Burned. Journal: Annals of Surgery, vol. 134, issue 4. Document Type: Journal Article. Date: October 1951
- Author: Everett I. Evans, Ph.D., M.D. Title: Treatment of High Intensity Burns. Journal: AMA Archives of Surgery, vol. 62. Document Type: Journal Article. Date: 1951
- From: W. J. H. Butterfield. To: Professor Everett I. Evans. Subject: Memorandum on Observations on Volunteers from Penitentiary. Document Type: Memorandum. Date: 1951 est.
- Authors: Everett I. Evans, Ph.D., M.D.; W. J. H. Butterfield, M.D.; Ardis M. Williams, M.S. Title: Effect of Adrenocorticotrophic Hormone on the Survival of Homografts. Journal: The Lancet, vol. 1, issue 14. Document Type: Journal Article. Date: 5 April 1952
- Authors: Mary M. Martin, M.D.; Everett I. Evans, Ph.D., M.D. Title: The Treatment of Acute Burns. Journal: The Medical Clinics of North America. Document Type: Journal Article. Date: 16 July 1953
- Authors: James W. Brooks, M.D.; Everett I. Evans, Ph.D., M.D. Title: Experimental Production of Flash Burns. Journal: Surgery, vol. 36, issue 6. Document Type: Journal Article. Date: December 1954
- Authors: Everett I. Evans, Ph.D., M.D.; Mary M. Martin, M.D. Title: The Successful Use of Dextran in the Treatment and Prevention of Shock in the Burned Patient. Journal: Surgical Forum. Document Type: Journal Article. Date: 1954 est.
- Authors: Everett I. Evans, Ph.D., M.D.; James W. Brooks, M.D.; Frederick H. Schmidt, M.S.; Ray C. Williams; William T. Ham, Jr., Ph.D. Title: Flash Burn Studies on Human Volunteers. Journal: Surgery, vol. 37, issue 2. Document Type: Journal Article. Date: February 1955
- Authors: B. W. Haynes, Jr., Maj., M.C.; Mary M. Martin, M.D.; Oliver J. Purnell, M.D. Title: Fluid Colloid and Electrolyte Requirements in Severe Burns. Journal: Annals of Surgery, vol. 142, issue 4. Document Type: Journal Article. Date: October 1955
- Authors: James W. Brooks, M.D.; Frederick H. Schmidt, M.D.; Ray O. Williams; William T. Ham, Jr., Ph.D. Title: Effect of Skin Pigmentation on Flash Burns in Human Volunteers. Journal: Surgical Forum. Document Type: Journal Article. Date: 1955 est.
- Authors: James W. Brooks, M.D.; B. W. Haynes, Jr., M.D.; W. T. Ham, Jr., Ph.D.; Fred Schmidt, M.S.; Ray Williams. Title: A Comparison of Local and Systemic Effects Following Contact and Flash Burns. Journal: Annals of Surgery, vol. 144, issue 4. Document Type: Journal Article. Date: October 1956

ARMY 1944–1974 (CONTINUED)

Medical College of Virginia, Richmond, VA (continued)

Authors: M. C. Goodall; C. Stone; B. W. Haynes, Jr. Title: Urinary Output of Adrenaline and Noradrenaline in Severe Thermal Burns. Journal: Annals of Surgery, vol. 145, issue 4. Document Type: Journal Article. Date: April 1957

Authors: James W. Brooks, M.D.; Everett I. Evans, Ph.D., M.D.; William T. Ham, Jr., Ph.D.; J. Douglas Reid, Ph.D. Title: The Influence of External Radiation on Mortality from Thermal Burns. Journal: Annals of Surgery, vol. 136, issue 3. Document Type: Journal Article. Date: September 1952

Philadelphia County Prison at Holmesburg, Philadelphia, PA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	MRDC024	Threshold doses in humans

Abstract: From 1964 to 1967, researchers from the University of Pennsylvania in Philadelphia, PA, investigated the minimum required exposure to a substance resulting in a measurable response. The sensitizing effects of nitrogen mustard to obtain predictable responses to nitrogen mustard concentrations, effects of nitrogen mustard on surface area and body regions, and the effects of repeated exposures were also investigated. Twenty healthy prisoners at the Philadelphia County Prison at Holmesburg participated as paid volunteers. Participants underwent physical exams, including chest x-rays, and psychological evaluations before the study. Methods of skin protection from various agents were tested. Results of this study are unavailable at this time.

Documents: Title: Threshold Doses in Humans [includes patient rights checklist, estimated costs, procurement checklist, and security checklist]. Document Type: Contract. Date: 11 October 1963

From: E. G. Scott, Chief, Law Division. To: Chief, Research and Development Division, D/Procurement. Subject: Threshold Doses in Humans. Document Type: Memorandum. Date: 15 November 1963

Authors: Albert M. Kligman, M.D., Ph.D., Principal Investigator; I. S. Ravdin, Vice-President for Medical Affairs. Title: US Army Edgewood Arsenal, Research and Development Contract, Proposal for Services in Connection with Contract RFP AMC(A)-18-035-64-88, Threshold Dose in Humans. Document Type: Proposal. Date: January 1964

Authors: L. A. Walker. Title: Contract, DA18-035-AMC-126(A), Threshold Doses in Humans. Document Type: Contract. Date: 31 March 1964

From: L. A. Walker, Contracting Officer. To: Record. Subject: Performance of Contract DA-18-035-AMC-126(A), University of Pennsylvania. Document Type: Memorandum. Date: 31 December 1964

Authors: Albert M. Kligman, M.D., University of Pennsylvania. Title: Holmesburg Prison Monthly Report, Covering April and May, 1964 [includes transmittal letter]. Document Type: Report. Date: 1964

Title: Test Data from Holmesburg [includes vital signs and other medical data]. Document Type: Log. Date: 1964–1965

Authors: L. A. Walker. Title: Contract Modification, DA18-035-AMC-126(A), Threshold Doses in Humans [includes modifications]. Document Type: Contract. Date: 3 June 1965

From: Capt. Arthur H. Hayes, Jr., MC, Contract Project Officer. To: M. Royston, Publications Writer. Subject: Contract Reports, Contract No. DA-18-035-AMC-126(A). Document Type: Memorandum. Date: 21 November 1966

ARMY 1944–1974 (CONTINUED)

Philadelphia County Prison at Holmesburg, Philadelphia, PA (continued)

Authors: Lt. Col. N. G. Bottiglieri, Chief, Medical Research Laboratory, et al. Title: Research Laboratories, US Army Edgewood Arsenal, Research Plan Number–17088, Minimal Effective Dose of CAR302,668 in Man by the Intravenous Route. Document Type: Proposal. Date: 20 July 1967

Title: Protocol and Procedural Guide for Threshold Effect Studies [includes experimental data sheet forms]. Document Type: Form; Protocol. Date: 1967 est.

Republic of Korea

<u>Start Date</u>	<u>Number</u>	<u>Title:</u>
Unknown	MRDC-008	Study of blood volumes in soldiers sustaining injury and requiring transfusion

Abstract: From a presently undetermined date until 1954, researchers from the Army Medical Service Graduate School evaluated the clinical status of patients entering the hospital and receiving blood transfusions after battle injury during the Korean conflict. It was thought that more could be learned about the adequacy of transfusion and its effect in maintaining blood volume throughout resuscitation and surgery. Fifty-three patients and five healthy individuals (for normal controls) participated. Each participant received red blood cells labeled with 150–200 microcuries of chromium-51 for determinations of blood volume. The dye T-1824 was also used for comparative plasma and blood volume determinations. When simultaneous blood volumes were determined with the labeled cells and the dye, the difference between the two was sixteen percent. Researchers concluded that when large amounts of blood were transfused and only a small blood volume increase was observed, the effect was greatest due to continued loss of blood either externally or into the tissues during the preoperative, operative, and postoperative periods.

Documents: Authors: Capt. Theodore C. Prentice, M.D., et al. Title: Studies of Blood Volume and Transfusion Therapy in the Korean Battle Casualty. Journal: Surgery, Gynecology and Obstetrics, vol. 99, issue 5. Document Type: Journal Article. Date: November 1954

St. Louis University, St. Louis, MO

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1963	MRDC019	Cardiovascular assessment kit

Abstract: From 1963 to 1966, researchers from St. Louis University in St. Louis, MO, developed a method to measure cardiac output. To date no information is available on the number of study participants. Both healthy individuals and cardiac patients participated. Researchers injected radioiodine (I-131) labeled serum albumin and externally monitored the flow of radioactivity through the heart. Cardiac output was calculated based on the dilution of I-131. This method considerably reduced the radiation dose to the patient and the necessity of a surgical team to conduct the measurements.

Documents: From: F. N. Craig, Chief, Applied Physiology Branch, Directorate of Medical Research. To: Dr. Theodore Cooper, Director, Center for Cardiovascular Research, St. Louis University School of Medicine. Subject: Proposal Approval. Document Type: Letter. Date: 26 February 1963

ARMY 1944–1974 (CONTINUED)

St. Louis University, St. Louis, MO (continued)

From: F. N. Craig, Contract Project Officer, Directorate of Medical Research. To: Theodore Cooper, M.D., Ph.D., Director, Center for Cardiovascular Research, St. Louis University School of Medicine. Subject: Approval for Use of Human Subjects. Document Type: Letter. Date: 2 July 1963

From: Theodore Cooper, M.D., Ph.D. To: Dr. F. N. Craig, Contract Project Officer, Directorate of Medical Research, US Army Chemical Research and Development Laboratories. Subject: Contract DA18-108-AMC-193(A). Document Type: Letter. Date: 12 July 1963

Author: F. N. Craig, Contract Project Officer. Title: Monthly Contract Project Officer Report for St. Louis University, July and August 1963. Document Type: Report. Date: 13 September 1963

Author: F. N. Craig, Contract Project Officer. Title: Monthly Contract Project Officer Report for St. Louis University, September 1963. Document Type: Report. Date: 14 October 1963

Author: F. N. Craig, Contract Project Officer. Title: Monthly Contract Project Officer Report for University of St. Louis (sic), October 1963. Document Type: Report. Date: 22 November 1963

Author: F. N. Craig, Contract Project Officer. Title: Monthly Contract Project Officer Report for University of St. Louis (sic), November 1963. Document Type: Report. Date: 26 December 1963

Author: F. N. Craig, Contract Project Officer. Title: Monthly Contract Project Officer Report, University of St. Louis (sic), December 1963. Document Type: Report. Date: 29 January 1964

Author: F. N. Craig, Contract Project Officer, Directorate of Medical Research. Title: Monthly Contract Project Officer Report for St. Louis University, January, February, and March 1964. Document Type: Report. Date: 2 April 1964

Author: F. N. Craig, Contract Project Officer. Title: Monthly Contract Project Officer Report for St. Louis University, April 1964. Document Type: Report. Date: 1 May 1964

Author: F. N. Craig, Contract Project Officer. Title: Monthly Contract Project Officer Report for St. Louis University, May 1964. Document Type: Report. Date: 28 May 1964

From: F. N. Craig, Contract Project Officer, Directorate of Medical Research. To: Dr. Theodore Cooper, Director, Center for Cardiovascular Research, St. Louis University School of Medicine. Subject: Receipt of Annual Comprehensive Report for Contract No. DA18-108-AMC-193(A). Document Type: Letter. Date: 25 June 1964

Author: F. N. Craig, Contract Project Officer, Directorate of Medical Research. Title: Monthly Contract Project Officer Report for St. Louis University, June 1964. Document Type: Report. Date: 1 July 1964

Author: F. N. Craig, Contract Project Officer. Title: Monthly Contract Project Officer Report for St. Louis University, July 1964. Document Type: Report. Date: 5 August 1964

Author: F. N. Craig, Contract Project Officer. Title: Monthly Contract Project Officer Report for St. Louis University, August 1964. Document Type: Report. Date: 17 September 1964

From: F. N. Craig, Contract Project Officer, Directorate of Medical Research. To: Dr. Theodore Cooper, Director, Center for Cardiovascular Research, St. Louis University School of Medicine. Subject: Request for Extension of Contract No. DA18-108-AMC-193(A). Document Type: Letter. Date: 10 February 1965

Author: Francis N. Craig. Title: Monthly Contract Project Officer Report for May 1965. Document Type: Report. Date: 15 June 1965

From: R. E. Erdmann, Contract Specialist. To: Dr. Francis N. Craig, CPO, Phys D, CRDL. Subject: Request for Closing Information Contract No. DA 18-108-AMC-193(A) St. Louis University [also includes reply from Craig to Erdmann]. Document Type: Memorandum; Form. Date: 1 October 1965

170 Appendix 1—Records Search

ARMY 1944–1974 (CONTINUED)

St. Louis University, St. Louis, MO (continued)

From: Francis N. Craig, Ph.D., Applied Physiology Br. To: Chief, Medical Research Lab. Subject: Further Evaluation of Research Contract No. DA18-108-AMC-193(A), St. Louis University. Document Type: Form. Date: 8 August 1966

Author: Francis N. Craig, Ph.D., Contract Project Officer, Physiology Department. Title: Evaluation Report of Research Contract No. DA 18-108-AMC-193(A). Document Type: Report. Date: 1966 est.

Strong Memorial Hospital, Rochester, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1958	MRDC021	Fate of atropine in man

(For abstract and documentation, see Army Chemical Research and Development Laboratories, Army Chemical Center, Edgewood, MD.)

Tripler Army Medical Center, Honolulu, HI

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	ACIR73000-K	Use of gallium-67 citrate for tumor scanning (1973)

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	ACIR73000-S	Use of gallium-67 citrate for tumor scanning

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Tulane University, New Orleans, LA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	RECC002	Biological decay rates of chloride in normal and diseased man, determined with long-life radiochloride, Cl-36

(For abstract and documentation, see Charity Hospital, New Orleans, LA.)

ARMY 1944–1974 (CONTINUED)

Tulane University, New Orleans, LA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	RECC003	Urinary excretion and biological decay periods of radiomercury labeling a mercurial diuretic in normal and diseased man

(For abstract and documentation, see Charity Hospital, New Orleans, LA.)

University of Pennsylvania, Philadelphia, PA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	MRDC024	Threshold doses in humans

(For abstract and documentation, see Philadelphia County Prison at Holmesburg, Philadelphia, PA.)

Walter Reed Army Hospital/Medical Center, Washington, DC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1962	MRDC029	Annual progress report, Department of Biophysics, Division of Nuclear Medicine and Chemistry, Walter Reed Army Institute of Research, Washington D.C.

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	ACIR66000-A	Intensive radiotherapy: chemotherapy study of generalized Hodgkin's disease, CALGB 6604

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1970	ACIR70000-B	Postoperative treatment of women with resectable ovarian cancer with radiotherapy, chlorambucil or no further treatment

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1970	ACIR70000-D	Treatment of women with advanced cervical cancer confined to the pelvis with hydroxyurea or placebo both in combination with radiation

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1970	ACIR70000-E	Request to evaluate Cleocin (7-chloro-7-deoxylincomycin) tissue levels in bone and irradiated bone

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	ACIR71000-A	Radiotherapy of localized and regionally advanced nodal and extra-nodal malignant lymphoreticular tumors and intensive radiotherapy and chemotherapy of nodular lymphomas

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	ACIR71000-G	Comparison of radiation therapy plus chemotherapy in localized bronchogenic carcinoma, WRAMC 7103

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-A	Gallium-67 citrate scans in detection of extent of testicular tumors

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-B	Gallium-67 citrate in the differentiation of cold nodules found in the liver scan
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-C	Gallium-67 citrate in the differentiation of cold nodules found in the thyroid scan
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-D	Increasing technetium-99m sulfur colloid uptake in bone marrow
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-E	Technetium-99m polyphosphate for bone imaging
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-F	Technetium-99m polyphosphate complexes as potential organ imaging and tumor localizing agents
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	ACIR72000-G	Production of iodine-123
------	-------------	--------------------------

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	ACIR72000-H	Study of the use of gallium-67 citrate in the staging of Hodgkin's disease
------	-------------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	ACIR72000-I	Intergroup rhabdomyosarcoma study: role of postoperative radiotherapy and combinations of dactinomycin, vincristine, cyclophosphamide, and Adriamycin in childhood, CALGB 7291 rhabdomyosarcoma
------	-------------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	ACIR72000-J	Intergroup Ewing's sarcoma study. Clinical trial of radiotherapy and chemotherapy in managing non-metastatic Ewing's sarcoma, CALGB 7299
------	-------------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	ACIR72000-P	Study of the use of gallium-67 citrate to localize lymphomas, WRAMC 7108
------	-------------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-Q	Clinical evaluation of postoperative radiotherapy and drug combination in the treatment of childhood rhabdomyosarcoma, CALGB 7291
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-S	Clinical use of technetium-99m polyphosphate
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	ACIR72000-T	Technetium-99m stannous polyphosphate in the diagnosis of bone disease in patients
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	ACIR73000-A	Study of 99m-Tc sulfide colloid as an agent for radioisotope lymphography
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	ACIR73000-B	Comparison of the use of radioactive phosphorus and radio-iodinated chloroquine in the diagnosis of melanoma tumors of the eye
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

176 Appendix 1—Records Search

ARMY 1944–1974 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1973	ACIR73000-D	Treatment of small cell carcinoma of lung: combination chemotherapy + radiation vs. single agent chemotherapy + radiation with and w/o prophylactic whole brain radiation. Comparison of cyclophosphamide + vincristine + methotrate vs. cyclophosphamide, CALGB 7283
------	-------------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1973	ACIR73000-E	Clinical evaluation of fluorescence scanning of the thyroid with an americium-241 source (external source)
------	-------------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1973	ACIR73000-F	Gallium-67 citrate in the staging of carcinoma of the cervix
------	-------------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1973	ACIR73000-J	Clinical trial of radiotherapy and chemotherapy (cyclophosphamide, vincristine, and actinomycin-D) in managing non-metastatic Ewing's sarcoma, CALGB 7391
------	-------------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1973	ACIR73000-O	Investigational new drug indium-111 chloride for intravenous injection
------	-------------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	ACIR73000-P	Gallium-67 nitrate in diagnosis of soft tissue tumors
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-A	Comparison of endoscopic and radiologic evaluation of the upper gastrointestinal tract
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-AB	Clinical evaluation of cisternography utilizing 111-indium DTPA
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-B	Combination chemotherapy in induction for standard risk and combination chemotherapy + cranial irradiation + daunorubicin for increased risk followed by maintenance w/ continuous vs. intermittent 6-MP + MTX + subsequent immunotherapy, CALGB 7411
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-F	Protocol for adjuvant therapy of stage II testicular carcinoma with chemotherapy (actinomycin D + chlorambucil, radiation, or chemotherapy + radiation therapy after retroperitoneal lymph node dissection), WRAMC 7402
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-G	Effect of iodine and lithium on the release of thyroxine from the thyroid gland of patients with thyrotoxicosis
<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-H	Combination radiotherapy and chemotherapy of stage III Hodgkin's disease (phase III), CALGB 7451
<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-I	Investigational use of indium-111 DTPA
<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-M	Cobalt-57 bleomycin in tumor imaging
<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>		

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-R	Use of gallium-67 citrate for tumor scanning (1974)
<p>At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.</p>		

ARMY 1944–1974 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-S	Clinical evaluation of 111-indium bleomycin (MPI Tumor Scintigraphin™) which is presently in the third phase of investigation
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-T	Clinical evaluation of thyroid by in vivo radionuclidic studies utilizing I-123
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-U	Investigational use of indium-111 chloride
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-V	Use of gallium-67 citrate in evaluation of patients with known or suspected tumors and pyogenic abscesses
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-W	Use of indium-111 DTPA for study of cerebrospinal fluid pathways
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-X	Bone marrow scintigraphy and scintigraphic localization of soft tissue tumors by use of indium-111 chloride

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-Y	Adjuvant therapy of stage II testicular carcinoma with chemotherapy, radiation therapy or chemotherapy plus radiation therapy

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-Z	Investigational use of gallium-67 citrate

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Walter Reed Army Institute of Research, Washington, DC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	MRDC026	Gamma ray activity of reactor personnel as determined by the Walter Reed whole body counting facility

Abstract: From a presently undetermined date until 1961, researchers from the Walter Reed Army Institute of Research in Washington, DC assessed the use of a whole-body counting device to obtain estimations of radioactivity in occupationally exposed people. The goal was to determine if these estimations could serve as a supplement to conventional methods of personnel monitoring. Researchers took eighty-eight body counts of sixty-four men assigned to the Army Package Reactor (APPR-1) at Fort Belvoir, VA. All men had an average of fourteen months of occupational exposure. Chemist-health physicists and reactor maintenance personnel were among those who were counted. Participants did not receive any additional radiation exposure by participating in this study. Analysis of 1,048 military personnel of approximately the same age, good health, and dietary intake and without histories of radioactive exposure was the standard of comparison for the results of this experiment. Forty-five percent of the study group was

ARMY 1944–1974 (CONTINUED)

Walter Reed Army Institute of Research, Washington, DC (continued)

uncontaminated at the time they were counted. Thirty percent of exposed personnel were contaminated with levels indistinguishable from normal. Twenty-five percent exhibited gamma ray activity clearly above the normal range, but still far below the maximum permissible body burdens and undetectable with conventional monitoring.

Documents: Title: Gamma Ray Activity of Reactor Personnel as Determined by the Walter Reed Whole Body Counting Facility. Document Type: Event Profile. Date: 1994

Start Date Number Title

Unknown MRDC027 Turnover of radioelements in clinical medicine

Abstract: From a presently undetermined date until 1961, researchers at the Walter Reed Army Institute of Research in Washington, DC developed and compared tests for detecting radionuclides in whole body, urine, feces, and blood specimens. Ten patients and healthy volunteers participated. A four pi scintillation detector was used to count participants before administration of radioisotopes. Absorption from the gastrointestinal tract, urinary excretion, and residual retention showed that elimination of radioiodinated serum albumin from the body was normal. Intravenous doses were given to determine the total turnover rate of vitamin B-12 labeled cobalt-60 in leukemia patients. Whole body counting followed. A metabolism test was conducted with strontium-85 chloride. In a fourth trial, iron absorption was determined. Patients were given ferrous sulphate containing iron-59 after they fasted. The benefits of whole-body counting were use of lower doses of radioactivity than conventional tracer techniques, the possibility of longer patient follow-ups, short counting times, the replacement of tedious laboratory methods, and more dynamic results.

Documents: Title: Turnover of Radioelements in Clinical Medicine. Document Type: Event Profile. Date: 1994

Start Date Number Title

Unknown MRDC028 Quantitative cerebral blood flow determination

Abstract: From a presently undetermined date until 1962, researchers at the Walter Reed Army Institute of Research in Washington, DC simplified the limitations of the krypton-85 saturation technique for measuring cerebral blood flow (CBF). Twenty-five healthy adult males participated. A basal metabolic rate (BMR) machine was used to administer krypton gas. Participants inhaled a krypton-oxygen (or krypton-air) mixture until their brains were saturated with krypton for a minimum of seven minutes. The amount of krypton concentration at the conclusion of saturation was measured from blood samples. Measurements were taken with a Geiger tube and standard scalar. Counts were plotted to determine the desaturation curve. The mean CBF was 56.5 cubic centimeters of blood per 100 grams of brain per minute. This desaturation technique minimized extracerebral contamination in CBF determination, eliminated the use of a face mask during CBF measurement, and simplified gas administration.

Documents: Author: Lawrence C. McHenry, Jr., M.D. Title: Quantitative Cerebral Blood Flow Determination. Document Type: Book; Excerpt. Date: 1963 est.

ARMY 1944–1974 (CONTINUED)

Western Reserve University, Cleveland, OH

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1961	MRDC023	Nature of intradermal barrier to skin penetration

Abstract: From 1961 to 1965, researchers from Western Reserve University in Cleveland, OH, studied the chemical and physiological characteristics of skin cells and inner skin barriers in response to permeation by various chemicals applied externally. Carbon-14 labeled fluocinolone acetonide was applied to the forearms of three normal, young, adult, male subjects. Results indicated that agents with high solubility in both ether and water were likely to penetrate the skin better than agents that have a low solubility in one of these solvents even if it has a high solubility in the other solvent.

Documents: Title: Nature of Intradermal Barrier to Skin Penetration, Western Reserve University. Document Type: Contract. Date: 20 June 1958

Authors: Richard Stoughton; William Glendenning; Doris Hales. Title: Progress Report No. 3 on Percutaneous Absorption to Army Chemical Center, Edgewood, Maryland, Contract No. DA 18-108-405-CML-215. Document Type: Report. Date: 23 December 1958

Authors: Richard B. Stoughton, M.D.; William E. Glendenning, M.D. Title: [The Rate of Percutaneous Penetration of Certain Nicotinates in Humans]. Document Type: Report. Date: 1958 est.

Title: General Provisions for Contract DA 18-108-405-CML-215 Western Reserve University. Document Type: Contract. Date: 1958 est.

From: Col. J. A. Martin, Cml C, Commanding. To: Dr. Richard B. Stoughton, Director of Dermatology, Western Reserve University, University Hospitals of Cleveland. Subject: Granting of Permission to Use Human Volunteers in Contract DA-18-108-405-CML-215, to Establish the Rate of Percutaneous Penetration of Certain Nicotinates. Document Type: Letter. Date: 26 May 1959

Authors: Richard Stoughton; William Glendenning; Doris Hales. Title: Progress Report No. 2 on Percutaneous Absorption to Army Chemical Center, Edgewood, Maryland. Document Type: Report. Date: 29 June 1959

Authors: Richard Stoughton; A. W. McKenzie; Doris Hales. Title: Progress Report No. 5 on Percutaneous Absorption to Army Chemical Center, Edgewood, Maryland. Document Type: Report. Date: 1 July 1962

Author: Richard B. Stoughton, M.D., Department of Dermatology, Western Reserve University. Title: Progress Report No. 6 on Percutaneous Absorption to Army Chemical Center, Edgewood, Maryland. Document Type: Report. Date: 15 March 1963

Title: Measurements of Penetration or Retention of Liquid Compounds by Human Skin [includes cost schedule]. Document Type: Form. Date: August 1963

Author: Richard B. Stoughton, M.D. Title: Final Report on Percutaneous Absorption to Army Chemical Center, Edgewood, Maryland. Document Type: Report. Date: 16 December 1963

Title: Proposal of Future Work on Percutaneous Absorption [includes bibliography and budget]. Document Type: Proposal. Date: 1964

Title: Modification No. 1 to 17 Supplemental Agreement to Contract No. DA18-108-405-CML-215(A), DA18-108-CML-6575(A), and CP8-405-15196 [includes Article I to VII]. Document Type: Contract. Date: 31 May 1966

ARMY 1944–1974 (CONTINUED)

William Beaumont Army Medical Center, El Paso, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1966	ACIR66000-B	Parathyroid reserves in 131-I treated patients
------	-------------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1969	ACIR69000-C	Use of RISA blood volume determination to determine red cell volume
------	-------------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1970	ACIR70000-A	Mottling on the colloidal radiogold liver scan
------	-------------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	ACIR72000-M	Fluorine-18 on the diagnosis of bone disease
------	-------------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1973	ACIR73000-C	99m-Tc polyphosphate in the diagnosis of bone disease in patients
------	-------------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1973	ACIR73000-N	Use of technetium-99m polyphosphate in the diagnosis of bone disease
------	-------------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

ARMY 1944–1974 (CONTINUED)

William Beaumont Army Medical Center, El Paso, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	ACIR73000-Q	Technetium-99m stannous polyphosphate in the diagnosis of bone disease in patients
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	ACIR73000-R	Gallium-67 citrate in diagnosis of soft tissue tumors
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-AC	Blood pool imaging with indium-111 chloride
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	ACIR74000-L	Gallium-67 citrate in the diagnosis of soft tissue tumors
		At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974

Armed Forces Radiobiology Research Institute, Bethesda, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	DNA09	Bone marrow transplantation

Abstract: From 1973 to 1976, researchers at the National Naval Medical Center (NNMC) in Bethesda, MD, participated in a National Institute of Health (NIH) and National Cancer Institute (NCI) protocol for the treatment and cure of leukemia. Twenty-two cancer patients, both adults and children, participated in the study. Eleven participants came from the NNMC and eleven from NIH/NCI. Patients were treated for leukemia with cobalt-60 whole-body irradiation and subsequent bone marrow transplants. The physical irradiations were conducted at the Armed Forces Radiobiology Research Institute in Bethesda, MD. The medical evaluation and treatment took place at NNMC and NIH. Decreased rejection of the donor bone marrow by the patients was expected. Results of the study are not available at this time.

Documents: Authors: Bone Marrow Transplantation Group, Experimental Hematology Section, Pediatric Oncology Branch, Medical Oncology, National Cancer Institute. Title: Allogeneic Bone Marrow Transplantation for Patients with Malignancy. Document Type: Report. Date: Unknown

Authors: Robert G. Graw, Jr., M.D.; Brigid G. Leventhal, M.D.; Ronald A. Yankee, M.D.; G. Nicholas Rogentine, Jr., M.D.; Edward S. Henderson, M.D. Title: Allogeneic Bone Marrow Transplantation of Patients with Leukemia. Document Type: Report. Date: 28 May 1970

From: Alfred S. Ketcham, M.D. To: Robert G. Grew, Jr., M.D. Subject: Total Body Irradiation of Patients for Bone Marrow Transplantation. Document Type: Memorandum. Date: 5 April 1972

Title: Report of the Ad Hoc Committee on Scientific Validity and Acceptability of Using Whole-Body Irradiation Prior to Bone Marrow Transplantation. Document Type: Report; Excerpt. Date: June 1972

From: D. L. Curtis, Commanding Officer, Naval Hospital, NNMC. To: Secretary of the Navy, via Commanding Officer, National Naval Medical Center, via Chief, Bureau of Medicine and Surgery. Subject: Protocol for Clinical Bone Marrow Transplantation; Submission for Approval [first endorsement]. Document Type: Memorandum. Date: 5 January 1973

From: Capt. Kenneth W. Sell, Chairman, Bone Marrow Transplantation Selection Committee. To: Secretary of the Navy. Subject: Protocol for Clinical Bone Marrow Transplantation; Submission for Approval. Document Type: Memorandum. Date: 8 January 1973

From: Commanding Officer, National Naval Medical Center, D. L. Curtis, Acting. To: Secretary of the Navy, via Chief, Bureau of Medicine and Surgery. Subject: Protocol for Clinical Bone Marrow Transplantation; Submission for Approval [second endorsement]. Document Type: Memorandum. Date: 9 January 1973

From: G. M. Davis, Chief, Bureau of Medicine and Surgery. To: Secretary of the Navy. Subject: Protocol for clinical bone marrow transplantation; submission for approval [third endorsement]. Document Type: Memorandum. Date: 15 January 1973

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	DNA06	Comparison of isotopes for skeletal imaging in patients with metastatic disease

Abstract: From 1973 to 1974, researchers at the Bowman Gray School of Medicine in Winston-Salem, NC, along with investigators at the Armed Forces Radiobiology Research Institute in Bethesda,

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Armed Forces Radiobiology Research Institute, Bethesda, MD (continued)

MD, compared the use of technetium-99m (Tc-99m) versus strontium-85 (Sr-85) in detecting bone lesions. Seventy-five cancer patients were injected with both Tc-99 and Sr-85. Comparisons were made of the images resulting from the two different isotopes. Results showed that, for 20 percent of patients, a greater number of bone lesions were detected using Tc-99m. Tc-99m scans improved the ability of the doctors to see areas of abnormal new bone growth at an earlier stage than radiographs. Tc-99m was determined to be superior to Sr-95 as a bone scanning agent.

Documents: Authors: J. S. Stevenson; C. D. Maynard. Title: Comparison of Technetium-99m Polyphosphate and Strontium-85 for Skeletal Imaging in Patients with Metastatic Disease. Document Type: Report. Date: June 1973

Start Date Number Title

Unknown DNA07 Scintigraphy to detect early disease of the hip

Abstract: From a presently undetermined date until 1974, researchers at the National Naval Medical Center in Bethesda, MD, studied the distribution, processing, and elimination of technetium-99m (Tc-99m). Ten adult male patients with hip injuries and a high probability of aseptic necrosis participated. Each patient was injected with Tc-99m two to three hours before scanning. Tc-99m detected necrotic changes earlier than standard x-ray examinations. With computer analysis, the rate of bone growth around necrotic areas could be calculated. Tc-99m was determined to be an effective method of detecting aseptic necrosis before radiographic changes.

Documents: Authors: J. S. Stevenson; F. R. Nelson; V. L. McManaman. Title: Technetium-99m Diphosphonate Scintigraphy to Detect Early Avascular Necrosis of the Hip. Document Type: Report. Date: July 1974

Baylor University College of Medicine, Houston, TX

Start Date Number Title

1952 DNA02 Influence of total body irradiation

(For further information, see Chapter 2—"Total-Body and Partial-Body Irradiation Studies.")

Documents: From: Col. H. C. Donnelly, Chief of Staff. To: The Surgeon General; Department of the Army. Subject: Request for Monitoring of Medical Radiation Effects Project at Baylor University College of Medicine. Document Type: Memorandum. Date: 2 December 1952

From: Col. J. R. Wood, M.C., Chief Research and Development. To: Dr. W. T. Gooch, Dean, Graduate School, Baylor University. Subject: Funds Required for Development of a Radioactive Isotope Gamma Ray Therapy Machine. Document Type: Memorandum. Date: 21 December 1952

Authors: R. Kenneth Loeffler; Vincent P. Collins; and George A. Hyman. Title: Comparative Effects of Total Body Radiation, Nitrogen Mustard, and Triethylene Melamine on the Hematopoietic System of Terminal Cancer Patients. Journal: Science, vol. 118, issue 3058. Document Type: Journal Article. Date: 7 August 1953

Authors: Vincent P. Collins, M.D.; R. Kenneth Loeffler, M.D. Title: A Study of the Effects of Total and Partial-Body Radiation on Iron Metabolism and Hematopoiesis. Document Type: Report. Date: 1 January 1954

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Baylor University College of Medicine, Houston, TX (continued)

Authors: Vincent P. Collins, M.D.; R. Kenneth Loeffler, M.D. Title: The Therapeutic Use of Single Doses of Total Body Radiation. Journal: The American Journal of Roentgenology Radium Therapy and Nuclear Medicine, vol. 75, issue 3. Document Type: Journal Article. Date: March 1956

From: H. O. Beeth. To: The Surgeon General; Department of the Army. Subject: Funding of Study of the Effects of Total and Partial-Body Radiation on Iron Metabolism and Hematopoiesis. Document Type: Memorandum. Date: 15 August 1956

Authors: Vincent P. Collins, M.D.; R. Kenneth Loeffler, M.D. Title: The Therapeutic Use of Single Doses of Total Body Radiation. Document Type: Report. Date: 1956

Authors: Vincent P. Collins, M.D.; R. Kenneth Loeffler, M.D.; C.T. Teng, M.D. Title: A Study of the Effects of Total and Partial-Body Radiation on Iron Metabolism and Hematopoiesis. Document Type: Report. Date: 1956 est.

Author: D. A. Rappoport, Department of Radiology and Biochemistry, Baylor University College of Medicine. Title: The Influence of X-rays on the Kinetics of Erythrocyte Enzymes as a Biological Dosimeter. Progress Report for Period 1 February 1956 to 31 August 1956. Document Type: Report. Date: 1956 est.

Authors: Vincent P. Collins, M.D.; R. Kenneth Loeffler, M.D.; D. A. Rappoport, Ph.D.; C. T. Teng, M.D. Title: A Study of the Effects of Total and Partial-Body Radiation on Iron Metabolism and Hematopoiesis. Progress Report for Period 1 September 1955–31 January 1956. Document Type: Report. Date: 1956 est.

Author: Donald A. Rappoport. Title: The Influence of Total-Body X-Rays on the Kinetics of Erythrocyte Enzymes as a Biological Dosimeter, Report for Period 01 September 1956–31 May 1957. Document Type: Report. Date: 1957 est.

Authors: Vincent P. Collins, M.D.; C. T. Teng, M.D.; Walton D. West, M.Sc. Title: The Study of the Effects of Total and Partial-Body Irradiation on Iron Metabolism and Hematopoiesis. Progress Report for Period 01 September 1956 to 01 March 1957. Document Type: Report. Date: 1 March 1957

From: Col. R. L. Hullinghorst, MC, Chief of Research and Development Division; AFSWP. To: The Surgeon General; Department of the Army. Subject: Funding for the Study of the Effects of Total and Partial-Body Radiation on Iron Metabolism and Hematopoiesis. Document Type: Memorandum. Date: 19 July 1957

Author: Vincent P. Collins, M.D., Professor of Radiology, Baylor College of Medicine. Title: A Study of the Effects of Total and Partial-Body Radiation on Iron Metabolism and Hematopoiesis. Progress Report for Period 1 March 1957 to 1 September 1957. Document Type: Report. Date: 1957 est.

From: Lt. Col. Harold F. Hamit, MC, Chief, Surgical Research Branch, Research and Development Division. To: James D. McMurrey, M.D., Assistant Professor of Surgery, Baylor University College of Medicine. Subject: Effects of Chronic, Continuous Ionizing Radiation at Low Dosage Levels, Need for Research. Document Type: Letter. Date: 17 January 1958

Authors: Vincent P. Collins, M.D.; C. T. Teng, M.D.; Walton D. West, M.Sc. Title: The Study of the Effects of Total and Partial-Body Irradiation on Iron Metabolism and Hematopoiesis. Progress Report for Period 1 September 1957–28 February 1958 [includes charts]. Document Type: Report. Date: 13 March 1958

From: Lt. Col. Harold F. Hamit, MC, Chief, Surgical Research Branch, Research and Development Division. To: Dr. D. A. Rappoport, Assistant Professor, Department of Biochemistry, Baylor University. Subject: Response to Questions Concerning Research on Radiation and Thermal Burns. Document Type: Letter. Date: 27 May 1958

Authors: Vincent P. Collins, M.D.; C. T. Teng, M.D.; Walton D. West, M.Sc. Title: The Study of the Effects of Total and Partial-Body Irradiation on Iron Metabolism and Hematopoiesis. Progress Report for Period 1 March 1958–31 May 1958 [includes charts]. Document Type: Report. Date: 31 May 1958

From: Lt. Col. William W. Cox, MC, Chief, Medical Research Branch, Research and Development Division. To: Vincent P. Collins, M.D., Professor of Radiology, Chairman of the Department, Baylor University College of Medicine. Subject: Receipt of Application for Research Contract Entitled: A Study of the Effects of Total and Partial-Body Radiation on Iron Metabolism and Hematopoiesis. Document Type: Letter. Date: 23 June 1958

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Baylor University College of Medicine, Houston, TX (continued)

From: Lt. Col. Arthur D. Sullivan, MSC, Research and Development Division. To: Donald A. Rappoport, M.D., Department of Biochemistry, Baylor University College of Medicine. Subject: Acknowledgment of Progress Report and Application for Renewal of Study: The Influence of Total-Body X-Radiation on the Kinetics of Erythrocyte Enzymes as a Biological Dosimeter, Contract No. DA-49-007-M.D.-428 [includes original forwarding memorandum]. Document Type: Letter. Date: 10 July 1958

From: Lt. Col. F. W. Timmerman, MC, Asst. Chief, Research and Development Division; Lt. Col. Arthur D. Sullivan, Biophysics Research Branch, Research and Development Division. To: Director, Walter Reed Army Institute of Research. Subject: Transmission of Research Proposal Renewal and Progress Report for Contract On: The Influences of Total-Body X-Radiation on the Kinetic of Erythrocyte Enzymes as a Biological Dosimeter, from Dr. D. A. Rappoport, Baylor University. Document Type: Memorandum. Date: 15 July 1958

From: Lt. Col. Bach. To: The Surgeon General; Department of the Army. Subject: Funding of Study of the Effects of Total and Partial-Body Radiation on Iron Metabolism and Hematopoiesis. Document Type: Memorandum. Date: 21 August 1958

Authors: Vincent P. Collins, M.D.; C. T. Teng, M.D.; Walton D. West, M.Sc. Title: The Study of the Effects of Total and Partial-body Irradiation on Iron Metabolism and Hematopoiesis. Progress Report for Period 1 June 1958–31 August 1958. [includes charts]. Document Type: Report. Date: 31 August 1958

Authors: Vincent P. Collins, M.D.; C. T. Teng, M.D.; Walton D. West, M.Sc. Title: The Study of the Effects of Total and Partial-Body Radiation on Iron Metabolism and Hematopoiesis. Progress Report for Period 1 September 1958–30 November 1958. Document Type: Report. Date: 30 November 1958

Authors: Vincent P. Collins, M.D.; C. T. Teng, M.D.; Walton D. West, M. Sc. Title: A Study of the Effects of Total and Partial-Body Radiation on Iron Metabolism and Hematopoiesis. Progress Report for Period 1 December 1958–31 August 1959. Document Type: Report. Date: 1959 est.

Authors: John M. Knox, M.D.; A. Clark Griffin, Ph.D.; Raouf E. Hakim, Ph.D.; Hugh D. Benett, M.D.; Harry L. Barton, M.D.; Vincent P. Collins, M.D.; Robert G. Freeman, M.D. Title: Protection from Total-Body Irradiation. Journal: Journal of the American Medical Association, vol. 175, issue 11. Document Type: Journal Article. Date: 18 March 1961

Title: Nuclear Weapons Effects Research Semiannual Progress Summary, 01 October 1962. "The Effect of Total-Body Irradiation on Immunologic Tolerance of Bone Marrow and Homografts of Other Living Tissue." Document Type: Report. Date: 1 October 1962

Author: Vincent P. Collins, M.D. Title: The Effect of Total Body Irradiation on Immunologic Tolerance of Bone Marrow and Homografts of Other Living Tissue. Report for Period 1 February 1961–31 January 1962 [DTL 006 413]. Document Type: Report. Date: 1962 est.

Author: Vincent P. Collins, M.D. Title: The Effect of Total Body Irradiation on Immunologic Tolerance of Bone Marrow and Homografts of Other Living Tissue. Report for Period 1 February 1962–31 January 1963. Document Type: Report. Date: 1963 est.

Author: Vincent P. Collins, M.D. Title: The Effect of Total Body Irradiation on Immunologic Tolerance of Bone Marrow and Homografts of Other Living Tissue. Report for Period 1 February 1963–31 January 1964 (Final Report). Document Type: Report. Date: 1964 est.

Bowman Gray School of Medicine, Winston-Salem, NC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	DNA11	Basic principles of pancreatic scanning

Abstract: From 1972 to 1973, researchers at the Bowman Gray School of Medicine in Winston-Salem, NC, assessed the effectiveness of routine pancreatic scanning in the diagnosis of carcinoma.

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Bowman Gray School of Medicine, Winston-Salem, NC (continued)

Eighty cancer patients from North Carolina Baptist Hospital participated. Patients prepared for the experiment with a high-protein, low-fat, low-carbohydrate diet for three days before the study. After this three-day diet, patients fasted overnight. Patients who were not placed on diets did not fast. All patients were given a high-protein, low-fat, liquid meal thirty minutes before injection of 120 to 250 microcuries of selenomethionine-75 (Se-75). Following the injection, an Anger scintillation camera took images every ten minutes for one hour with the detector angled toward the patient's head and midline. The center of Anger camera's crystal was placed at the stomach. Ninety-six percent of patients with normal test results did not have pancreatic disease. Normal uptake of Se-75 in the pancreas appeared as a diffuse uniform pattern. While pancreatic scanning was not a reliable method of verifying malignancy, it was a useful procedure for determining normality. As a result of this experiment, pancreatic scanning was accepted as a simple cancer screening procedure.

Documents: Authors: J. S. Stevenson; C. D. Maynard. Title: Basic Principles of Pancreatic Scanning. Document Type: Report. Date: August 1973

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	DNA06	Comparison of isotopes for skeletal imaging in patients with metastatic disease

(For abstract and documentation, see Armed Forces Radiobiology Research Institute, Bethesda, MD.)

Cincinnati General Hospital, Cincinnati, OH

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1961	DNA03	Radiation effects in man

(For further information, see Chapter 2—"Total-Body and Partial-Body Irradiation Studies.")

Documents: Author: Eugene L. Saenger, M.D., Associate Clinical Professor of Radiology [University of Cincinnati]. Title: Application for Research Contract—Parts 1–4, Metabolic Changes in Humans Following Total Body Radiation. Document Type: Proposal. Date: 25 September 1958

From: Lt. Col. James B. Hartgering, MC, Director, Division of Nuclear Medicine and Chemistry. To: US Army Medical Research and Development Command, Attn.: Lt. Col. A. D. Sullivan. Subject: Application for Research Contract [regarding Dr. Saenger's proposed total body irradiation program]. Document Type: Memorandum. Date: 25 September 1958

From: Col. Clinton S. Maupin, MC, Special Assistant for Nuclear Energy, OTSG. To: Deputy Commander, USA Medical Research and Development Command. Subject: Application for Research Contract (Approval Memorandum). Document Type: Memorandum. Date: 24 October 1958

From: Lt. Col. Arthur D. Sullivan, MSC, Asst. Chief, Biophysics and Astronautics Research Branch, USA Medical Research and Development Command. To: [John A. Isherwood] Chief, Radiological Service, Walter Reed Army Medical Center. Subject: Application for Research Contract [includes approval memorandum from John A. Isherwood, Chief, Radiological Service, Walter Reed Army Medical Center, 22 October 1958]. Document Type: Memorandum. Date: 24 October 1958

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: Lt. Col. William W. Cox, MC, Chief, Medical Research Branch. To: Col. Sullivan. Subject: Application for Research Contract, Metabolic Changes in Humans Following Total Body Radiation, Submitted by Eugene L. Saenger, M.D., College of Medicine at University of Cincinnati (Approval Memorandum). Document Type: Memorandum. Date: 3 November 1958

From: Lt. Col. James B. Hartgering, MC, Director, Division of Nuclear Medicine and Chemistry. To: Lt. Col. A. D. Sullivan, USA Medical Research and Development Command. Subject: Application for Research Contract (Approval Memorandum). Document Type: Memorandum. Date: 7 November 1958

From: Lt. Col. Arthur D. Sullivan, MSC, Asst. Chief, Biophysics & Astronautics Research Branch. To: Col. Hullinghorst. Subject: Application for Research Contract, Metabolic Changes in Humans Following Total Body Radiation, Submitted by Eugene L. Saenger, M.D., College of Medicine at University of Cincinnati. Document Type: Memorandum. Date: 12 November 1958

From: Eugene L. Saenger, M.D., Radioisotope Laboratory, Cincinnati General Hospital, University of Cincinnati College of Medicine. To: Lt. Col. Arthur D. Sullivan, Biophysics Research Branch, Research and Development Division, OSG. Subject: [refers to additional studies to be carried out in conjunction with the studies proposed in the contract at no additional expense to the program]. Document Type: Letter. Date: 4 December 1958

From: David Lambert, Capt., USN, Deputy Chief of Staff, Weapons Effects and Tests. To: Director of Logistics, Attn.: Chief, Contract Management Branch [through: Chief, DASA Chief of Staff, DASA Comptroller]. Subject: Negotiation of Contract [Saenger TBI Studies]. Document Type: Memorandum; Contract. Date: 29 October 1959

From: Capt. David Lambert, USN, Deputy Chief of Staff, Weapons Effects and Tests. To: Director of Logistics, Attn: Chief, Contract Management Branch. Subject: Negotiation of Contract (refers to research proposal entitled: Metabolic Changes in Humans Following Total Body Radiation). Document Type: Memorandum. Date: 29 October 1959

Author: Defense Atomic Support Agency. Title: Contract No. DA-49-146-XZ-029. Contract for: Research Relating to Study the Phenomenon of Amino-Aciduria Following Irradiation [1 January 1960–28 February 1961] with UCCM [signed 01 March 1960, effective 01 January 1960]. Document Type: Contract. Date: 1 May 1960

Authors: Saenger et al. Title: Total Body Dosimetry [showing patient numbers, exposed doses in rads; includes handwritten draft of chart]. Document Type: Chart; Notes. Date: 1960–68

Author: Defense Atomic Support Agency. Title: Contract No. DA-49-146-XZ-029, Modification No. 1, University of Cincinnati [extension through 30 April 1962]. Document Type: Contract Modification. Date: 28 February 1961

Author: Defense Atomic Support Agency. Title: Contract No. DA-49-146-XZ-029, Modification No. 2, University of Cincinnati. Document Type: Contract Modification. Date: 15 June 1961

Author: Eugene L. Saenger, M.D. Title: Metabolic Changes in Humans Following Total Body Irradiation, February 1960 through October 1961. Document Type: Report. Date: 1961 est.

Authors: Department of Defense, Defense Atomic Support Agency. Title: Contract No. DA-49-146-XZ-029, Modification No. 3, University of Cincinnati [extension through 28 February 1963] [signed 21 May 1962, effective 15 April 1962]. Document Type: Contract Modification. Date: 21 May 1962

Title: Subtask Title: Metabolic Changes in Humans Following Total Body Irradiation, in Nuclear Weapons Effects Research, Semiannual Progress Summary 1 October 1962. Document Type: Report; Excerpt. Date: 1962

Author: Defense Atomic Support Agency. Title: Contract No. DA-49-146-XZ-029, Modification No. 4, University of Cincinnati [1 January 1960–30 April 1964] [signed 20 May 1963, effective 01 April 1963]. Document Type: Contract Modification. Date: 20 May 1963

Author: Eugene L. Saenger, M.D., Principal Investigator. Title: Metabolic Changes in Humans Following Total Body Radiation, 01 November 1961–30 April 1963. Document Type: Report; Excerpt. Date: 1963 est.

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

Author: Defense Atomic Support Agency. Title: Contract No. DA-49-146-XZ-029, Modification No. 5, University of Cincinnati [1 September 1961–31 August 1962]. Document Type: Contract Modification. Date: 17 March 1964

Author: Defense Atomic Support Agency. Title: Contract No. DA-49-146-XZ-029, Modification No. 6, University of Cincinnati [1 September 1962–31 August 1963]. Document Type: Contract Modification. Date: 30 April 1964

Authors: E. L. Saenger; J. G. Kereiakes; Helen Berry. Title: Urinary Excretion of Amino Acids and Nucleosides by Cancer Patients Following Whole-Body Irradiation. Journal: Radiation Research, vol. 22, issue 1. Document Type: Abstract. Date: May 1964

Authors: Ben I. Friedman, M.D.; Eugene L. Saenger, M.D.; Michael S. Kreindler. Title: Endoreduplication in Leucocyte Chromosomes, Preliminary Report of Its Relation to Cancer and Whole-Body Irradiation. Journal: The Lancet. Document Type: Journal Article. Date: 5 September 1964

Authors: Eugene L. Saenger, M.D. et al Title: Metabolic Changes in Humans Following Total Body Irradiation, 1 May 1963–29 February 1964. Document Type: Report. Date: 1964 est.

Authors: DASA. Title: Contract for: Research to Obtain New Information About the Metabolic Effects of Total-Body and Partial-Body Irradiation [01 June 1964–30 June 1965]. Document Type: Contract Modification. Date: 5 January 1965

Title: Consent for Special Study and Treatment (...bone marrow aspiration and to store bone marrow...). Document Type: Form. Date: 1 May 1965

Title: Consent for Special Study and Treatment (...whole or partial-body irradiation and marrow autotransplant...). Document Type: Form. Date: 1 May 1965

Title: Consent for Special Study and Treatment for Whole or Partial-Body Irradiation, Signed (Patient Name Redacted). Document Type: Form. Date: 1 May 1965

Title: Consent to Special Study and Treatment [for whole or partial-body irradiation]. Document Type: Form. Date: 1 May 1965

From: Ralph C. Rursick; E. L. Saenger. To: Defense Atomic Support Agency, Attn.: STMD. Subject: NWER No. 03.009: Summary of Fund Requirements [description of upcoming research]. Document Type: Letter. Date: 17 May 1965

Title: Six Consent Forms (Consent for Special Study and Treatment, and Voluntary Consent Statement) for Bone Marrow Aspiration, Whole or Partial-Body Irradiation, Whole or Partial Irradiation and Marrow Autotransplant, and Bone Marrow Transplantation. Document Type: Form. Date: 1965–1972

Title: [cost summaries: Research Grants and Contracts, Dr. Eugene Saenger, 1965–1985] Subject: [log of funding of various research grants and contracts from various government agencies]. Document Type: Report; Budget. Date: 1965–1985

Authors: A. J. Luzzio, Ph.D.; B. I. Friedman, M.D.; J. G. Kereiakes, Ph.D.; E. L. Saenger, M.D. Title: Specific Proteins in Serum of Total-Body Irradiated Humans [pre-publication paper]. Document Type: Paper. Date: 1965 est.

Title: 14 Consent Forms (Consent for Special Study and Treatment, and Faculty Committee on Research Voluntary Consent Statement) for Treatments Including: Total or Partial-Body Irradiation, Drug Treatment, and Bone Marrow Aspiration or Transplantation. Document Type: Form. Date: 1965–72 est.

Author: DASA. Title: Contract No. DA-49-146-XZ-315, Modification 1 [contract for research to obtain information about the metabolic effects of total- and partial-body irradiation, University of Cincinnati, 30 June 1965–30 April 1966]. Document Type: Contract Modification. Date: 22 January 1966

Authors: A. J. Luzzio, Ph.D.; B. I. Friedman, M.D.; J. G. Kereiakes, Ph.D.; E. L. Saenger, M.D. Title: Specific Proteins in Serum of Total-Body Irradiated Humans (Effects of Laser Radiation on Immune Mechanisms, Work Unit no. 012, Biophysics; Report No. 660) [reprint of article in the Journal of Immunology]. Document Type: Journal Article. Date: 4 March 1966

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: Edward A. Gall, M.D., Director, Faculty, Committee on Research. To: Dr. Clifford G. Grulee, Jr., Dean, College of Medicine. Subject: The Opinion of the Faculty Committee on Research Regarding a Research Project Entitled, "Protection of Humans with Stored Autologous Marrow" [submitted by Drs. B. I. Friedman and E. L. Saenger]. Document Type: Letter. Date: 6 May 1966

From: Edward A. Gall, M.D., Director [Faculty Committee on Research]. To: Dr. Clifford G. Grulee, Jr., Dean, College of Medicine, University of Cincinnati. Subject: [approval of research proposal submitted by Dr. Thomas L. Wright; letter to Wright from Grulee is attached]. Document Type: Letter. Date: 24 August 1966

From: Eugene A. Confrey, Ph.D., Director, Division of Research Grants, DHEW. To: Clifford G. Grulee, Jr., Dean, University of Cincinnati College of Medicine. Subject: The Public Health Service Has Reviewed and Accepted the Statement of Assurance Dated October 26, 1966. Document Type: Letter. Date: 15 November 1966

Title: Contract No. DA-49-146-XZ-029, Modification No. 7, University of Cincinnati. Document Type: Contract Modification. Date: 29 November 1966

Authors: Ben I. Friedman; Eugene L. Saenger. Title: Protection of Humans with Stored Autologous Marrow [includes consent forms]. Document Type: Form; Proposal. Date: 1966

Authors: A. J. Luzzio; B. I. Friedman; J. G. Kereiakes; E. L. Saenger. Title: Specific Proteins in Serum of Total-Body Irradiated Humans. Journal: Journal of Immunology, vol. 96, issue 1. Document Type: Journal Article. Date: 1966

Authors: E. L. Saenger; B. I. Friedman; J. G. Kereiakes; H. Perry, Radioisotope Laboratory and Dept. of Radiology, University of Cincinnati College of Medicine. Title: Effects of Whole-Body and Half-Body Irradiation in Human Beings with Cancer. Document Type: Report; Excerpt. Date: 1966 est.

Authors: Eugene L. Saenger, M.D. et al. Title: Metabolic Changes in Humans Following Total-Body Irradiation, February 1960 through 30 April 1966. Document Type: Report. Date: 01 September 1966

Title: University of Cincinnati Medical Center, Faculty Committee on Research, Voluntary Consent Statement (Procedure: Radiation of the Whole-Body). Document Type: Form. Date: 1966 est.

From: Dr. George Shields. To: Dr. Edward A. Gall [Director, Faculty Committee on Research]. Subject: Protection of Humans with Stored Autologous Marrow [an internal committee review on the proposal submitted by Friedman and Saenger]. Document Type: Memorandum. Date: 13 March 1967

Author: DASA. Title: Contract No. DA-49-146-XZ-315, Modification 2 [contract for research to obtain information about the metabolic effects of total- and partial-body irradiation, University of Cincinnati, 01 June 1964–31 October 1967]. Document Type: Contract Modification. Date: 14 March 1967

From: Thomas E. Gaffney, M.D. To: Dr. Edward Gall, Chairman, Clinical Research Committee [Faculty Committee on Research]. Subject: [internal committee review of the proposed study entitled "The Therapeutic Effect of Total Body Irradiation Followed by Infusion of Stored Autologous Marrow in Humans" submitted by Friedman and Saenger]. Document Type: Memorandum. Date: 17 April 1967

From: Edward P. Radford, M.D. To: Dr. Edward A. Gall [Director, Faculty Committee on Research]. Subject: Application of Dr. Ben I. Friedman and Dr. Eugene L. Saenger [Internal committee review]. Document Type: Memorandum. Date: 29 April 1967

From: Dr. Harvey C. Knowles, Jr. To: Dr. Edward A. Gall [Director, Faculty Committee on Research]. Subject: [internal committee review of the proposal entitled "The Therapeutic Effect of Total Body Irradiation Followed by Infusion of Stored Autologous Marrow in Humans" submitted by Friedman and Saenger]. Document Type: Memorandum. Date: 5 May 1967

From: Dr. H. C. Knowles, Jr. To: Dr. Edward A. Gall [Director, Faculty Committee on Research]. Subject: [internal committee review of proposal entitled "The Therapeutic Effect of Total Body Irradiation Followed by Infusion of Stored Autologous Marrow in Humans" submitted by Friedman and Saenger]. Document Type: Memorandum. Date: 7 May 1967

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: R. L. Witt, M.D. To: Dr. Edward A. Gall [Director, Faculty Committee on Research]. Subject: [internal Committee review of proposal entitled "The Therapeutic Effect of Total Body Irradiation Followed by Infusion of Stored Autologous Marrow in Humans" submitted by Friedman and Saenger]. Document Type: Memorandum. Date: 9 May 1967

From: R. L. Witt, M.D. To: Dr. Edward A. Gall [Director, Faculty Committee on Research]. Subject: [internal committee review of proposal entitled "The Therapeutic Effect of Total Body Irradiation Followed by Infusion of Stored Autologous Marrow in Humans" submitted by Friedman and Saenger]. Document Type: Memorandum. Date: 17 May 1967

From: Thomas E. Gaffney, M.D., Director, Division of Clinical Pharmacology to Dr. Edward A. Gall [Director, Faculty Committee on Research]. Subject: The Friedman Proposal for Studies in Total-Body Radiation [internal committee review of proposal submitted by Friedman and Saenger]. Document Type: Letter. Date: 18 May 1967

From: Edward A. Gall, M.D., Director [Faculty Committee on Research]. To: Clifford G. Grulee, Jr., Dean, College of Medicine, University of Cincinnati Medical Center. Subject: [committee recommendations regarding changes in proposal by Friedman]. Document Type: Letter. Date: 22 May 1967

From: Clifford G. Grulee, Jr., M.D., Dean [College of Medicine, University of Cincinnati]. To: Dr. Ben Friedman, Radioisotope Lab. Subject: [forwarding Faculty Research Committee recommendations and modifications of research proposal]. Document Type: Letter. Date: 23 May 1967

Authors: DASA. Title: Contract No. DA-49-146-XZ-315, Modification 3 [contract for research to obtain information about the metabolic effects of total- and partial-body irradiation, University of Cincinnati, 01 March 1967–29 February 1968, effective 25 April 1967]. Document Type: Contract Modification. Date: 28 June 1967

From: D. J. Ryder, LGCM. To: Ruth Lindsey [U. Cincinnati]. Subject: Telephone Memo [negotiations; certification, reception and modification of contracts XZ-315 and 69-C-0131 overhead rates]. Document Type: Memorandum; Contract. Date: 13 August 1967

Authors: Ben I. Friedman, M.D.; Susan J. Toler, B. A. Title: The Effects of Filtration on Stored Bone Marrow. Document Type: Report. Date: 1967 est.

Authors: Eugene L. Saenger, M.D. et al. Title: Metabolic Changes in Humans Following Total-Body Irradiation, 1 May 1966 through 30 April 1967. Document Type: Report. Date: 1967 est.

Author: DASA. Title: Contract No. DA-49-146-XZ-315, Modification 4 [contract for research to obtain information about the metabolic effects of total- and partial-body irradiation, University of Cincinnati, 01 June 1964–14 June 1968]. Document Type: Contract Modification. Date: 29 January 1968

Author: DASA. Title: Contract No. DA-49-146-XZ-315, Modification 5 [continuation of study on metabolic effects of total- and partial-body irradiation in human beings, University of Cincinnati, 01 June 1964–14 June 1969, effective 01 April 1968]. Document Type: Contract Modification. Date: 29 May 1968

Authors: I-Wen Chen; James G. Kereiakes; Ben I. Friedman; Eugene L. Saenger. Title: Colorimetric Analysis of Deoxycytidine in Urine After Separation by Ion-Exchange Column Chromatography. Journal: Analytical Biochemistry, vol. 23, issue 2. Document Type: Journal Article. Date: May 1968

Authors: I-Wen Chen, Ph.D.; James G. Kereiakes, Ph.D.; Ben I. Friedman, M.D.; Eugene L. Saenger, M.D. Title: Radiation-Induced Urinary Excretion of Deoxycytidine by Rats and Humans. Journal: Radiology, vol. 91, issue 2. Document Type: Journal Article. Date: August 1968

From: Thomas E. Gaffney, M.D., Chairman, Faculty Committee on Research. To: Dr. Clifford G. Grulee, Jr., Dean, College of Medicine, University of Cincinnati. Subject: [Faculty Committee on Research reviews of research proposal submitted by Saenger and Friedman]. Document Type: Letter. Date: 9 December 1968

Authors: Ben I. Friedman, M.D.; Susan Toler, B. A. Title: A Closed Method for Filtration of Human Bone Marrow. Document Type: Report. Date: 1968 est.

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: Eugene L. Saenger; Edward B. Silberstein. To: Faculty Committee on Research, Radiation Safety Committee. Subject: Proposal Review of "Investigation of Metabolic Pathways of Labeled Deoxyctidine (3-H and 14-C) in Human Beings." Document Type: Memorandum; Proposal. Date: 1968 est.

Authors: Eugene L. Saenger, M.D. et al. Title: Radiation Effects in Man: Manifestations and Therapeutic Efforts, 1 May 1967 through 30 April 1968. Document Type: Report. Date: 1968 est.

Author: Eugene L. Saenger. Title: [proposal] Subtask: Radiation Effects in Man: Manifestations and Therapeutic Efforts [NWER CM.D. 3.009] Subject: Pre-Award, Proposal, Purchase Request. Document Type: Proposal. Date: 1968–1969 est.

From: Eugene L. Saenger, M.D., Radioisotope Laboratory, Cincinnati General Hospital. To: Dr. Steven Kessler, DASA Project Officer, DASA. Subject: Transmittal of Eight Copies of Contract Proposal for Coming Year. Document Type: Letter. Date: 19 February 1969

From: Capt. J. E. Stark, M.D., USN, Chief, Medical Directorate. To: Distribution. Subject: Negotiation of Contract with University of Cincinnati College of Medicine (for FY 1969). Document Type: Memorandum. Date: 28 February 1969

From: Capt. J. E. Stark, MC, USN, Chief, Medical Directorate. To: OALG, Attn.: LGCM. Subject: Pre-Award Negotiation of Contract with University of Cincinnati College of Medicine [evaluation and recommendations]. Document Type: Report; Contract. Date: 28 February 1969

Author: L. T. Muse, Contracting Officer. Title: Negotiation Report: University of Cincinnati, Cincinnati, Ohio; Predetermined Overhead Rates for Use in Cost-Reimbursement Type Contracts (Except Cost-Sharing Contracts) [negotiation for first contract]. Document Type: Report. Date: 17 March 1969

From: John W. Watson, Contracting Officer. To: LGCM. Subject: Negotiation of Contract with University of Cincinnati College of Medicine. Pre-Award—Authority to Negotiate. Document Type: Memorandum; Contract. Date: 21 March 1969

From: N. W. Martin, Chief, Finance & Accounting Division, Comptroller. To: Chief, Logistics Dir., Contract Mgmt. Division. Subject: Negotiation of Contract with University of Cincinnati College of Medicine [comment no. 3]. Document Type: Memorandum; Contract. Date: 26 March 1969

From: F. V. Fraas, LCDR, USN, Chief, ISCP[OAIS]. To: LGCM. Subject: Negotiation of Contract. Document Type: Memorandum; Contract. Date: 28 March 1969

Authors: Signed by D. Jeanne Ryder, LGCM; John W. Watson, Contracting Officer. Title: Pre-Award Patent Rights Documentation Checklist. Document Type: Form; Contract. Date: 7 April 1969

From: Eugene L. Saenger, M.D. To: Dr. Steven Kessler, DASA Project Officer, Defense Atomic Support Agency. Subject: Pre-award: Contract Proposal. Document Type: Letter; Contract. Date: 7 April 1969

Authors: Signed by John W. Watson, Contracting Officer. Title: Determination and Findings: Authority to Use a Cost-Reimbursement Contract [for Contract No. DASA 01-69-C-0131 with University of Cincinnati] Subject: [justification type contract]. Document Type: Contract. Date: 7 April 1969

Author: John W. Watson, Contracting Officer. Title: Determination and Findings: Responsibility of Contractor [for Contract No. DASA 01-69-C-0131 with University of Cincinnati] Subject: Justification for Type of Contract. Document Type: Letter; Contract. Date: 7 April 1969

Author: Signed by John W. Watson, Contracting Officer. Title: Determination of Personal and Nonpersonal Services [DASA 01-69-C-0131] Subject: [justification contract type]. Document Type: Form; Contract. Date: 7 April 1969

From: D. J. Ryder, LGCM. To: Dr. Saenger; Ruth Lindsey [University of Cincinnati]. Subject: Telephone Memo: Continuation of Work, DA 49-146-XZ-315 [negotiations, record of phone calls]. Document Type: Contract. Date: 29 April 1969

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: Eugene L. Saenger, M.D. To: LGCM Mrs. Becker, Defense Atomic Support Agency, DASA HQ. Subject: Letter Describing Contractor's General Policy Concerning Use of Consultants Under Contract DASA 01-69-C-0131 [negotiation]. Document Type: Letter; Contract. Date: 30 April 1969

From: Col. H. B. Mitchell, USAF, MC, Acting Chief, Medical Directorate. To: OALG, Attn.: LGCM. Subject: Amendment to Contract Negotiation with University of Cincinnati College of Medicine [evaluation, recommendations, funds commitment]. Document Type: Memorandum; Contract. Date: 30 April 1969

Author: Signed by D. Jeanne Ryder, LGCM Contract Negotiator. Title: Price Negotiation Memorandum, Contract No. DASA 01-69-C-0131. Subject: Price Negotiation. Document Type: Memorandum; Contract. Date: 30 April 1969

From: D. Jeanne Ryder, LGCM Negotiator. To: Record. Subject: Negotiation of Contract DASA 01-69-C-0131 with University of Cincinnati, College of Medicine [negotiation]. Document Type: Memorandum; Contract. Date: 30 April 1969

From: N. W. Martin, Chief, Finance & Accounting Division, Comptroller. To: Chief, Logistics Dir., Contract Mgmt. Division. Subject: Amendment to Contract Negotiation with University of Cincinnati College of Medicine [funds commitment]. Document Type: Memorandum; Contract. Date: 5 May 1969

From: Ralph E. Ballinger, Contracting Officer. To: University of Cincinnati College of Medicine, Attn.: Eugene L. Saenger, M.D. Subject: Letter Responding to 30 April 1969 Letter from Contractor Regarding Use of Consultants Under Contract DASA 01-69-C-0131 [negotiations]. Document Type: Letter; Contract. Date: 9 May 1969

From: John W. Watson, Contracting Officer. To: Lt. Stephen Kessler, USN, Medical Directorate, Headquarters, DASA. Subject: Designation of Contracting Officer's Representative, Contract No. DASA 01-69-C-0131; University of Cincinnati. Document Type: Letter; Contract. Date: 9 May 1969

From: John W. Watson, Contracting Officer. To: ONR Resident Representative [Purdue University]. Subject: Contract No. DASA 01-69-C-0131; University of Cincinnati [property administrator designation, execution of contract]. Document Type: Letter; Contract. Date: 26 May 1969

Authors: Signed by John W. Watson, Contracting Officer; Ralph C. Bursiek, Clerk, University of Cincinnati. Title: Notice of Award [University of Cincinnati College of Medicine]. Document Type: Contract. Date: May 1969

From: Thomas E. Gaffney, M.D., Chairman, Faculty Committee on Research. To: Dr. Clifford G. Grulee, Jr., Dean, College of Medicine [University of Cincinnati]. Subject: [Faculty Committee on Research review of research proposal submitted by Saenger and Silberstein]. Document Type: Letter. Date: 2 June 1969

From: Everett F. Schneider [ONR Rep., Purdue University]. To: Chief, Contract Division, Defense Atomic Support Agency. Subject: Appointment of Property Administrator for Contract DASA 01-69-C-0131 with University of Cincinnati [doc. ref: ONR Laf/657:vm, DASA 0131, 3 June 1969]. Document Type: Memorandum; Contract. Date: 3 June 1969

Title: Copy No. 2, Contract No. DASA 01-69-C-0131, University of Cincinnati. From: Headquarters, Defense Atomic Support Agency. Subject: Contract. Document Type: Contract; Appendix/Attachment. 15 June 1969

From: Eugene L. Saenger, M.D. To: Ralph E. Ballinger [Contracting Officer, DASA]. Subject: Contracts DA49-146-XZ-315 & DASA 01-69-C-0131 [negotiation of overhead rates]. Document Type: Letter; Contract. Date: 29 July 1969

Author: Signed by D. Jeanne Ryder, Negotiator. Title: Contract No. DASA 01-69-C-0131 with University of Cincinnati [negotiator's checklist]. Subject: [negotiation]. Document Type: Contract; List. Date: 13 August 1969

From: Ronald C. Leach, Fiscal Officer and Assistant to the Dean [University of Cincinnati, College of Medicine]. To: Headquarters DASA, Defense Atomic Support Agency, Attn.: LGCM. Subject: Completed Forms Required for Contract [includes Contingent Fee Statement, Equal Opportunity Statement, and Certification of Nonsegregated Facilities]. Document Type: Letter; Contract; Appendix/Attachment. Date: 19 August 1969

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: John W. Watson, Contracting Officer. To: Record. Subject: Contract Modification No. DASA 01-69-C-0131-P001 University of Cincinnati [negotiation]. Document Type: Memorandum. Date: 26 September 1969

From: F. V. Fraas, LCDR, USN, Chief, ISCP. To: ISCP; LGCM. Subject: Security Review of Contract No. DASA 01-69-C-0131 [includes complying security review checklist, from ISCP to LGCM, undated]. Document Type: Memorandum; Contract. Date: 15 October 1969

From: Ralph E. Ballinger, Contract Reviewer, Headquarters, DASA. To: Record. Subject: Review of Proposed Contract No. DASA 01-69-C-0131, University of Cincinnati [funding recommended, review of contract, draft cont., approval of award]. Document Type: Memorandum; Contract. Date: 20 October 1969

From: John W. Watson, Contracting Officer [LGCM]. To: University of Cincinnati College of Medicine. Subject: Execution of Contract No. DASA 01-69-C-0131 [distribution, execution of contract]. Document Type: Letter; Contract. Date: 20 October 1969

From: Lorraine G. Stork, Administrative Assistant [University of Cincinnati School of Medicine]. To: John W. Watson, Contracting Officer DASA, LGCM. Subject: Return of Signed Contract (DASA 01-69—0131), with Overhead Rate Change Amendment [distribution of contract]. Document Type: Letter; Contract. Date: 5 November 1969

From: John W. Watson, Contracting Officer [LGCM]. To: University of Cincinnati College of Medicine. Subject: Copy No. 3 of the Contract No. DASA 01-69-C-0131 [execution of contract, distribution of contract]. Document Type: Letter; Contract. Date: 18 November 1969

Author: Signed by John W. Watson, Contracting Officer. Title: Contract Distribution List [for Contract No. DASA 01-69-C-0131] Subject: [contract distribution]. Document Type: Contract; List. Date: 18 November 1969

Title: Individual Procurement Action Report [for Contract DASA 01-69-C-0131, A Study of Radiation Effects in Man: Manifestations and Therapeutic Efforts] Subject: [approval of award, distribution of contract]. Document Type: Form; Contract. Date: 18 November 1969

From: F. V. Fraas, LCDR, USN, Chief, ISCP. To: ISCP; LGCM. Subject: Security Review of Contract No. DASA 01-69-C-0131 [and security classification review report, dated 21 November 1969, from ISCP to LGCM]. Document Type: Memorandum; Contract. Date: 18–21 November 1969

Authors: Louis A. Gottachalk, M.D.; Robert Kunkel, M.D.; Theodore H. Wohl, Ph.D.; Eugene L. Saenger, M.D.; Carolyn N. Winget, M. A. Title: Total and Half Body Irradiation; Effect on Cognitive and Emotional Processes. Journal: Arch. Gen. Psychiat, vol. 21. Document Type: Journal Article. Date: November 1969

Author: DASA. Title: Contract No. DA-49-146-XZ-315, Modification 6 [extension of contract completion date and incorporation of final negotiated overhead rates for FY 1968 and FY 1969, effective 14 June 1969 [includes memorandum regarding contract close-out, 14 September 1970]. Document Type: Contract Modification. Date: 19 December 1969

Author: I-Wen Chen. Title: A Progress Report for the Studies on the Radiation-Induced Urinary Excretion of Deoxyribonucleic Acid Component. Document Type: Report. Date: 1969

Title: [Dosimetry Measurements and Calculations: #105, Lateral Head 16 cm]. Document Type: Notes. Date: 1969–1971

Title: Cumulative Payment Record of DASA Contract DASA 01-69-0131 and Subsequent Modifications [lists vouchers by number, date, and amount, covering June 1969–December 1972]. Document Type: Contract; Budget; List. Date: 1969–1972

Authors: Eugene L. Saenger, M.D. et al. Title: Radiation Effects in Man: Manifestations and Therapeutic Effects [proposal for research to obtain new information about the metabolic effects of total body and partial-body irradiation]. Document Type: Proposal; Excerpt. Date: 1969 est.

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

Authors: Edward B. Silberstein, M.D.; E. L. Saenger, M.D.; J. Kereiakes, M.D. Subject: [laboratory notes, calculations, and correspondence]. Document Type: Letter; Chart; Notes; File. Date: 1969–1973 est.

From: John W. Watson, Contracting Officer [OAPR]. To: University of Cincinnati College of Medicine. Subject: Notice of Requested Information for Administrative Close-Out of Contract No. DASA 01-69-C-0131, Final Patents Report and Certification of Level of Effort. Document Type: Letter; Contract. Date: 7 March 1970

From: Col. Edward J. Huycke, MC, USA, Chief, Medical Directorate. To: OALG, Attn.: LGCM. Subject: Modification of Contract No. DASA 01-69-C-0131 with the University of Cincinnati College of Medicine (Evaluation, Recommendations) [proposal, negotiation, review of contract]. Document Type: Report. Date: 23 March 1970

From: R. G. Niles, Chief, ISCP. To: LGCM. Subject: Modification of Contract No. DASA 01-69-C-0131 with the University of Cincinnati College of Medicine. Document Type: Memorandum. Date: 2 April 1970

From: W. F. Thacher, Jr., LTC, USA, Finance and Accounting Officer. To: Chief, Logistics Dir., Contract Mgmt. Div. Subject: Modification of Contract No. DASA 01-69-C-0131 [-P001] with the University of Cincinnati College of Medicine [Funds Commitment]. Document Type: Budget. Date: 8 April 1970

Author: Signed by John W. Watson, Contracting Officer. Title: Contracting Officer's Determination as to Nonpersonal Nature of Services To Be Obtained Under Modification Number DASA 01-69-C-0131-P001 with University of Cincinnati. Subject: [justification for contract type]. Document Type: Contract. Date: 13 April 1970

Author: Signed by John W. Watson, Contracting Officer. Title: Determination and Findings: Authority to Use a Cost-Reimbursement Contract [for Contract No. DASA 01-69-C-0131, Modification No: P001 with University of Cincinnati] Subject: [justification contract type]. Document Type: Report. Date: 13 April 1970

From: Carl D. Dedillo, LTC, USA, Director of Logistics. To: Director, Defense Atomic Support Agency, Attn.: LGCM, Washington, D.C. Subject: [capital equipment transfer related to Contract DA-49-146-XZ-315 close-out (enclosure: forwarded memo from E. F. Schneider recommending disposition)]. Document Type: Memorandum. Date: 21 April 1970

From: John W. Watson, Chief, Contracting Division. To: ONR Resident Representative, Purdue University, Department of the Navy, Office of Naval Research. Subject: Property Administrator's Final Report on Contract DASA 01-69-C-0131 with the University of Cincinnati. Document Type: Letter. Date: 4 May 1970

From: Signed by D. Jeanne Ryder, LGCM Negotiator. To: Record. Subject: Negotiation of Contract DASA 01-69-C-0131-P001 with University of Cincinnati, Proposal No. RM.D. 3.009 Dated 1970 [negotiation]. Document Type: Memorandum. Date: 13 May 1970

Author: Signed by D. Jeanne Ryder. Title: Negotiator's Checklist, Contract No. DASA 01-69-C-0131 with University of Cincinnati, Modification No. P001. Subject: [negotiation (mod 1)]. Document Type: List. Date: 13 May 1970

Author: Signed by D. Jeanne Ryder, LGCM, Contract Negotiator. Subject: Price Negotiation Memorandum, Contract/Modification No. DASA 01-69-C-0131-P001. Document Type: Memorandum; Contract. Date: 13 May 1970

From: Eugene L. Saenger, M.D. To: Headquarters, Defense Atomic Support Agency, Department of Defense, Attn.: Jeanne Ryder. Subject: Contract Negotiations for Pending Contract [DASA 01-69-C-0131-P001] Discussed on May 13, 1970 [includes Negotiation Agreement A-88 DHEW Negotiation with University of Cincinnati, dated 01 April 1970]. Document Type: Letter; Contract. Date: 15 May 1970

From: R. G. Niles, Classification Analyst, DASA. To: ISCP; LGCM. Subject: Security Review of Contract Number: DASA 01-69-C-0131-P001 [draft of contract]. Document Type: Memorandum. Date: 10 June 1970

From: Ralph E. Ballinger, Contract Reviewer, Headquarters, DASA. To: Record. Subject: Review of Proposed Contract Modification No. DASA 01-69-C-0131-P001 University of Cincinnati [funding recommended, review of contract]. Document Type: Memorandum. Date: 11 June 1970

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: John W. Watson, Contracting Officer [LGCM]. To: University of Cincinnati College of Medicine. Subject: Execution of Contract Modification No. DASA 01-69-C-0131-P001 [execution, distribution of contract]. Document Type: Letter. Date: 11 June 1970

Author: Headquarters, Defense Atomic Support Agency [John Watson, Contracting Officer]. Title: Copy No. 2, Contract Modification No. Contract DASA 01-69-C-0131-P001, University of Cincinnati. Document Type: Appendix/Attachment. Date: 15 June 1970

From: Lorraine G. Stork, Administrative Assistant. To: Headquarters, Defense Atomic Support Agency; Attn.: John W. Watson, Contracting Officer. Subject: Contract Modification No. DASA 01-69-C-0131-P001 [establishment of, signing of, execution, distribution]. Document Type: Letter. Date: 25 June 1970

From: R. V. Lindsey for E. L. Saenger. To: D. J. Ryder, Headquarters Defense Atomic Support, LGCM Agency. Subject: Contract Modification No. DASA 01-69-C-0131-P001 [notification of award, approval of award]. Document Type: Telegram. Date: 26 June 1970

Author: Signed by John W. Watson, Contracting Officer. Title: Contract Distribution List [for Contract No. DASA 01-69-C-0131-P0001]. Document Type: List. Date: 30 June 1970

From: John W. Watson, Contracting Officer. To: Ralph C. Bursiek, Clerk. Subject: Copy No. 3, Contract Modification No. DASA 01-69-C-0131 - P001 [distribution]. Document Type: Letter. Date: 30 June 1970

Title: Individual Procurement Action Report [for Contract DASA 01-69-C-0131-P001, continuation of study of radiation effects in man and incorporation of final negotiated overhead rate for FY 1969] Subject: [distribution of contract]. Document Type: Form. Date: 30 June 1970

From: Wilma H. Loichinger, Assistant Controller, Grants & Contracts. To: Defense Atomic Support Agency, Department of Defense, Attn.: Contracting Officer/Univ. Cincinnati. Subject: Letter Regarding Contractor's Computation of Overhead Rates for Research as of 30 June 1970 [includes list of rates/and memo initiating closure of DASA 01-69-0131]. Document Type: Letter; Budget. Date: 19 October 1970–2 April 1971

From: Mrs. Lessinger, University of Cincinnati. To: H. Sullivan, LGCM. Subject: Telephone Memo [inquiry if the stipulated salary support in the contract is mandatory, discussion of contract cost principles and procedures]. Document Type: Memorandum. Date: 23 October 1970

From: D. J. Ryder, LGCM. To: Mrs. Lessinger, University of Cincinnati. Subject: Telephone Memo [discussion of contractor's exception to stipulated salary support item in the contract, negotiations leading to mod 2] [DASA 01-69-C-0131-P001]. Document Type: Memorandum. Date: 26 October 1970

From: Eugene L. Saenger, M.D. To: Contracting Officer, Defense Atomic Support Agency, DASA Headquarters, Attn.: Mrs. Jean Ryder. Subject: Contact Modification-Negotiation for Coverage of Funding Gap for DASA 01-69-C-0131: Request for Consultant's Fee ["proposal" leading to mod 2]. Document Type: Letter. Date: 26 October 1970

From: John W. Watson, Contracting Officer. To: Lt. R. C. Loynd, USN, Medical Directorate, Headquarters, DASA. Subject: Designation of Contracting Officer's Representative Contract/Notice of Award DASA 01-69-C-0131 [authority to negotiate]. Document Type: Letter. Date: 26 October 1970

Authors: Eugene L. Saenger, M.D. et al. Title: Radiation Effects in Man: Manifestations and Therapeutic Efforts, May 1, 1968, through April 30, 1969 [includes raw data, graphs]. Document Type: Report. Date: October 1970

Author: [Headquarters, Defense Atomic Support Agency]. Title: Copy No. 2, Contract Modification No. 2 of Contract DASA 01-69-C-0131-P00002, University of Cincinnati. Document Type: Contract Modification. Date: 2 November 1970

From: Evelyn V. Hess, Chairman, Faculty Committee on Research. To: Alvin Mauer, Associate Professor of Pediatrics, Children's Hospital. Subject: Solicitation of Outside Consultant for Review of Proposal "Therapeutic Effect of Total-Body

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

Irradiation Followed by Infusion of Stored Autologous Marrow in Humans.” Document Type: Letter. Date: 19 November 1970

Subject: Submission of Consent Forms to Faculty Committee on Research for Review (two copies). Document Type: Letter. Date: 18 December 1970

Authors: Eugene L. Saenger, M.D. et al. Title: Radiation Effects in Man: Manifestations and Therapeutic Effects; Annual Report May 01, 1969–April 30, 1970. Document Type: Report. Date: December 1970

Authors: Edward B. Silberstein, M.D.; I-Wen Chen, Ph.D.; Eugene L. Saenger, M.D.; James G. Kereiakes, Ph.D. Title: Cytologic-Biochemical Radiation Dosimeters in Man. Document Type: Report; Chart. Date: 1970 est.

Subject: [notes on terms of stipulated salary support for faculty involved in Contract DASA 01-69-C-0131-P001 with University of Cincinnati, negotiations leading to mod 2]. Document Type: Contract. Date: 1970 est.

Subject: [rationale behind Dr. Saenger’s objection to stipulated salary support, negotiation leading to mod 2]. Document Type: Notes; Transcript; Excerpt. Date: 1970 est.

Title: Dose Measurements in Rando Phantom, 1970 [Rando Phantom cross sections with dosimetry calculations. Document Type: Chart. Date: 1970–72

From: Ralph E. Ballinger, Contract Reviewer, Headquarters, DASA. To: Record. Subject: Review of Proposed Contract Modification No. DASA 01-69-C-0131-P00002 University of Cincinnati (funding recommended) [includes telephone memo]. Document Type: Memorandum. Date: 10 January 1971

From: John W. Watson, Contracting Officer. To: University of Cincinnati College of Medicine. Subject: Execution of Contract Modification No. DASA 01-69-C-0131-P00002 [copy distribution; execution, distribution]. Document Type: Letter. Date: 12 January 1971

From: Everett F. Schneider, Property Administrator (ONR Resident Representative, Purdue University). To: Commanding Officer, Defense Atomic Support Agency (LGCM/J. W. Watson). Subject: Contract DASA 01-69-C-0131 with the University of Cincinnati [includes interim inventory and assignment of property titles]. Document Type: Letter; List. Date: 25 January 1971

From: Lorraine G. Stork, Administrative Assistant, University of Cincinnati. To: John W. Watson, Contracting Officer [DASA]. Subject: Contract Modification No. DASA 01-69-C-0131-P00002 [copy distribution and signing, execution, distribution]. Document Type: Letter. Date: 5 February 1971

From: E. V. Hess, Faculty Committee on Research. To: Dr. Silberstein. Subject: Revised Protocol—“The Therapeutic Effect of Total- Body Irradiation Followed by Infusion of Autologous or Isologous Marrow in Humans” (by E. Silberstein, M.D.) [internal committee review of revised proposal]. Document Type: Memorandum. Date: 16 February 1971

Author: Signed by John W. Watson, Contracting Officer. Title: Contract Distribution List [for Contract No. DASA 01-69-C-0131-P00002] Subject: [distribution mod 2]. Document Type: List. Date: 24 February 1971

From: John W. Watson, Contracting Officer. To: University of Cincinnati College of Medicine. Subject: Copy No. 3, Contract Modification No. DASA 01-69-C-0131-P00002 [execution of contract modification, distribution]. Document Type: Letter. Date: 24 February 1971

From: Edward B. Silberstein, M.D. To: Evelyn V. Hess, M.D., Chairman, Faculty Committee on Research. Subject: Reply to Faculty Committee on Research Recommendations for Revising Research Proposal. Document Type: Letter. Date: 6 March 1971

From: Evelyn V. Hess, M.D., Chairman, Faculty Committee on Research. To: Dr. Clark West; Dr. Harvey Knowles; Dr. Virginia Donaldson; Dr. Alvin Mauer. Subject: Faculty Committee on Research Minutes of Meeting [review of Saenger proposal, interview with Saenger]. Document Type: Memorandum. Date: 9 March 1971

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: Eugene L. Saenger, M.D. To: Dr. Robert Loind, Defense Atomic Support Agency. Subject: DASA -01-69-C-0131 [proposal and budget for FY 73]. Document Type: Letter; Budget. Date: 22 March 1971

From: Col. Edward J. Huycke, MC, USA, Director for Medical Research. To: J-4CM. Subject: Modification of Contract No. DASA 01-69-C-0131 with the University of Cincinnati College of Medicine [evaluation and recommendations; includes form DD1423, Contracts Requirements List, and related instructions, and related cost appropriation memo]. Document Type: Report. Date: 22 March 1971

From: R. G. Niles, Chief, J-2CP. To: J-4. Subject: Modification of Contract No. DASA 01-69-C-0131 with the University of Cincinnati, College of Medicine. Document Type: Memorandum. Date: 22 March 1971

From: Eugene L. Saenger, M.D. To: Dr. Robert Loind, Defense Atomic Support Agency, Attn.: STND. Subject: DASA 01-69-C-0131 [includes proposal for FY 1971; proposal]. Document Type: Letter; Proposal; Budget. Date: 22 March 1971

From: Eugene L. Saenger, M.D. To: Dr. Robert Loind, Defense Atomic Support Agency, Attn.: STND. Subject: DASA 01-69-C-0131 [includes proposal for FY 1973, with budget details on reverse of letter; proposal]. Document Type: Letter; Budget; Excerpt. 22 March 1971

From: Eugene L. Saenger. To: Robert Loind. Subject: Proposal for FY73. Document Type: Letter. Date: 22 March 1971

From: Evelyn V. Hess, M.D., Chairman, Faculty Committee on Research. To: Edward B. Silberstein, M.D. Subject: Transmittal of the Recommendations of the Faculty Committee on Research [includes the recommendations on total-body irradiation]. Document Type: Letter. Date: 26 March 1971

Title: [form indicating completion date of contract, for DASA 01-69-C-0131]. Document Type: Form. Date: 31 March 1971

Author: Headquarters, Defense Atomic Support Agency. Title: Copy No. 2, Contract Modification No. 3 of Contract DASA 01-69-C-0131-P00003, University of Cincinnati. Document Type: Contract. Date: 1 April 1971

From: W. F. Thacher, Jr., LTC, USA, Finance and Accounting Officer. To: Chief, Logistics Dir., Contract Mgmt. Div. Subject: Modification of Contract No. DASA 01-69-C-0131 [-P00003] with the University of Cincinnati College of Medicine [funds commitment]. Document Type: Budget. Date: 7 April 1971

From: Asher Tenner, Regional Audit Director, HEW Audit Agency. To: Director, Defense Atomic Support Agency. Subject: Notice to Contracting Officer that Technical Performance Under Contract No. DASA 01-69-C-0131 Is Completed. Document Type: Report. Date: 12 April 1971

Author: Signed by John W. Watson, Contracting Officer. Title: Contracting Officer's Determination as to Nonpersonal Nature of Services To Be Obtained Under Contract/Modification Number DASA 01-69-C-0131-P00003 with University of Cincinnati, College of Medicine. Subject: [justification of contract type]. Document Type: Contract. Date: 12 April 1971

Author: Signed by John W. Watson, Contracting Officer. Title: Determination and Findings: Authority to Use a Cost-Reimbursement Contract [for Contract No. DASA 01-69-C-0131-P00003 with University of Cincinnati]. Subject: [justification of contract type]. Document Type: Report. Date: 12 April 1971

From: Eugene L. Saenger, M.D. [University of Cincinnati, College of Medicine]. To: Roger Rapaport. Subject: [follow-up to telephone conversation; objectives of whole- and partial-body radiation exposure, with emphasis on treatment of cancer; enclosures mentioned but absent]. Document Type: Letter. Date: 19 April 1971

From: Edward B. Silberstein, M.D. To: Eugene L. Saenger, M.D. Subject: [telephone conversation with Evelyn Hess regarding Human Research Committee review of current protocol, as well as GAO investigation]. Document Type: Memorandum. Date: 20 April 1971

From: Edward B. Silberstein and Eugene L. Sanger. To: Evelyn Hess, Chairman, Faculty Committee on Research. Title: The Therapeutic Effects of Total-Body Irradiation Followed by Infusion of Autologous Marrow in Humans (Draft 2). Document Type: Memorandum; Proposal. Date: 4 May 1971

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: [Eugene Saenger; handwritten memo]. To: Mrs. Ruth Lindsay, University of Cincinnati, and Miss Ryder, DASA. Subject: "Personnel Budget" [stating positions and salary as amounts and percentages of budget; proposal]. Document Type: Notes; Budget. Date: 5 May 1971

From: D. Jeanne Ryder, [J-4CM] Contract Negotiator. To: Record. Subject: Negotiation of Contract DASA 01-69-C-0131 Mod. P00003 with University of Cincinnati College of Medicine [negotiation]. Document Type: Memorandum. Date: 6 May 1971

Author: Signed by D. Jeanne Ryder, Negotiator. Title: Negotiator's Checklist, Contract No. DASA 01-69-C-0131 with University of Cincinnati, Modification No. P00003. Subject: [negotiation]. Document Type: Budget; Excerpt; List. Date: 6 May 1971

From: Eugene L. Saenger, M.D. To: Miss Jean Ryder, Defense Atomic Support Agency, J-4CM. Subject: DASA 01-69-C-0131 [mod. P00003; budget corrections; negotiations]. Document Type: Letter; Budget; Excerpt. Date: 6 May 1971

Subject: Price Negotiation Memorandum, Contract/Modification No. DASA 01-69-C-0131-P00003 [signed by D. Jeanne Ryder, J-4CM, Contract Negotiator, and John W. Watson, Contracting Officer]. Document Type: Memorandum. Date: 6 May 1971

From: Vernon J. Rolf, Fiscal Officer [University of Cincinnati]. To: Mrs. Jean Ryder, Defense Atomic Support Agency, J-4CM. Subject: DASA 01-69-C-0131, Modification P00003, Representations & Certifications Required [negotiation]. Document Type: Letter. Date: 11 May 1971

From: J-4CM. To: J-2CP. Subject: Security Review of Contract No. DASA 01-69-C-0131-P00003 [draft of contract]. Document Type: Memorandum. Date: 25 May 1971

From: Ralph E. Ballinger, Contract Reviewer, Headquarters, DASA. To: Record. Subject: Review of Proposed Contract Modification No. DASA 01-69-C-0131-P00003, the University of Cincinnati [funding approved; contract review]. Document Type: Letter. Date: 28 May 1971

From: John W. Watson, Contracting Officer [J-4CM]. To: University of Cincinnati College of Medicine. Subject: Execution of Contract Modification No. DASA 01-69-C-0131-P00003 [copy distribution; execution; distribution]. Document Type: Letter. Date: 28 May 1971

From: Lorraine G. Stork, Administrative Assistant [University of Cincinnati]. To: John W. Watson, Contracting Officer [DASA]. Subject: Contract Modification No. DASA 01-69-C-0131-P00003 [return of signed copies; execution, distribution]. Document Type: Letter. Date: 24 June 1971

From: John W. Watson, Contracting Officer [J-4CM]. To: Lorraine G. Stork, Administrative Assistant [University of Cincinnati]. Subject: Forwarding of Negotiation Agreement for Period 2/28/71 through 6/30/71 and 7/1/71 through 6/30/73. Document Type: Letter. Date: 28 June 1971

From: Wilma H. Loichinger, Assistant Controller, Grants & Contracts. To: Defense Atomic Support Agency, Department of Defense, Attn.: Contracting Officer. Subject: DASA 01-69-C-0131 [indirect cost rates negotiated with DHEW, negotiation; enclosure is RCC1.958005.014]. Document Type: Letter. Date: 7 July 1971

From: Evelyn V. Hess, M.D., Chairman, Faculty Committee on Research. To: Dr. Edward B. Silberstein; Dr. Eugene L. Saenger. Subject: The Therapeutic Effects of Total and Large Field Partial-Body Irradiation Followed by Infusion of Autologous Marrow in Humans [internal committee review of proposal submitted by Silberstein and Saenger]. Document Type: Memorandum. Date: 22 July 1971

From: Eugene L. Saenger, M.D. To: Dr. Robert Loind, STMD., Defense Nuclear Agency. Subject: Annual Report of Contract DASA 01-69-C-0131 for 1 May 1970–30 April 1971 [request for new equipment, one item to be purchased from ORNL]. Document Type: Letter. Date: 22 July 1971

From: Everett F. Schneider, Property Administrator (ONR Resident Representative). To: Director, Defense Nuclear Agency (LGCM/J.W. Watson). Subject: Contract DASA 01-69-C-0131 with the University of Cincinnati [includes inventory list (Ref ONR Laf/657 vm Cincinnati-0131 29 July 1971)]. Document Type: Memorandum; List. Date: 29 July 1971

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: Edward B. Silberstein, M.D.; Eugene L. Saenger, M.D. To: Evelyn Hess, M.D. [Chairman, Committee on Research, Cincinnati General Hospital]. Title: The Therapeutic Effects of Total and Large Field Partial-Body Irradiation Followed by Infusion of Autologous Marrow in Humans. Document Type: Proposal. Date: July 1971

From: Evelyn V. Hess, M.D., Chairman, Faculty Committee on Research. To: Clifford G. Grulee, Jr., M.D., Dean, College of Medicine, University of Cincinnati. Subject: Therapeutic Effects of Total Body Irradiation Followed by Infusion of Autologous Marrow in Humans [forwarding of Faculty Committee on Research approval of proposal submitted by Silberstein and Saenger]. Document Type: Letter. Date: 3 August 1971

From: Evelyn V. Hess, M.D., Chairman, Faculty Committee on Research. To: Edward B. Silberstein, M.D., Associate Professor, Radioisotope Laboratory. Subject: The Therapeutic Effects of Total-Body Irradiation Followed by Infusion of Autologous Marrow in Humans [internal committee review of proposal submitted by Silberstein and Saenger]. Document Type: Letter. Date: 3 August 1971

From: Evelyn V. Hess, M.D., Chairman, Faculty Committee on Research. To: Eugene Saenger, M.D., Director, Radioisotope Laboratory. Subject: The Therapeutic Effects of Total and Large Field Partial-Body Irradiation Followed by Infusion of Autologous Marrow in Humans [internal committee review of proposal submitted by Silberstein and Saenger]. Document Type: Letter. Date: 3 August 1971

From: Clifford G. Grulee, Jr. (Dean, UCCM). To: Edward B. Silberstein and Eugene L. Saenger. Subject: Notification of FCR Approval of "Therapeutic Effect of Total-Body Irradiation Followed by Infusion of Autologous Marrow in Humans." Document Type: Letter. Date: 9 August 1971

From: Clifford G. Grulee, Jr., M.D., Dean [College of Medicine]. To: Dr. Edward B. Silberstein and Dr. Eugene L. Saenger, Dept. of Radiology, Radioisotope Laboratory, Cincinnati General Hospital. Subject: Therapeutic Effects of Total-Body Irradiation Followed by Infusion of Autologous Marrow in Humans [internal committee review of proposal submitted by Silberstein and Saenger]. Document Type: Letter. Date: 9 August 1971

From: Ralph E. Ballinger, Contracting Officer [J-4CM]. To: University of Cincinnati College of Medicine, Attn.: Eugene L. Saenger, M.D. Subject: Request Approval of Additional Equipment for Use Under Contract DASA 01-69-C-0131 [for sterile room, but not for analyzer of UV abs. metabolic products; funds commitment]. Document Type: Letter. Date: 10 August 1971

Authors: Edward B. Silberstein, M.D.; Eugene L. Saenger, M.D. Title: Appendix VIII, Revised Protocol, Approved August 1971. Protocol: The Therapeutic Effect of Total and Large Field Partial-Body Irradiation Followed by Infusion of Autologous Marrow in Humans [includes consent forms]. Document Type: Protocol. Date: August 1971

From: Ralph E. Ballinger, Contracting Officer. To: University of Cincinnati, Office of Controller: Attn.: Wilma H. Loichinger, Assistant Controller, Grants & Contracts. Subject: Letter Acknowledging Receipt of HEW Negotiation Agreement re: Contract DASA 01-69-C-0131 [regarding overhead rates; negotiation]. Document Type: Letter. Date: 8 September 1971

From: Lt. Col. John W. Cable, USAF, VC, Medical Directorate. To: Dr. Northrop. Subject: S. Auerbach Visit on 6 October 1971 About Contract DASA 01-69-C-0131. Document Type: Memorandum. Date: 6 October 1971

From: John W. Watson, [DNA] Contracting Officer. To: Record. Subject: Washington Post Request for Copy of Contract DASA 01-69-C-0131, University of Cincinnati. Document Type: Memorandum. Date: 6 October 1971

Author: Department of Defense. Title: Statement from DoD October 14, 1971. Subject: Department of Defense Contractual Arrangements with the University of Cincinnati in Connection with Whole-Body Radiation Research. Document Type: Fact Sheet. Date: 14 October 1971

From: Dr. E. L. Saenger Radioisotope Laboratory. To: Warren G. Bennis, President, University of Cincinnati. Subject: [a statement in regard to whole- and partial-body radiation therapy]. Document Type: Memorandum. Date: 19 October 1971

From: Eugene L. Saenger, M.D. To: Dr. William Rider, Princess Margaret Hospital. Subject: [inquiries regarding "The Symptomatic and Hematological Disturbance Following Total Body Radiation of 300-Rad Gamma-Ray Irradiation" and references]. Document Type: Letter. Date: 28 October 1971

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

Title: [justification for use of radiation as palliative therapy for advanced cancer]. Document Type: Report; Draft. Date: 29 October 1971

From: Edward B. Silberstein, M.D. To: Eugene L. Saenger, M.D. Subject: [psychological studies in whole-body radiation patients]. Document Type: Memorandum. Date: 1 November 1971

Author: E. L. Saenger, M.D. Title: Answers to Senator Gravel's Questions. Document Type: Report; Draft. Date: 2 November 1971

From: Eugene L. Saenger, M.D. Subject: [forwarding Gravel's questions and Saenger's answers to a third party]. Document Type: Memorandum. Date: 3 November 1971

Author: Eugene L. Saenger, M.D. Title: A Statement in Regard to Whole and Partial-Body Radiation Therapy for Palliation of Cancer Patients Carried Out at the University of Cincinnati College of Medicine and General Hospital. Document Type: Statement. Date: 3 November 1971

Author: E. B. Silberstein, M.D. Title: Evolution of Bone Marrow Transplantation in Total Body Irradiation Study at the University of Cincinnati. Document Type: Report; Excerpt. Date: 3 November 1971

From: Ruth V. Lindsey/per Eugene L. Saenger, M.D. To: Dr. Donald T. Chalkley, National Institutes of Health. Subject: [forwarding of material in regard to whole and/or partial-body radiation study at the request of Dr. Gall]. Document Type: Letter. Date: 4 November 1971

From: Eugene L. Saenger, M.D. To: Dr. Harold Perry, Department of Radiology, Sinai Hospital. Subject: [request for follow-up information on two 1960 patients; update on rebuttal for press reaction]. Document Type: Letter. Date: 4 November 1971

From: Dr. Clifford G. Grulee, Jr. To: Dr. Raymond Suskind, Chairman; Dr. Bernard Aron; Dr. Eugene Conway; Dr. Robert Daniels; Dr. Paul Herget; Dr. Evelyn Hess; Dr. Daniel Kline; Dr. Harvey Knowles; Dr. Alvin Mauer; Dr. Milton Orchin; Dr. Edward Pratt. Subject: Creation of Ad Hoc Committee to Review the Total Body Radiation Study [Dr. Saenger's research]. Document Type: Memorandum. Date: 12 November 1971

From: Dr. Clifford G. Grulee, Jr. [Dean, College of Medicine]. To: Dr. Raymond Suskind; Dr. Bernard Aron; Dr. Eugene Conway; Dr. Robert Daniels; Dr. Paul Herget; Dr. Evelyn Hess; Dr. Daniel Kline; Dr. Harvey Knowles; Dr. Alvin Mauer; Dr. Milton Orchin; Dr. Edward Pratt. Subject: [membership in an ad hoc committee to review the scientific content, methodology, and data treatment with respect to the total body radiation study]. Document Type: Memorandum. Date: 12 November 1971

From: Otha W. Linton, Director, Washington Office [American College of Radiology]. To: Senator Mike Gravel. Subject: [letter responding to Senator Gravel's request that the American College of Radiology investigate Saenger's research program]. Document Type: Letter. Date: 24 November 1971

From: Eugene L. Saenger, M.D., Professor of Radiology, Director, Radioisotope Laboratory. To: Dr. John Northrop, Deputy Director, Science and Technology, Defense Nuclear Agency. Subject: [comments on the draft of statement of Dr. John A. Northrop, Deputy Director (Science & Technology), Defense Nuclear Agency, before the Subcommittee on Health, Committee on Labor and Public Welfare, US Senate, November 1971]. Document Type: Letter. Date: 26 November 1971

Author: Dr. John Northrop, Defense Nuclear Agency. Title: Statement of Dr. John A. Northrop, Deputy Director (Science & Technology), Defense Nuclear Agency, Before the Subcommittee on Health Committee on Labor and Public Welfare, US Senate, November 1971 [includes consent form and budget information]. Document Type: Statement; Draft. Date: November 1971

Title: Rebuttal to Press Articles About UCCM, DoD, Cancer Treatment. Document Type: Statement. Date: November 1971

From: Eugene L. Saenger, M.D. Subject: An Interview with Dr. Silberstein and Mr. Motter and Dr. Caper Representing Senator Kennedy. Document Type: Memorandum; Notes. Date: 6 December 1971

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: Dr. E. B. Silberstein, M.D. Subject: Meeting with Mr. Motter, Staff of Senator Edward Kennedy, Dr. Caper, Staff of Health, Education and Welfare, Regarding Conduct of Total Body Irradiation Study. Document Type: Memorandum; Notes. Date: 6 December 1971

From: Eugene L. Saenger, M.D. To: Dr. Edward Gall [VP Medical Affairs, UCCM]. Subject: [visit to evaluate the problems of the whole-body radiation study]. Document Type: Letter. Date: 7 December 1971

From: Eugene L. Saenger, M.D. To: Evelyn Hess, M.D. [Faculty Committee on Research]. Subject: [visit to evaluate the problems of the whole-body radiation study]. Document Type: Letter. Date: 7 December 1971

From: Eugene L. Saenger, M.D. To: Dr. Raymond Suskind [Director, Institute of Environmental Health, Kettering Laboratory]. Subject: [visit to evaluate the problems of the whole-body radiation study]. Document Type: Letter. Date: 7 December 1971

From: Eugene L. Saenger, M.D., Professor of Radiology, Director, Radioisotope Laboratory. To: Dr. Edward A. Gall, Vice President for Medical Affairs, University of Cincinnati Medical Center. Subject: [the advisability of having patients who have been treated with whole- or partial-body radiation interviewed by representatives of Senator Kennedy]. Document Type: Letter. Date: 11 December 1971

Authors: Eugene L. Saenger, M.D. (with others). Title: Progress Report: Whole and Partial-Body Radiation Therapy for Palliation of Cancer Patients Carried Out at the University of Cincinnati College of Medicine and General Hospital [includes two versions with the same date]. Document Type: Report; Excerpt. Date: 13 December 1971

From: Ben I. Friedman, M.D., Professor of Radiology and Medicine, Head, Section of Nuclear Medicine, Acting Chairman, Department of Radiology. To: Eugene L. Saenger, M.D. Subject: [defending "informed consent" by description of the briefing of patients considered for whole- or partial-body radiation on the type of treatment and forms of therapy that they might receive]. Document Type: Letter. Date: 15 December 1971

Title: Congressional Record, Proceedings and Debates of the 92nd Congress, First Session, December 13, 1971 to December 17, 1971. Journal: Congressional Record, vol. 117, issue 36. Document Type: Journal Article; Excerpt. Date: 15 December 1971

Title: [Congressional Record excerpt. Proceedings and Debates of the 92nd Congress, First Session, December 13, 1971. Page 47051 only]. Journal: Congressional Record. Document Type: Journal Article; Excerpt. Date: 15 December 1971

Title: Discussion of DoD's Contractual Arrangement with the University of Cincinnati in connection with Whole-Body Radiation Research [includes Congressional Record—Senate, dated 15 December 1971]. Document Type: Fact Sheet. Date: 15 December 1971 est.

From: Eugene L. Saenger, M.D. To: Dr. Charles Barrett, Department of Surgery, Cincinnati General Hospital. Subject: [review of the letter of December 13, 1971 from Senator Edward Kennedy to Dr. Warren Bennis]. Document Type: Letter. Date: 17 December 1971

Author: Evelyn V. Hess, M.D., Chairman, Faculty Committee on Research. Title: Appendix I [to Suskind report]: Historical Review of the Total Body Irradiation Project and the Faculty Research Committee Reviews. Document Type: Appendix/Attachment. Date: 20 December 1971

From: [Unknown]. To: Mr. Arthur Newmyer, Newmyer Associates. Subject: [letter enclosing material concerning the congressional inquiries of Senator Kennedy and Senator Gravel regarding UCCM and Saenger research]. Document Type: Letter; Excerpt. Date: 20 December 1971

From: Mike Gravel [Senator, Alaska]. To: Dr. McConnell [President, American College of Radiology]. Subject: Letter from Senator Mike Gravel to Dr. McConnell Concerning Radiation Therapy Project, University of Cincinnati Medical Center. Document Type: Letter. Date: 1971

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

Authors: [three members of the University of Cincinnati Junior Faculty Association]. Title: A Report to the Campus Community. Subject: [radiation experiments at University of Cincinnati]. Document Type: Report. Date: 1971

Authors: E. B. Silberstein; I-Wen Chen; E. L. Saenger; J. G. Kereiakes. Title: "Cytologic-Biochemical Radiation Dosimeters in Man." Book: Biochemical Indicators of Radiation Injury in Man. Document Type: Chapter. Date: 1971

Title: University of Cincinnati Medical Center Faculty Committee on Research Voluntary Consent Statement [for radiation of the lower body, with investigatory and witness signatures]. Document Type: Form. Date: 1971

Authors: Eugene L. Saenger, M.D. et al. Title: Radiation Effects in Man: Manifestations and Therapeutic Efforts, 1 May 1970 through 30 April 1971. Document Type: Report. Date: 1971

Title: Appendix II [to Suskind report]: Letters from 1966 to 1971 Showing the Reviews and Recommendations of the Faculty Committee on Research Relating to the Research Proposals Submitted by Dr. Saenger. Document Type: Appendix/Attachment. Date: 1971

From: Dr. John Northrop, Deputy Director, Science & Technology [DNA]. To: Eugene L. Saenger, M.D. Subject: [plans for Senate hearings in front of Senator Kennedy's committee]. Document Type: Letter. Date: 19 November 1971

Title: University of Cincinnati Medical Center, Faculty Committee on Research, Voluntary Consent Statement (Procedure: Bone Marrow Transplantation). Document Type: Form. Date: 1971 est.

Title: Faculty Committee on Research, Voluntary Consent Statement. (Procedure: Radiation of the Whole-Body). Document Type: Form. Date: 1971 est.

From: J-4CM, John W. Watson, Chief, Contract Division. To: COMP, STAP. Subject: Negotiated Amount of Modification No. DASA 01-69-C-0131-P00003 with the University of Cincinnati College of Medicine [includes copy of budget provided by Saenger, negotiation, funds commitment]. Document Type: Memorandum; Budget; Excerpt. Date: 1971 est.

Title: Individual Procurement Action Report [for Contract DASA 01-69-C-0131-P00003, Continuation of Study of Radiation Effects in Man]. Document Type: Report. Date: 1971 est.

Author: Signed by John W. Watson, Contracting Officer. Title: Contract Distribution List [for Contract No. DASA 01-69-C-0131-P00003] Subject: [distribution]. Document Type: List. Date: 1971 est.

Title: Tables, Whole-Body and/or Partial-Body Study (Survival Tables, Incidence of Nausea and Vomiting, etc.). Document Type: Report; Chart; Draft. Date: 1971 est.

Authors: Eugene L. Saenger, M.D. et al. Title: Radiation Effects in Man: Manifestations and Therapeutic Efforts, 01 May 1969 through 30 April 1970. Document Type: Report. Date: 1971 est.

Authors: Eugene L. Saenger, M.D. et al. Title: Radiation Effects in Man: Manifestations and Therapeutic Efforts, 1 May 1970–30 April 1971. Document Type: Report; Draft. Date: 1971 est.

From: Senator Gravel [Alaska]. To: Dr. Steinfeld. Subject: [letter circulated by Senator Gravel questioning the radiation therapy projects at the University of Cincinnati College of Medicine]. Document Type: Letter; Excerpt. Date: 1971 est.

Title: Patient Dosimetry [includes charts and illustrations]. Document Type: Notes. Date: 1971 est.

Title: [the University of Cincinnati College of Medicine's program for total-body and partial-body exposure of patients for the treatment of cancer; includes notations for slide display]. Document Type: Paper. Date: 1971 est.

From: David K. Lyon, LTC, USA, Technical Operations Officer. To: Record. Subject: GAO Investigation of DNA Contract (DASA 01-69-C-0131) with University of Cincinnati. Document Type: Memorandum. Date: 12 January 1972

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: Raymond R. Suskind, M.D., Chairman, Ad Hoc Committee. To: Clifford G. Grulee, Jr., M.D., Dean, College of Medicine, University of Cincinnati. Subject: Transmission of Ad Hoc Committee [Suskind] Report, Reviewing the Total Body Irradiation Study by Dr. Saenger. Document Type: Letter. Date: 14 January 1972

From: Robert L. Bachman, Property Administrator (ONR Resident Representative). To: Director, Defense Nuclear Agency (LGCM/J.W. Watson). Subject: Contract No. DASA 01-69-C-0131 with the University of Cincinnati [item inventory, ref: ONR Laf/657:vm Cinci-0131 18 July 1972]. Document Type: Memorandum. Date: 18 January 1972

Authors: Mike Gravel [Senator, Alaska]. Title: Congressional Record, Proceedings and Debates of the 92d Congress, 2nd Session, January 19, 1972 to January 25, 1972, Senate, Body Radiation Program. Journal: Congressional Record, vol. 118, issue 1. Document Type: Journal Article. Date: 19 January 1972

From: Todd H. Bogart, Vice-President, Junior Faculty Association. To: [open letter to campus community]. Subject: Disclaimer to Report Published by Three Members of the Junior Faculty Association Re: Dr. Saenger's Research Projects. Document Type: Statement. Date: 25 January 1972

From: Eugene L. Saenger, M.D. To: Mr. Mike Gertner, Administrative Aide, Senator William Saxbe. Subject: [Office of Senator Kennedy's interest in studies on whole- and partial-body radiation for the treatment of cancer and the investigation of radiation effects]. Document Type: Letter. Date: 29 January 1972

Author: Ad Hoc Review Committee of the University of Cincinnati. Title: The Whole-Body Radiation Study at the University of Cincinnati: A Report to the Dean of the College of Medicine [Suskind report]. Document Type: Report. Date: January 1972

Author: Ad Hoc Review Committee of the University of Cincinnati. Title: The Whole-Body Radiation Study at the University of Cincinnati: A Report to the Dean of the College of Medicine [Suskind report, including transmittal memorandum, appendices 1-9, and press release]. Document Type: Report; Appendix/Attachment. Date: January 1972

Title: Questions from the Committee to Appendix VI to the University of Cincinnati Ad Hoc Committee Report, January 1972 [includes Dr. Saenger's answers to questions related to funding (missing)]. Document Type: Appendix/Attachment. Date: January 1972

From: Eugene L. Saenger, M.D. To: Col. John Cable, Defense Nuclear Agency. Subject: DASA 01-69-C-0131. Document Type: Letter. Date: 4 February 1972

Title: Meeting with Mr. Robert Murphy and Mr. Myrton Stewart [GAO] and E. L. Saenger, Mr. Vern Rolf, and Ruth V. Lindsey (UCCM). Document Type: Transcript. Date: 4 February 1972

From: Eugene L. Saenger, M.D. To: Clifford G. Grulee, Jr., M.D., Dean, College of Medicine, UC. Subject: Contract Extension, Grant Renewals and Publicity [reply from Grulee to Gall (FCR) attached]. Document Type: Letter; Memorandum. Date: 9 February 1972

From: Eugene L. Saenger, M.D. To: Mr. Robert Murphy (GAO). Subject: Information Concerning Informed Consent. Document Type: Letter. Date: 10 February 1972

Title: A Critique of "A Report to the Campus Community" — Statement of Three Members of the Junior Faculty Association. Document Type: Report. Date: 10 February 1972

Author: E. L. Saenger. Title: Report of Conference with Messrs. Myrton Tom Stewart and Robert Murphy of the General Accounting Office (GAO), Friday February 4, 1972. Document Type: Report; Transcript. Date: 11 February 1972

From: Dr. Clifford G. Grulee, Jr. To: Eugene L. Saenger, M.D., Professor of Radiology and Director, Radioisotope Laboratory. Subject: Letter to Acknowledge the Budget for the Contract Titled "Therapeutic Effect of Total Body Irradiation Followed by Infusion of Autologous Marrow in Humans." Document Type: Letter. Date: 15 February 1972

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

From: Warren Bennis, President, University of Cincinnati. To: Edward M. Kennedy, Chairman, Subcommittee on Health, Committee on Labor and Public Welfare. Subject: Response to letter of February 3, 1972 Regarding Requests for Reports on Total Body Irradiation Study. Document Type: Letter. Date: 16 February 1972

Author: [Saenger]. Title: Questions from the Committee [regarding whole-body irradiation studies]. Document Type: Notes. Date: February 1972 est.

From: Robert W. McConnell, M.D., President, American College of Radiology. To: The Honorable Mike Gravel. Subject: Response to Request by Sen. Gravel for Further Investigation by Committee from American College of Radiology (ACR). Document Type: Letter. Date: 7 March 1972

From: Edward B. Silberstein. To: Evelyn Hess, Chairman, Faculty Committee on Research. Subject: Submission of Protocol: Evaluation of the Therapeutic Effectiveness of Total- and Partial-Body Irradiation as Compared to Chemotherapy in Humans with Carcinoma of Lung or Colon [second submission; title page has wide field]. Document Type: Memorandum; Proposal. Date: 4 April 1972

Author: Capt. Myron I. Varon, MC, USN, Surgeon, AFRRRI, DNA. Title: Minutes of the Twentieth Meeting, AFRRRI Board of Governors, 13 April 1972. Document Type: Minutes; Excerpt. Date: 13 April 1972

From: Eugene L. Saenger, M.D. To: Director, Defense Nuclear Agency. Subject: Withdrawal of Contractor's Letter in Regard to FY 74 Due to Cancellation of Contract. Document Type: Letter. Date: 26 April 1972

From: Edward A. Gall [Vice President, Director, University of Cincinnati Medical Center]. To: Eugene L. Saenger. Subject: President Bennis' Letter Describing His Conclusion Regarding Whole-Body Irradiation Experimentation Forwarded to Saenger. Document Type: Memorandum. Date: 1 May 1972

From: Edward B. Silberstein. To: Faculty Committee on Research. Subject: Submission of Third Revision of "Evaluation of the Therapeutic Effectiveness of Wide Field Radiotherapy as Compared to Chemotherapy in Humans with Carcinoma of the Lung and Colon. Document Type: Memorandum. Date: 22 May 1972

Author: Evelyn V. Hess, M.D., Chairman, Faculty Committee on Research. Subject: Faculty Committee on Research Meeting Regarding Evaluation of the "Therapeutic Effectiveness of Total and Partial-Body Irradiation as Compared to Chemotherapy in Humans with Carcinoma of the Lung or Colon." Document Type: Notes. Date: May 1972

Author: Evelyn V. Hess, M.D., Chairman, Faculty Committee on Research. Subject: Meeting of the Faculty Committee on Research, Held on June 12, 1972, Reviewing Saenger's Proposal for Total Body Radiation Research to the National Cancer Institute. Document Type: Minutes. Date: 15 June 1972

Authors: James G. Kereiakes, Ph.D.; William Van de Riet, Ph.D.; Clifford Born, M.S.; Carol Ewing; Edward Silberstein, M.D.; Eugene L. Saenger, M.D. Title: Active Bone-Marrow Dose Related to Hematological Changes in Whole-Body and Partial-Body 60-Co Gamma Radiation Exposures: Journal: Radiobiology, vol. 103. Document Type: Journal Article. Date: June 1972

Title: Congressional Record: Senate [discussion of amendment to military procurement authorization bill regarding experiments involving humans subjects; cases discussed include UCCM and other DoD research projects]. Journal: Congressional Record, vol. 1, issue: Aug 1972, pp. 26229 - 26240. Document Type: Journal Article; Excerpt. Date: 1 August 1972

Title: Congressional Record: Senate [regarding amendment to military procurement authorization bill to allow the use of federal funds for experiments involving humans subjects after obtaining informed consent; cases cited include Saenger research at UCCM]. Journal: Congressional Record, vol. 1, issue: Aug. 1972. Document Type: Journal Article; Excerpt. Date: 1 August 1972

From: Evelyn V. Hess, M. D., Chairman, Faculty Committee on Research. To: Clifford G. Grulee, Jr., M.D., Dean, College of Medicine. Subject: Approval of the Radiation Project (Evaluation of the Therapeutic Effectiveness of Wide-

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

Field Radiotherapy as Compared to Chemotherapy in Humans with Carcinoma of the Lung or Colon) as a Grant Application to the National Cancer Institute. Document Type: Memorandum. Date: 28 August 1972

From: Edward B. Silberstein. To: Faculty Committee on Research. Subject: Revised Proposal: "Evaluation of the Therapeutic Effectiveness of Wide Field Radiotherapy as Compared to Chemotherapy in Humans with Carcinoma of the Lung or Colon" (Fourth Revision) and Faculty Committee on Research Correspondence Re: This Proposal. Document Type: Letter; Memorandum. Date: August 1972

From: Edward B. Silberstein, M.D. To: Eugene L. Saenger, M.D. Subject: Progress of the Research Grant Proposal Entitled "Radiation vs. Chemotherapy for Metastatic Cancer." Document Type: Memorandum. Date: 12 September 1972

From: Eugene L. Saenger, M.D. To: John W. Watson, Contracting Officer [Logistics Headquarters, DNA]. Subject: Contract Budget Overruns [enclosing work sheets developed by Mr. Homer Denny, an auditor with the Columbus, Ohio, Audit Agency of DHEW covering three contract years from 6/15/69 through 3/31/72, and DNA reply]. Document Type: Letter; Appendix/Attachment. Date: 30 October 1972

Authors: Eugene L. Saenger, M.D. et al. Title: Radiation Effects in Man: Manifestations and Therapeutic Efforts, 1 April 1971 through 31 March 1972. Document Type: Report. Date: 1972

Author: Dr. Saenger. Title: Unattributed Summary Transcript of GAO Investigators Interview with Dr. Saenger on February 7, 1972 [includes summary and questions addressing DoD funding (missing)]. Document Type: Transcript. Date: 1972 est.

From: Asher Tenner, Regional Audit Director, HEW Audit Agency. To: Headquarters, Defense Nuclear Agency. Subject: Miscellaneous Correspondence Pertaining to Fiscal Matters [contract audit closing statement for DASA 01-69-C-0131]. Document Type: Letter. Date: 29 January 1973

Authors: Eugene L. Saenger, M.D. et al. Title: Whole-Body and Partial-Body Radiotherapy of Advanced Cancer. Journal: The American Journal of Roentgenology, Radium Therapy and Nuclear Medicine, vol. CXVII, issue 3. Document Type: Journal Article. Date: March 1973

Title: Contract Administration Completion Record [for Contract No. DASA 01-69-C-0131-P00003]. Document Type: Form; Contract. Date: 31 May 1973

Authors: Eugene L. Saenger, M.D. et al. Title: Whole-Body and Partial-Body Radiotherapy of Advanced Cancer. Document Type: Chart. Date: 1973 est.

From: Wilma H. Loichinger, Assistant Controller—Grants & Contracts. To: Contracting Officer, Defense Nuclear Agency. Subject: Letter Concerning Billing to Collect the Final Payment on Contract DASA 01-69C-0131. Document Type: Letter. Date: 4 February 1974

From: Eugene L. Saenger, M.D. To: Contracting Officer. Subject: DASA 01-69-C-0131 (June 15, 1969–March 31, 1972). Document Type: Letter. Date: 22 May 1974

Title: Contract Completion Statement [for Contract No. DASA 01-69-C-0131-P00003]. Document Type: Form; Contract. Date: 23 July 1974

Author: Edward B. Silberstein, M.D., E. L. Saenger Radioisotope Laboratory. Title: The Political and Ethical Investigation of Human Research: A Case Study. Document Type: Report. Date: 1976 est.

From: H. D. Wisely, RADM, USN, Director. To: Dr. Joseph A. Steger, Office of the President, University of Cincinnati. Subject: A Process to Resolve Issues Relating to Human Radiation Experiments Conducted or Sponsored by the Federal Government. Document Type: Letter. Date: 10 March 1994

From: Comptroller General of the United States. To: Senator Edward M. Kennedy, Chairman, Subcommittee on Health, Committee on Labor & Public Welfare. Subject: Documents Relating to GAO Report: 1) the Whole-Body

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Cincinnati General Hospital, Cincinnati, OH (continued)

Irradiation Program at the University of Cincinnati Medical Center and 2) the Policy of the Department of Defense Regarding the Protection of Humans Used in Medical Research Projects Under Contract. Document Type: Letter. Date: Unknown

From: Robert W. McConnell, M.D., President American College of Radiology. To: Mike Gravel [Senator, Alaska]. Subject: [response to request to investigate the whole-body radiation therapy project being conducted by Dr. Eugene L. Saenger and his colleagues at the University of Cincinnati College of Medicine]. Document Type: Letter. Date: Unknown

Authors: James G. Kereiakes; Edward B. Silberstein; J. Winston Rogers; Eugene L. Saenger. Title: Bone Marrow Dosimetry in a Co-60 Irradiated Tissue-Equivalent Human Phantom [includes cover letter]. Document Type: Letter; Abstract. Date: Unknown

Author: [Eugene L. Saenger, M.D.]. Title: [a conversation with Dr. Suskind regarding the whole-body radiation project and Faculty Committee on Research]. Document Type: Notes. Date: Unknown

Author: Eugene L. Saenger. Title: Effects of Total- and Partial-Body Therapeutic Irradiation in Man. Document Type: Chapter. Date: Unknown

Author: E. L. Saenger. Title: Progress Report—Whole and Partial-Body Radiation Therapy for Palliation of Cancer Patients Carried Out at the University of Cincinnati College of Medicine and General Hospital. Document Type: Report; Draft. Date: Unknown

Author: Eugene L. Saenger. Title: Radiation Effects in Man (A Collection of Articles from Various Journals). Document Type: File. Date: Unknown

From: E. B. Silberstein, M.D. To: Eugene L. Saenger, M.D. Subject: [private patient's interest in becoming part of irradiation study]. Document Type: Memorandum. Date: Unknown

From: Bill Wickens. To: [Record]. Subject: UC Cancer Research Project Investigation. Document Type: Memorandum. Date: Unknown

Title: Three Consent Forms: Consent for Special Study and Treatment (1965); University of Cincinnati Medical Center Faculty Committee on Research Voluntary Consent Statement [two versions, undated]. Document Type: Form. Date: Unknown

Jefferson Davis Hospital, Houston, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1952	DNA02	Influence of total body irradiation

(For abstract and documentation, see Baylor University College of Medicine, Houston, TX.)

National Naval Medical Center, Bethesda MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	DNA07	Scintigraphy to detect early disease of the hip

(For abstract and documentation, see Armed Forces Radiobiology Research Institute, Bethesda, MD.)

210 Appendix 1—Records Search

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

New York University Medical Center, Institute of Environmental Medicine, New York, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	DNA12	Short lived nuclides in the food chain and man

Abstract: From a presently undetermined date until 1966, researchers at the New York University Medical Center, Institute of Environmental Medicine in New York, NY, evaluated potassium iodide (KI) in suppressing thyroidal iodine-131 (I-131) uptake. The object of the study was to investigate the efficacy of KI in suppressing thyroidal I-131 uptake as a means of reducing the risk of thyroid damage due to single massive exposures to this isotope. Because exposure might be unavoidable in the event of a nuclear accident, researchers sought a prophylactic procedure to minimize or prevent absorption of radioiodine by the thyroid. Sixty-two healthy volunteers participated. For all participants, the percent thyroidal I-131 accumulation was determined twenty-four hours after the administration of a standard dose of 1.5 nanocuries I-131 dissolved in 10.0 milliliters of water. The thyroid dose for 30 percent thyroidal uptake of I-131 was 6.8 millirems per 1.5 nanocuries. Determinations of protein-bound iodine (PBI) and I-131 labeled triiodothyronine resin uptake were also made. Forty-one of the original volunteers then participated in a test for the effect of KI administration on thyroidal radioiodine accumulation. These participants received doses of KI ranging from 5 to 1,000 milligrams either one hour before, with, or at specified times following administration of I-131. One or two days later, an additional dose of 1.5 to 5.0 nanocuries of I-131 was administered without additional doses of KI. The 24-hour uptake was again measured to evaluate the suppression. Researchers felt that prophylactic administration of 100 to 200 milligrams of KI in anticipation of radioiodine exposure prevented thyroid uptake and reduced the radiation dose by more than 98 percent.

Documents: Authors: Merrill Eisenbud; McDonald E. Wrenn. Title: Short Lived Nuclides in the Food Chain and Man. Document Type: Report. Date: November 1966

From: William N. Rom, M.D., MPH. To: Lawrence M. Bates. Title: Semiannual Historical Report, Headquarters, Field Command, The Armed Forces Special Weapons Project; Sandia Base, Albuquerque, New Mexico, 01 July 1954–31 December 1954 [research related to "Short Lived Nuclides in the Food Chain and Man"] Document Type: Letter. Date: 14 September 1994

North Carolina Baptist Hospital, Winston-Salem, NC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	DNA11	Basic principles of pancreatic scanning

(For abstract and documentation, see Bowman Gray School of Medicine, Winston-Salem, NC.)

Sloan-Kettering Institute for Cancer Research, New York, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1954	DNA01	Post-irradiation syndrome in man

(For further information, see Chapter 2—"Total-Body and Partial-Body Irradiation Studies.")

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Sloan-Kettering Institute for Cancer Research, New York, NY (continued)

- Documents: Author: James J. Nickson, M.D. Title: Abstract of: Study of the Post-Irradiation Syndrome in Humans [includes quarterly report to the AFSWP, with distribution list]. Document Type: Report; Abstract; Excerpt. Date: 1 March 1953
- Authors: James J. Nickson, M.D.; Henry J. Koch, Jr., M.D. Title: A Proposal for the Study of the Post-Irradiation Syndrome in Humans. Document Type: Proposal. Date: December 1953
- From: The Chief, Armed Forces Special Weapons Project. To: Surgeon General, Department of the Army. Subject: Request for Sponsoring a Study of the Post-Irradiation Syndrome in Humans at the Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: February 1954
- From: Maj. John A. Hilcken, MSC. To: Dr. Bayne-Jones. Subject: Proposal for Study of Post-Irradiation Syndrome in Man at Sloan-Kettering Institute, Requested for 1 March 54–30 April 55. Document Type: Memorandum. Date: 3 March 1954
- From: S. Bayne-Jones, M.D. To: Maj. John A. Hilcken, MSC. Subject: Application (via AFSWP) of Dr. James Nickson and Dr. Henry J. Koch, Jr., Sloan-Kettering Institute for Cancer Research, New York City, for a Contract to Support a "Study of the Post-Irradiation Syndrome in Humans," for 1 March 1954–30 April 1955. Document Type: Memorandum. Date: 8 March 1954
- From: Lt. Col. Tyron E. Huber, Medical Corps. To: Comptroller, OTSG. Subject: Request for Allotment. Document Type: Memorandum. Date: 12 March 1954
- To: James J. Nickson, M.D. Subject: Memo Draft Which Includes Contract Number and Duration. Document Type: Memorandum. Date: 15 March 1954
- From: Lt. Col. Tyron E. Huber, Medical Corps. To: James J. Nickson, M.D. Subject: Notification of Approval of the Proposal Submitted by Drs. Nickson and Koch (to Study Post-Irradiation Syndrome in Man) for AFSWP Support. Document Type: Letter. Date: 15 March 1954
- From: Lt. Col. Tyron E. Huber, Medical Corps. To: Contracting Officers, OTSG. Subject: New Research Contract No. DA-49-007-M.D.-533 (OI No. 144-54). Document Type: Memorandum. Date: 30 March 1954
- Authors: James J. Nickson, M.D.; Henry J. Koch, Jr., M.D. Title: Study of the Post-Irradiation Syndrome in Humans. Progress Report for Period 1 April 1954–30 June 1954. Document Type: Report. Date: 10 July 1954
- From: Maj. John A. Hilcken, MSC. To: Stanhope Bayne-Jones, M.D. Subject: Renewal of Contract DA-49-007-M.D.—533. Document Type: Memorandum. Date: 1 August 1954
- From: Maj. John A. Hilcken, MSC. To: C. P. Rhoads, M.D. Subject: Acknowledgement of Receipt of Progress Report for Contract DA-49-007-M.D.-533 and Update on Policy Changes Concerning Submission of Reports. Document Type: Letter. Date: 16 August 1954
- From: Col. R. P. Mason, MC. To: Chief, Armed Forces Special Weapons Project. Subject: Transmittal of Progress Reports. Document Type: Memorandum. Date: 17 August 1954
- From: Maj. Jesse W. West, MSC. To: Contracting Officer, OTSG. Subject: Invoice. Document Type: Memorandum. Date: 30 August 1954
- From: Maj. Jesse W. West. To: Contracting Officer, OTSG. Subject: Invoice. Document Type: Memorandum. Date: 16 December 1954
- From: Col. R. P. Mason, MC. To: Chief, Armed Forces Special Weapons Project. Subject: Progress Report, AFSWP No. 742. Document Type: Memorandum. Date: 10 January 1955
- From: C. P. Rhoads, M.D. To: Maj. John A. Hilcken, MSC. Subject: The Submission of Progress Report #3 for the Project Conducted Under Contract No. DA-49-007-M.D.-533. Document Type: Letter; Form; Routing Slip. Date: 20 June 1955

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Sloan-Kettering Institute for Cancer Research, New York, NY (continued)

Author: Col. R. P. Mason, MC. Title: Post-Irradiation Syndrome in Humans. Document Type: Report. Date: 22 June 1955

From: C. P. Rhoads, M.D. To: Maj. John A. Hilcken, MSC. Subject: Renewal Proposal for Contract No. DA-49-007-M.D.-533. Document Type: Letter. Date: 22 June 1955

Author: James J. Nickson, M.D. Title: A Proposal for the Continuation of the Study of the Post-Irradiation Syndrome in Humans. Document Type: Proposal. Date: June 1955

From: Col. Irving L. Branch, USAF. To: The Surgeon General, Department of the Army. Subject: Continuation of Contract at the Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum; Routing Slip. Date: 29 July 1955

From: Maj. John A. Hilcken, MSC. To: The Chief, Armed Forces Special Weapons Project. Subject: Continuation of Contract of the Sloan-Kettering Institute of Cancer Research. Document Type: Memorandum. Date: 9 August 1955

From: Maj. John A. Hilcken, MSC. To: C. P. Rhoads, M.D. Subject: Renewal of Contract No. DA-49-007-M.D.-533 with Sloan-Kettering Institute for Cancer Research. Document Type: Letter. Date: 9 August 1955

From: Maj. John A. Hilcken, MSC. To: Comptroller, OTSG. Subject: Amendment of Contract No. DA-49-007-M.D.-533—the Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: 12 August 1955

From: Maj. John A. Hilcken, MSC. To: Contracting Officer, OTSG. Subject: New Research Contract No. DA-49-007-M.D.-669. Document Type: Memorandum. Date: 12 August 1955

From: Maj. John A. Hilcken, MSC. To: Dr. Stella Leche Deignan. Subject: The Extension of Contract No. DA-49-007-M.D.-533 and the Renewed Contract Identification No. DA-49-007-M.D.-669. Document Type: Letter. Date: 23 August 1955

From: Lt. Col. Tyron E. Huber, Medical Corps. To: Contracting Officer, OTSG. Subject: Continuation of Contract No. DA-49-007-M.D.-533—the Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: 2 September 1955

From: Maj. John A. Hilcken, MSC. To: Contracting Officer, OTSG. Subject: Contract No. DA-49-007-M.D.-533 - The Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: 12 September 1955

From: Maj. John A. Hilcken. To: Contracting Officer. Subject: Contract No. DA-49-007-M.D.-669—The Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: 12 September 1955

From: Lt. Col. W. F. Lawrence, MSC. To: Contracting Officer, OTSG. Subject: Contract No. DA-49-007-M.D.-533—The Sloan-Kettering Institute for Cancer Research (Report on Audit of Total Costs and Supplemental Agreement). Document Type: Memorandum. Date: 28 October 1955

From: Maj. John A. Hilcken, MSC. To: Contracting Officer, OTSG. Subject: Decreased Funding for Contract No. DA-49-007-M.D.-533—The Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: 1 November 1955

From: Maj. John A. Hilcken, MSC. To: Mrs. Lamasure. Subject: Non-Receipt of Report from Dr. Nickson for Contract No. DA-49-007-M.D.-669. Document Type: Memorandum. Date: 27 November 1955

Author: James J. Nickson, M.D. Title: Study of the Post-Irradiation Syndrome in Humans, Interim Report, Accompanying Renewal Proposal, October 1958 [includes annual report and quarterly reports]. Document Type: Report. Date: 1955 est.

Authors: James J. Nickson, M.D.; Henry J. Koch, Jr., M.D. Title: Study of the Post-Irradiation Syndrome in Humans. Progress Report for Period 1 April 1954–31 March 1955. Document Type: Report. Date: 1955 est.

Author: Col. R. P. Mason, Medical Corps. Title: Study of Post-Irradiation Syndrome in Humans. Document Type: Report. Date: 1 January 1956

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Sloan-Kettering Institute for Cancer Research, New York, NY (continued)

Title: Contractor's Statement of Contingent or Other Fees for Contract No. DA-49-007-M.D.-755. Document Type: Form; Statement. Date: 1 January 1956

From: Maj. John A. Hilcken, MSC. To: Mrs. Lamasure. Subject: Contract No. M.D.-504 and M.D.-669 (Contract Renewal). Document Type: Memorandum. Date: 27 February 1956

From: Maj. John A. Hilcken, MSC. To: James J. Nickson, M.D. Subject: Non-Receipt of Report for Contract No. DA-49-007-M.D.-669. Document Type: Letter. Date: 8 May 1956

Author: James J. Nickson, M.D. Title: Annual Report, Post-Irradiation Syndrome in Humans, Period of Report: 1 April 1955–31 March 1956. Document Type: Report. Date: May 1956

From: Buhla M. Hill for Maj. John A. Hilcken, MSC. To: Lt. Col. Louis E. Browning. Subject: Annual Report for Contract No. DA-49-007-M.D.-669. Document Type: Letter. Date: 12 June 1956

From: C. P. Rhoads, M.D. To: Maj. John A. Hilcken, MSC. Subject: Submission of Renewal Proposal for the Continuation of the Study of the Post-Irradiation Syndrome in Humans. Document Type: Letter. Date: 13 June 1956

From: Lt. Col. F. W. Timmerman, MC. To: Chief, Armed Forces Special Weapons Project. Subject: Proposal for the Continuation of Research Study (Sloan-Kettering Institute for Cancer Research). Document Type: Memorandum. Date: 25 June 1956

Author: James J. Nickson, M.D. Title: A Proposal for the Continuation of the Study of the Post-Irradiation Syndrome in Humans. Document Type: Proposal. Date: June 1956

From: Col. Irving L. Branch. To: The Surgeon General, Department of the Army. Subject: Funding of the Studies on Post-Irradiation Syndrome in Humans at the Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: 26 July 1956

From: Maj. John A. Hilcken, MSC. To: Mrs. Lamasure. Subject: New Research Contract for Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: 30 July 1956

From: Col. R. L. Hullinghorst, Medical Corps. Subject: Records Relating to Contract No. DA-49-007-M.D.-755. Document Type: Memorandum. Date: 14 August 1956

From: Maj. John A. Hilcken, MSC. To: Contracting Officer, OTSG. Subject: Initiation of New Research Contract No. DA-49-007-M.D.-755—The Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: 14 August 1956

Author: Lt. Col. W. F. Lawrence, MSC. Title: Department of the Army Determinations and Findings Approval of Award for Attached Proposal to Study Post-Irradiation Syndrome in Humans. Report Period: 1 September 1956–31 August 1957. Document Type: Proposal. Date: 14 August 1956

From: Lt. Col. Max H. Brown, MSC. To: Contracting Officer, OTSG. Subject: Initiation of a Fixed Price Contract with Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: 17 August 1956

From: Col. R. L. Hullinghorst, MC; Maj. John A. Hilcken, MSC. To: The Surgeon General, Department of the Army. Subject: AFSWP Funding Studies of Post-Irradiation Syndrome in Humans in the Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: 20 August 1956

From: Maj. John A. Hilcken, MSC. To: C. P. Rhoads, M.D. Subject: Contract Administration and Reporting Procedure for Medical Research Contracts. Document Type: Letter; Protocol. Date: 23 August 1956

From: Maj. John A. Hilcken, MSC. To: Dr. Stella Leche Deignan. Subject: Initiation of Contract No. DA-49-007-M.D.-755. Document Type: Letter. Date: 27 August 1956

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Sloan-Kettering Institute for Cancer Research, New York, NY (continued)

Author: Lt. Col. Max H. Brown, MSC. Title: Department of the Army Medical Research Contract with the Sloan-Kettering Institute for Cancer Research for Period 1 September 1956–31 August 1957. Document Type: Contract. Date: 1 September 1956

From: Maj. John A. Hilcken, MSC. To: James J. Nickson, M.D. Subject: Information Related to Contract No. DA-49-007-M.D.-755. Document Type: Letter. Date: 19 September 1956

Author: James J. Nickson, M.D. Title: Study of Post-Irradiation Syndrome in Humans. Quarterly Report for Period 1 September 1956–30 November 1956. Document Type: Report. Date: 1 December 1956

From: C. P. Rhoads, M.D. To: Maj. John A. Hilcken. Subject: Quarterly Report for the Period of 1 September 1956–30 November 1956. Document Type: Letter. Date: 12 December 1956

Authors: James J. Nickson, M.D.; Henry J. Koch, Jr., M.D.; Henry N. Bane, Ph.D. Title: Study of the Post-Irradiation Syndrome in Humans. Document Type: Abstract. Date: 1956 est.

Author: James J. Nickson, M.D. Title: Study of Post-Irradiation Syndrome in Humans. Quarterly Report for Period 1 December 1956–28 February 1957. Document Type: Report. Date: 10 March 1957

From: Mr. Bernard J. Palumbo. To: Lt. Col. W. F. Lawrence. Subject: Invoice for Supplies Furnished and Services Rendered Under Contract No. DA-49-007-M.D.-755. Document Type: Letter. Date: 7 May 1957

From: Bernard J. Palumbo. To: Office of the Surgeon General, Department of the Army. Subject: Invoice for Services Rendered and Supplies Furnished Under Contract No. DA-49-007-M.D.-755 for Period 1 September 1956–28 February 1957. Document Type: Bill. Date: 10 May 1957

From: Lt. Col. Max H. Brown, MSC. To: Mr. B. L. Mecke. Subject: Modification to Contract No. DA-49-007-M.D.-755. Document Type: Letter. Date: 15 May 1957

Author: Lt. Col. Max H. Brown, MSC. Title: Modification No.1 to Contract No. DA-49-007-M.D.-755 with the Sloan-Kettering Institute for Cancer Research. Document Type: Contract Modification. Date: May 1957

Subject: Correspondence regarding Contract No. DA-49-007-M.D.-755. Recommendation for Payment of Invoice for Period 1 September 1956–28 February 1957. Document Type: Memorandum. Date: May 1957

Author: James J. Nickson, M.D. Title: Study of the Post-Irradiation Syndrome in Humans. Progress Report for Period 1 March 1957–31 May 1957. Document Type: Report. Date: 1 June 1957

From: Lt. Col. Max H. Brown, MSC. To: Mr. B. L. Mecke. Subject: Outline of the Purpose of Modifications for Contracts (DA-49-007-M.D.-341, DA-49-007-M.D.-729, DA-49-007-M.D.-755). Document Type: Letter. Date: 19 August 1957

Authors: Lt. Col. Max H. Brown, MSC; C. P. Rhoads, M.D. Title: Modification No. 2 for Fixed Price Contract with the Sloan-Kettering Institute for Cancer Research. Contract Period 1 September 1956– 31 October 1957. Document Type: Contract Modification. Date: 3 September 1957

From: C. P. Rhoads, M.D. To: Dr. John Barton, AFSWP. Subject: Request for Extension of the Ending Date and Reporting Period for Contract No. DA-49-007-M.D.-755. Document Type: Letter. Date: 27 September 1957

From: C. P. Rhoads, M.D. To: Dr. John Barton, AFSWP. Subject: Renewal Proposal for Contract No. DA-49-007-M.D.-755. Document Type: Letter. Date: 30 September 1957

Author: James J. Nickson, M.D. Title: A Proposal for the Continuation of the Study of the Post-Irradiation Syndrome in Humans. Document Type: Proposal. Date: September 1957

Author: James J. Nickson, M.D. Title: A Proposal for the Continuation of the Study of the Post-Irradiation Syndrome in Humans [includes organization chart of The Sloan-Kettering Institute for Cancer Research]. Document Type: Chart; Proposal. Date: September 1957

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Sloan-Kettering Institute for Cancer Research, New York, NY (continued)

Subject: Contract Number DA49-007-M.D.-755: "Study of Post-Irradiation Syndrome in Humans" at the Sloan-Kettering Institute for Cancer Research. [includes related correspondence]. Document Type: Letter; Memorandum. Date: September–October 1957

Author: James J. Nickson, M.D. Title: Study of the Post-Irradiation Syndrome in Humans. Report for Period 1 September 1956–31 August 1957. Document Type: Report. Date: 1 October 1957

From: Col. Cordes F. Tiemann, USAF. To: The Surgeon General, Department of the Army. Subject: Re-Routing of a Letter from C. P. Rhoads, M.D., Requesting extension of Contract No. DA-49-007-M.D.-755 (Letter dated 27 September 1957 is attached). Document Type: Memorandum; Appendix/Attachment. Date: 4 October 1957

From: Lt. Col. Arthur D. Sullivan, MSC. To: Contracting Officer, OTSG. Subject: Request and Justification for Extension of Contract No. DA-49-007-M.D.-755 with The Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: 8 October 1957

From: Mr. R. L. Mecke. To: Lt. Col. Max H. Brown. Subject: Request to Have Modification No. 2 Acted Upon by Appropriate Officers. Document Type: Letter. Date: 30 October 1957

From: Lt. Col. Arthur D. Sullivan. To: Contracting Officer, OTSG. Subject: New Research Contract No. DA-49-007-M.D.-910 (OI-139-58). Document Type: Memorandum. Date: 30 October 1957

Author: Lt. Col. Max H. Brown, MSC. Title: Department of the Army Fixed Price Medical Research Contract with the Sloan-Kettering Institute for Cancer Research. Document Type: Contract. Date: 1 November 1957

From: Col. W. F. Lawrence, MSC. Subject: Approval of Award for Contract No. DA-49-007-M.D.-910 to the Sloan-Kettering Institute for Cancer Research. Document Type: Letter. Date: 1 November 1957

From: Lt. Col. Arthur D. Sullivan, MSC. To: C. P. Rhoads, M.D. Subject: Administration of Contract for Continued Support of Research Entitled "The Study of the Post-Irradiation Syndrome in Humans." Document Type: Letter. Date: 5 November 1957

From: Col. W. F. Lawrence. To: Mr. B. L. Mecke. Subject: Receipt of Application for Proposed New Contract. Document Type: Letter. Date: 7 November 1957

From: Lt. Col. Max H. Brown, MSC. To: Mr. B. L. Mecke. Subject: Execution of Contract by Appropriate Officers. Document Type: Letter. Date: 15 November 1957

From: Lt. Col. Max H. Brown, MSC. To: Mr. R. L. Mecke. Subject: Modification No. 2 for Contract No. DA-49-007-M.D.-755. Document Type: Letter. Date: 19 November 1957

From: Mr. B. L. Mecke. To: Lt. Col. Max H. Brown, MSC. Subject: Modification No. 2 to Contract No. DA-49-007-M.D.-755. Document Type: Letter. Date: 19 November 1957

From: Mr. Bernard J. Palumbo. To: Col. W. F. Lawrence, MSC. Subject: Analysis for Overhead Computed for 1957. Document Type: Letter. Date: 21 November 1957

From: Bernhard Mecke. To: Lt. Col. Max H. Brown, MSC. Subject: Notarized Copies of Contract No. DA-49-007-M.D.-910. Document Type: Letter. Date: 29 November 1957

From: Lt. Col. Max H. Brown. To: Mr. R. L. Mecke. Subject: Copies of Contract No. DA-49-007-M.D.-910. Document Type: Letter. Date: 3 December 1957

Author: Marian J. Johnston. Title: Summary of Negotiation and Contract Award Data for Contract No. DA-49-007-910. Document Type: Contract; Appendix/Attachment. Date: 13 December 1957

From: Lt. Col. Max H. Brown, MSC. To: Mr. R. L. Mecke. Subject: Contract Expiration and Contract Finalization Procedure. Document Type: Letter. Date: 16 December 1957

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Sloan-Kettering Institute for Cancer Research, New York, NY (continued)

From: Lt. Col. Max H. Brown, MSC. Subject: Extension of the Ending Date for Contract No. DA-49-007-M.D.-755. Document Type: Memorandum. Date: 1957 est.

Author: James J. Nickson, M.D. Title: Study of the Post-Irradiation Syndrome in Humans [Final Report]. Document Type: Report. Date: 1 February 1958

From: Bernhard L. Mecke. To: Lt. Col. Max. H. Brown. Subject: Final Scientific Report for Contract No. DA-49-007-M.D.-755 with Accompanying Forms. Document Type: Letter; Appendix/Attachment. Date: 25 March 1958

From: Lt. Col. Arthur D. Sullivan, MSC. To: Mr. R. L. Mecke. Subject: Provision of Funds for Research Project Entitled "Study of the Post-Irradiation Syndrome on Humans" and a Request for Vouchers. Document Type: Letter. Date: 28 March 1958

From: Charles A. O'Connor. To: Lt. Col. W. F. Lawrence. Subject: The Submission of Quarterly Progress Reports and Invoice for the Period 1 March 1957–31 August 1957. Document Type: Letter. Date: 2 April 1958

From: Charles A. O'Connor. To: Lt. Col. W. F. Lawrence. Subject: The Submission of Quarterly Progress Report and Invoice for Period 1 November 1957–31 January 1958. Document Type: Letter. Date: 10 April 1958

From: Bernhard L. Mecke. To: Lt. Col. Arthur D. Sullivan, MSC. Subject: Financial and Technical Reports for Contract No. DA-49-007-M.D.-755. Document Type: Letter. Date: 11 April 1958

From: Lt. Col. Max H. Brown, MSC (Letter #1); Lt. Col. Arthur D. Sullivan, MSC (Letter #2). To: Chief, Research and Development Division (Letter #1); Contracting Officer, OTSG (Letter #2). Subject: Correspondence on Contract DA-49-007-M.D.-910: "Study of Post-Irradiation Syndrome in Humans" at the Sloan-Kettering Institute for Cancer Research. Document Type: Letter. Date: April 1958

From: Lt. Col. Max H. Brown. To: Chief, Voucher Branch. Subject: Recommendation for Payment of Invoice for Contract No. DA-49-007-M.D.-910. Document Type: Memorandum. Date: 1 May 1958

From: Col. W. F. Lawrence, MSC. To: Mr. B. L. Mecke. Subject: Acknowledgement of Invoice Receipt and Request for Breakdown of Costs Incurred Under Contract No. DA-49-007-M.D.-755. Document Type: Letter. Date: 13 May 1958

Author: James J. Nickson, M.D. Title: Study of the Post-Irradiation Syndrome on Humans. Progress Report for Period 1 February 1958–30 April 1958. Document Type: Report. Date: 1 June 1958

From: Charles A. O'Connor. To: Lt. Col. W. F. Lawrence. Subject: Final Report of Expenditures Under Contract No. DA-49-007-M.D.-755 for Period 1 September 1956–31 October 1957. Document Type: Letter. Date: 3 June 1958

Title: Vouchers for Services Rendered and Supplies Furnished Under Contract No. DA-49-007-M.D.-755. Document Type: Form. Date: 3 June 1958

From: Chief, Biophysics Research Branch. To: Contracting Officer, OTSG. Subject: Correspondence Regarding Payment of Final Voucher for Contract No. DA-49-007-M.D.-755. Document Type: Memorandum; Form. Date: 10 June 1958

From: Lt. Col. Max H. Brown, MSC. To: Chief, Voucher Section. Subject: Recommendation for Payment of Final Billing for Contract No. DA-49-007-M.D.-755. Document Type: Memorandum. Date: 12 June 1958

Subject: Correspondence on Contract DA-49-007-M.D.-755 and DA-49-007-M.D.-910: "Study of Post-Irradiation Syndrome in Humans" at the Sloan-Kettering Institute for Cancer Research. Document Type: Letter. Date: June 1958

Author: James J. Nickson, M.D. Title: Study of the Post-Irradiation Syndrome in Humans. Progress Report for Period 1 May 1958–31 July 1958. Document Type: Report. Date: 1 August 1958

From: Bernard Palumbo. To: Lt. Col. W. F. Lawrence. Subject: Submission of Quarterly Progress Report and Invoice for Contract No. DA-49-007-M.D.-910 Covering the Period 1 February 1958–31 July 1958. Document Type: Letter. Date: 11 August 1958

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Sloan-Kettering Institute for Cancer Research, New York, NY (continued)

Subject: Correspondence on DA-49-007-M.D.-910: "Study of Post-Irradiation Syndrome in Humans" at the Sloan-Kettering Institute for Cancer Research. Document Type: Letter. Date: August-September 1958

From: Lt. Col. Arthur D. Sullivan, MSC. To: File. Subject: Result of Discussion Regarding Renewal of Contract No. DA-49-007-M.D.-910. Document Type: Memorandum. Date: 21 October 1958

From: Col. R. L. Hullinghorst, Deputy Special Assistant for Research and Development Affairs. To: Chief, Armed Forces Special Weapons Project. Subject: Proposal for the Continuation of the Study of the Post-Irradiation Syndrome in Humans. Document Type: Memorandum. Date: 22 October 1958

Authors: James J. Nickson, M.D.; Arvin S. Glickman, M.D. Title: A Proposal for the Continuation of the Study of the Post-Irradiation Syndrome in Humans. Document Type: Proposal. Date: 24 October 1958

From: Maj. Irwin Lee, MSC. Subject: Correspondence Regarding Review of Contract File for Contract No. DA-49-007-M.D.-910. Document Type: Memorandum. Date: October 1958 est.

To: The Surgeon General. Subject: Funding of Studies on Post-Irradiation Syndrome in Humans at the Sloan-Kettering Institute for Cancer Research. Document Type: Memorandum. Date: 17 November 1958

From: Maj. Robert D. Evans, MSC. To: Mr. Bernhard L. Mecke. Subject: Request for Documents Necessary to Complete Finalization Procedure for Contract No. DA-49-007-M.D.-910. Document Type: Letter. Date: 9 December 1958

Title: Report of Inventions and Subcontracts Form for Contract No. DA-49-007-M.D.-910. Document Type: Form. Date: 24 December 1958

Title: Partial Payment Record for Contract No. DA-49-007-M.D.-755 with the Sloan-Kettering Institute for Cancer Research. Document Type: Form. Date: 1958 est.

From: Lt. Col. A. D. Sullivan, MSC. To: Commanding General. Subject: Receipt of Final Scientific Report for Contract No. DA-49-007-M.D.-910. Document Type: Routing Slip. Date: 3 February 1959

From: C. P. Rhoads, M.D. To: Col. R. W. Hullinghorst. Subject: Final Report for Contract No. DA-49-007-M.D.-910: "Study of the Post-Irradiation Syndrome in Humans." Document Type: Letter. Date: 25 February 1959

From: Lt. Col. Arthur D. Sullivan, MSC. To: Contracting Officer, USAMRDC. Subject: Request for Payment of Final Voucher for Contract No. DA-49-007-M.D.-910. Document Type: Memorandum. Date: 27 February 1959

Authors: James J. Nickson, M.D.; Arvin S. Glicksman, M.D., Assistant, Experimental Radiation Section, Sloan-Kettering Institute. Title: Study of the Post-Irradiation Syndrome in Humans. Document Type: Report. Date: 1 April 1960

From: Maj. Irwin Lee, MSC. Subject: Review of the Sloan-Kettering Institute for Cancer Research Contract File. Document Type: Memorandum. Date: 1960 est.

Authors: James J. Nickson, M.D.; Arvin S. Glicksman, M.D. Title: The Study of the Post-Irradiation Syndrome in Man, Period of Report: 1 January 1960–31 January 1961. Document Type: Report. Date: 1 February 1961

Author: Lt. Col. Max H. Brown, MSC. Title: Modification of Contracts with Sloan-Kettering Institute for Cancer Research. Document Type: Contract. Date: Unknown

Author: James J. Nickson, M.D. Title: Annual Report, Contract No. DA-49-007-M.D.-669; Post-Irradiation Syndrome in Humans, Period of Report 01 April 1955–31 March 1956. Document Type: Report. Date: May 1956

Author: James J. Nickson, M.D., Head Experimental Radiation Section, Member Sloan-Kettering Institute, Chief Department of Radiation Therapy, Memorial Center. Title: Study of the Post-Irradiation Syndrome in Humans, Period of Report, 01 November 1957–31 October 1958. Document Type: Report. Date: 1958 est.

218 Appendix 1—Records Search

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Sloan-Kettering Institute for Cancer Research, New York, NY (continued)

Authors: James J. Nickson, M.D.; Henry J. Koch, Jr., M.D. Title: Study of the Post-Irradiation Syndrome in Humans. Progress Report for Period 1 April 1954–31 March 1955 [includes handwritten draft of title page]. Document Type: Notes; Cover. Date: 1955 est.

Authors: James J. Nickson, M.D.; Henry J. Koch, Jr., M.D. Title: Study of the Post-Irradiation Syndrome in Humans. Progress Report for Period 1 July 1954–30 September 1954. Document Type: Report. Date: 1954 est.

Title: Contracts and Modifications Re: Contract DA-49-007-M.D.-755, "Study of Post-Irradiation Syndrome in Humans," at the Sloan-Kettering Institute for Cancer Research [includes contracts, reports, proposal, and related correspondence]. Document Type: Report; Memorandum; Contract. Date: Unknown

Texas Medical Center, Houston, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1952	DNA02	Influence of total body irradiation

(For abstract and documentation, see Baylor University College of Medicine, Houston, TX.)

University of Cincinnati College of Medicine, Cincinnati, OH

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1961	DNA03	Radiation effects in man

(For abstract and documentation, see Cincinnati General Hospital, Cincinnati, OH.)

Veterans Administration Hospital, Long Beach, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	DNA04	Effects of incidental irradiation of "normal" humans

Abstract: From a presently undetermined date until 1969, researchers from the University of California at Irvine investigated neurophysiological and behavioral effects of radiation. Twelve male cancer patients at the Veterans Administration Hospital in Long Beach, CA, participated. This study explored specific physiological sensitivities to radiation, including sensory detection and estimate of dose, visual perception, sensory discrimination and effects on performance. Radiation dose was determined by the patient's treatment routine. Visual perception of low-level radiation from a cobalt-60 machine was tested after a ten minute dark-adaptation period. Perception of radiation was thought to be affected by the phosphene effect, a visual sensation appearing with the eyes closed, and in the absence of visual light. Elimination of the period of dark adaptation reduced patients' ability to distinguish radiation from non-radiation exposures. Simple motor performance

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Veterans Administration Hospital, Long Beach, CA (continued)

was impaired when central portions of the brain received approximately fifty rads. No reliable post-treatment effects of irradiation on complex motor performance were found.

Documents: Authors: B. H. Feder, M.D.; R. S. Boswell, Ph.D.; J. W. Schaefflein, M.Sc.; C. A. Sondhaus, Ph.D.; J. Stuhlberg, M.D. Title: Further Observations on Reaction Time and Flicker Fusion in "Normal" Humans Under Daily Irradiation. Journal: Radiology Journal, vol. 90. Document Type: Journal Article. Date: February 1968

Authors: Reed S. Boswell, Ph.D.; B. H. Feder, M.D.; J. W. Schaefflein, M.Sc. Title: Neurophysiological and Behavioral Effects of Incidental Irradiation of "Normal" Humans. Document Type: Report. Date: August 1969

Walter Reed Army Institute of Research, Washington, DC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1958	DNA08	Calibration of whole-body counting facility

Abstract: From 1958 to 1960, researchers from Walter Reed Army Institute of Research in Washington, DC, validated accurate calibration of two whole-body counters. Thirteen healthy individuals participated. Nine participants took part in the calibration of the liquid scintillation counter. Three of the nine and four other participants participated in the calibration of the crystal spectrometer. Each participant ingested approximately 2.1 microcuries of potassium-42. Maximum gamma ray activity and total body potassium were measured in each participant by one or both of the instruments. Two subjects participated twice in the crystal spectrometer calibration. The efficiency of the liquid scintillation counter as a function of participant weight was determined. Body potassium values were obtained with both the liquid scintillation and crystal spectrometer counters.

Documents: Authors: Maj. Kent T. Woodward; Maj. Charles L. Randolph, Jr.; Capt. Robert van Hoek; Lt. Col. James B. Hartgering; Capt. Harry A. Claypool; M. Sgt. Arnold A. Manskey, Jr.; Mr. Jay J. Noble. Title: The Walter Reed Whole-Body Counting Facility. Document Type: Report. Date: July 1960

Title: The Walter Reed Whole-Body Counting Facility: Details of Contraction Gamma Radioactivity in People and Foodstuffs. Document Type: Report. Date: July 1958–July 1960

Walter Reed General Hospital, Washington, DC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	DNA10	Technetium-99m minicolloid for radionuclide lymphography

Abstract: From 1972 to 1973, researchers from Walter Reed General Hospital in Washington, DC, improved diagnostic imaging capabilities in the treatment of lymphatic disease. The effectiveness of an innovative scanning agent, technetium-99m "minicolloid" (Tc-99m), was compared to a commercially available Tc-99m preparation. Eight patients participated. Tc-99m

DEFENSE SPECIAL WEAPONS AGENCY/ARMED FORCES RADIOBIOLOGY INSTITUTE 1944-1974 (CONTINUED)

Walter Reed General Hospital, Washington, DC (continued)

minicolloid was injected into their feet. Researchers observed the movement of the scanning agent, as well as the effect of exercise on agent movement. Tc-99m minicolloid demonstrated greater ability to migrate through successive lymph node levels as a result of its smaller particle size. Dose to scan time for Tc-99m minicolloid was short and flexible. This radionuclide technique was preferable due to its effectiveness and simplicity and the facilitation of long-term follow-up care of patients.

Documents: Authors: G. L. Dunson et al. Title: Technetium-99m Minicolloid for Radionuclide Lymphography. Document Type: Report. Date: July 1973

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	DNA05	Effect of central nervous system irradiation

Abstract: From a presently undetermined date until 1971, researchers from the Walter Reed General Hospital in Washington, DC, analyzed the effect of radiation on performance. Sixteen cancer patients participated. Patients were under age fifty, educated at least through ninth grade, did not have brain damage or psychosis, and had tumors that could be treated with radiation. Eight control participants were employees at the Walter Reed Hospital and received no radiation. Participants were divided into three groups: brain irradiation, spinal irradiation, and non-irradiated. Radiation doses are reported as tumor dose to the brain or spinal column expressed in roentgen equivalent tumor (ret) and ranged from 600 to 1,900 rets. Each group took eleven behavioral tests, including decision-making, intelligence, memory, motor coordination, muscle strength, blood pressure, motivation, emotional state, health questionnaire, time horizon, and social distance. Behavioral functions were highly resistant to impairment from therapeutic central nervous system irradiation. There were no significant differences between irradiated and non-irradiated patients in a broad spectrum of behavioral measures.

Documents: Authors: Aaron Wolfgang, Ph.D.; John G. Maier, M.D. Title: Effects of Central Nervous System Irradiation on Human Performance, Blood Pressure and Emotional State. Document Type: Report. Date: December 1972

NAVY 1944–1974

Abbassia Fever Hospital, Cairo, Egypt

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NMRU3-13	Treatment of chronic urinary Salmonella carriers
---------	----------	--

Abstract: From a presently undetermined date until 1969, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, investigated methods of clinically managing urinary Salmonella carriers. Twenty-six male Egyptians participated. For five patients, imaging studies of the urinary bladder were done during urination. Results of this study are not available at this time.

Documents: Title: Treatment of Chronic Urinary Salmonella Carriers. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NMRU3-15	Chronic urinary Salmonella carriers with intermittent bacteraemia
---------	----------	---

Abstract: From a presently undetermined date until 1970, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, along with investigators at Kasr-el-Aini Hospital and Abbassia Fever Hospital, both located in Cairo, examined bacterial contamination of circulating blood in urinary Salmonella carriers. Urinary Salmonella excretion is often a complication of Schistosoma haematobium infection because of urinary tract damage. From a population of forty urinary Salmonella carriers, fifteen male Egyptian patients with urinary tract damage, verified by x-ray, participated in this follow-up study. Results of this study are not available at this time.

Documents: Title: Chronic Urinary Salmonella Carriers with Intermittent Bacteraemia. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NMRU3-16	Urinary schistosomiasis treated with niridazole (Ambilhar): quantitative evaluation
---------	----------	---

Abstract: From a presently undetermined date until 1970, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, along with investigators at Kasr-el-Aini Hospital and Abbassia Fever Hospital, both located in Cairo, Egypt, evaluated the use of niridazole (Ambihar) in the treatment of Schistosoma haematobium. Seventeen male Egyptian patients with schistosomal infections participated. Kidney function tests, including plain x-rays, were part of this study. Results of this study are not available at this time.

Documents: Title: Urinary Schistosomiasis Treated with Niridazole (Ambilhar): Quantitative Evaluation. Document Type: Event Profile. Date: 1994

Ahmadu Bello University, Zaria, Nigeria

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1969	NMRU3-10	Some effects of louse-borne relapsing fever on the function of the heart
------	----------	--

Abstract: In 1969, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, along with investigators at the Haile Selassie University in Addis Ababa, Ethiopia; Ahmadu Bello

NAVY 1944–1974 (CONTINUED)

Ahmadu Bello University, Zaria, Nigeria (continued)

University in Zaria, Nigeria; and St. Paul's Hospital in Addis Ababa, Ethiopia; and researchers at the Hammersmith Hospital and St. John's Hospital for Diseases of the Skin, both in London, England, studied the effects of louse-borne relapsing fever on heart function. Clinical, EKG, and hemodynamic studies were made on thirty-one patients in Ethiopia, and more detailed studies were made on nineteen additional patients. Posteroanterior chest x-rays were taken periodically to survey cardiac and pulmonary changes. Evidence of an abnormal myocardium was obtained and transient acute cor pulmonale was found to occur after the reaction to treatment. No simple correlation could be established between clinical signs and electrocardiographic and hemodynamic evidence of myocardial damage. A statistically significant correlation was found between prolonged QTc and relative acidemia before treatment and between T wave abnormalities and hypocapnia during the chill phase of the febrile reaction following treatment.

Documents: Authors: E. H. O. Parry et al. Title: Some Effects of Louse-Borne Relapsing Fever on the Function of the Heart. Journal: The American Journal of Medicine. Document Type: Journal Article. Date: October 1970

Ain Shams University, Cairo, Egypt

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NMRU3-08	Changes in hepatic blood flow and blood volume after splenectomy for bilharzial hepatosplenic fibrosis dehydrogenase deficiency

Abstract: In 1972, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, and Ain Shams University in Cairo, Egypt, evaluated the effects of spleen removal in patients suffering from liver or spleen enlargement due to schistosomal infections. Liver function and peripheral blood flow patterns were examined. Fifteen Egyptian patients with schistosomiasis participated. Hepatic blood flow was calculated using gold-198, plasma volume was determined using iodine-131 labeled human serum albumin, and red blood cell volume was calculated using chromium-51 sodium citrate. Radiation exposures and results of this study are not available at this time.

Documents: Title: Changes in Hepatic Blood Flow and Blood Volume After Splenectomy for Bilharzial Hepatosplenic Fibrosis Dehydrogenase Deficiency. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	NMRU3-22	Symptomatic, radiological, and functional improvement following treatment of urinary schistosomiasis in Egypt

Abstract: In 1967, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, along with investigators at Kasr-el-Aini Hospital and Ain-Shams Hospital, both in Cairo, Egypt, investigated complications associated with urinary schistosomal infections. Ten male Egyptian patients infected with *Schistosoma haematobium* participated. Tartar emetic or sodium dimercaptosuccinate was used to induce vomiting. Results were assessed clinically, radiologically (plain x-ray of the bladder), and functionally. Radiation exposures and results of this study are unavailable at this time.

Documents: Title: Symptomatic, Radiological, and Functional Improvement Following Treatment of Urinary Schistosomiasis in Egypt. Document Type: Event Profile. Date: 1994

NAVY 1944–1974 (CONTINUED)

Armed Forces Radiobiology Research Institute, Bethesda, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NNMC-097	Enhanced blood coagulation and fibrolysis in a patient with amyloidosis

Abstract: In 1971, researchers from the Armed Forces Radiobiology Research Institute and the National Naval Medical Center in Bethesda, MD, reported a single case of enhanced coagulation and fibrinolysis in primary amyloidosis with episodes of severe hemorrhage. The patient, a thirty-one year-old male, was admitted with cramping epigastric pain and massive hematochezia. A barium enema disclosed a constriction of the transverse colon, and exploratory laparotomy revealed a subserosal hemorrhage of the colon. Several laboratory tests and a cardiac angiography were performed.

Documents: Title: Enhanced Blood Coagulation and Fibrolysis in a Patient with Amyloidosis. Document Type: Event Profile. Date: 1994

Beth Israel Hospital, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1947	ONR-39	The use of I-131 in treatment of heart diseases and long term radiation effects of I-131 in man

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Boston Lying-In Hospital, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1949	ONR-02	Circulating red cell volume and body hematocrit in normal pregnancy and puerperium by direct measurement, using radioactive red cells

Abstract: From a presently undetermined date until 1951, researchers at Harvard Medical School, the Boston Lying-In Hospital, and the Massachusetts Institute of Technology studied circulating red cell volume during pregnancy and the Puerperium (the forty two days following childbirth). Twelve pregnant women from the Boston Lying-In Hospital participated. Investigators tagged red cells using radioactive iron (Fe-55) to determine, by direct measurement, the volume of circulating red cell mass during normal pregnancy and the period during and just after childbirth. Results from the study indicated that an increase in red cells of approximately forty percent occurs during normal pregnancy. The increase in the circulating red cell mass was significant and exceeded two standard deviations 160 days before delivery. At the end of the first week in the puerperium, the red cell volume increase still exceeded two standard deviations. The volume of the red cell mass returned to normal nonpregnant limits approximately sixty days following

NAVY 1944–1974 (CONTINUED)

Boston Lying-In Hospital, Boston, MA (continued)

delivery. Whole blood volume increased by approximately forty-five percent during normal pregnancy. Body hematocrit and large vessel hematocrit each decreased during pregnancy. The average decrease in venous or large vessel hematocrit was fifteen percent, while body hematocrit decreased only 8.4 percent. The ratio between body hematocrit and venous hematocrit increased during normal pregnancy, and the high ratio suggested that a relatively greater part of the blood volume was accommodated by the large vessels rather than the capillary bed.

Documents: Authors: William L. Caton et al. Title: The Circulating Red Cell Volume and Body Hematocrit in Normal Pregnancy and the Puerperium: By Direct Measurement, Using Radioactive Red Cells. Journal: American Journal of Obstetrics and Gynecology, vol. 61, no. 6. Document Type: Journal Article. Date: June 1951

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-03	Persistence and utilization of maternal iron for blood formation during infancy

Abstract: In the 1950s researchers from the Department of Pediatrics, Medicine, and Obstetrics, Harvard Medical School, the Radioactivity Center, Massachusetts Institute of Technology, Boston Lying-In Hospital, Children’s Hospital, and Peter Bent Brigham Hospital in Boston, MA, assessed the persistence and utilization of transplacental iron during infancy. This study was an adjunct to other studies that investigated maternal red cell volume and hematocrit via radioactive iron (Fe-55). Donor red cells labeled with Fe-55 were administered to eleven pregnant women on four to seven occasions during pregnancy. From the eleven pregnancies, and five subsequent ones of four of the women, sixteen infants were available for participation in the study. The total activity of Fe-55 administered ranged from two to twelve microcuries, equivalent to an initial dose rate of 0.1 to 1.0 millirads per day in the mother’s blood stream. The cumulative radiation dose to the blood of the infants for periods averaging 397 days (range 115 to 580) on average, was 131 millirads (range 30 to 354). According to the researchers, the total radiation resulting from the Fe-55 was, on average, less than that due to natural sources (cosmic rays, terrestrial gamma rays, and naturally occurring potassium-40). The sixteen infants were studied up to thirty-two months of age. Measurements of red blood cells, hemoglobin, hematocrit, total iron, and Fe-55 of erythrocytes were made from the umbilical cord blood and from venous blood at intervals during the period. Results indicated very little or no utilization of dietary iron from hemoglobin until three to four months after birth. A 20 percent rise in transplacental iron, at 200 to 400 days, over hemoglobin at birth suggested utilization of iron stored elsewhere during fetal life. Researchers observed that prematurity increases the proportionate contribution of dietary iron.

Documents: Authors: C. A. Smith et al. Title: Persistence and Utilization of Maternal Iron for Blood Formation During Infancy. Journal: Journal of Clinical Investigation, vol. XXXIV, no. 9. Document Type: Journal Article. Date: September 1955

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-17	Lifespan of preserved red cells

Abstract: From a presently undetermined date until 1971, researchers from the Boston University Medical Center, Boston, MA, and the Naval Blood Research Laboratory, Chelsea, MA, studied the

NAVY 1944–1974 (CONTINUED)

Boston Lying-In Hospital, Boston, MA (continued)

lifespan and the rate of random destruction of preserved red blood cells. Forty-four red cell survival studies were performed in thirty-nine patients who required therapeutic transfusions according to orders from clinical staff. Twenty-three of the patients had incurred traumatic injuries in a war zone two to four weeks before admission to the Naval Hospital, Chelsea. Eight of the patients had carcinoma, and eight had other diagnoses. Two different red cell populations were transfused into each of four patients, and the survivals were measured simultaneously. In another patient, the survivals of two transfused red cell populations were studied in succession. The red cell volume of each recipient was measured immediately before the transfusion with the use of five or ten microcuries of radioactive chromium (Cr-51). Survival of the recipient's own cells was determined by the radioactive chromium technique; the recipient's red cells were labeled with twenty microcuries of Cr-51 at the time the red cell volume was measured. Researchers found that the mean red cell lifespan of ninety-seven days was not affected by either the method of preservation or the length of storage. Accelerated linear removal of red cells was seen in severely injured patients, and improved red cell survival was associated with improvement in the recipient's health. The correlation between the lifespan of transfused cells and the recipient's general health suggested that the decreased long-term survival noted in the recipients was produced by some extracorporeal toxic factor.

Documents: Authors: I. O. Szymanski; C. R. Valeri. Title: Lifespan of Preserved Red Cells. Journal: Vox Sanguinis, vol. 21. Document Type: Journal Article. Date: 1971

Boston University School of Medicine, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	NHCHEL-001	Blood volume studies (Cr-51 and I-125)

Abstract: From 1964 until present, researchers from the Boston University School of Medicine and the Naval Blood Research Laboratory, both in Boston, MA, studied the preservation of blood and blood products. One hundred-fifty active duty military personnel and civilians participated in blood volume studies using chromium-51 and iodine-125. Radiation exposures and results of this study are unavailable at this time.

Documents: Title: Blood Volume Studies (Cr-51 and I-125). Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	NHCHEL-002	Red blood cell survival studies (Cr-51 and I-125)

Abstract: From 1964 until present, researchers from the Naval Blood Research Laboratory and the Boston University School of Medicine, both in Boston, MA, studied the preservation of blood and blood products. Seven hundred active duty military personnel and civilians participated in studies of red blood cell survival using chromium-51 and iodine-125. Results of this study are unavailable at this time.

Documents: Title: Red Blood Cell Survival Studies (Cr-51 and I-125). Document Type: Event Profile. Date: 1994

NAVY 1944–1974 (CONTINUED)

Boston University School of Medicine, Boston, MA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1964	NHCHEL-003	Platelet survival studies (Cr-51 and I-125)
------	------------	---

Abstract: From 1964 until present, researchers from the Boston University School of Medicine and the Naval Blood Research Laboratory, both in Boston, MA, studied the preservation of blood and blood products. One hundred-fifty active duty military personnel and civilians participated in studies of platelet survival using chromium-51 and iodine-125. Results of this study are unavailable at this time.

Documents: Title: Platelet Survival Studies (Cr-51 and I-125). Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1964	NHCHEL-004	Blood volume studies (Cr-51 and I-125)
------	------------	--

Abstract: From 1964 until present, researchers from the Naval Blood Research Laboratory and the Boston University School of Medicine, both in Boston, MA, have studied the preservation of blood and blood products. One thousand active duty military and civilian patients participated in blood volume studies involving chromium-51 and iodine-125 labelling. Results of this study are unavailable at this time.

Documents: Title: Blood Volume Studies (Cr-51 and I-125). Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	ONR-16	Analysis of erythrocyte survival curves obtained simultaneously by Cr-51 and automated differential agglutination technic (sic)
---------	--------	---

Abstract: From a presently undetermined date until 1969, researchers from the Naval Blood Research Laboratory in Chelsea, MA and Boston University School of Medicine, Boston, MA compared red blood cell survival curves obtained by two different clinical techniques. This study determined age-dependent and random destruction factors in red blood cell survival using a radioisotopic chromium technique compared to an automated differential agglutination (ADA) technique. Nineteen individuals at the Boston University Medical Center in Boston, MA participated. In all cases it was possible to estimate the erythrocyte lifespan with the ADA technique. Significant random destruction of red blood cells was observed in nine patients. With the chromium-51 technique it was possible to estimate the erythrocyte lifespan in only ten cases; these values were similar to those obtained with the ADA technique. It was not possible to determine the erythrocyte lifespan in the remaining nine cases; the best estimates were too large. The inability to measure erythrocyte lifespan satisfactorily with the chromium-51 technique may have been related to the preferential labeling of young red blood cells in vitro.

Documents: Authors: I. O. Szymanski; C. R. Valeri. Title: Analysis of erythrocyte survival curves obtained simultaneously by Cr-51 and an automated differential agglutination technique: Journal: Transfusion, vol. 10, issue 6. Document Type: Journal Article. Document Date: December 1970

NAVY 1944–1974 (CONTINUED)

Cairo University Hospital, Cairo, Egypt

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU3-06	Schistosomiasis of the liver: Clinical, pathological, and laboratory studies in Egyptian cases

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Cairo University, Cairo, Egypt

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	NMRU3-03	Bilharzial splenomegaly and refractory anemia

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Camp Stoneman, Pittsburg, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	NRDL-03	Protecting and cleaning hands contaminated by synthetic fallout under field conditions

Abstract: From 1956 to 1958, researchers at the Naval Radiological Defense Laboratory in San Francisco, CA, explored methods of removing skin contaminants from the hands. Researchers sought to identify methods for protection and cleansing of skin under field conditions. To date, no information is available on the number of study participants. The contaminants used in the study were dry and slurry synthetic fallout made with lanthanum-140 (La-140) tracer and La-140 in an acid solution. Results of the study showed that three experimental cleaning solutions (ethylenediaminetetraacetic acid, saline, and citric acid) were found to remove contaminants more readily than soap and water. A waterless hand cleaner was as effective as soap and water. Two protective creams used to reduce adherence of contaminants were not as effective as soap and water. There was no observable difference in decontamination effectiveness traceable to contaminant type. No decontamination method was found reliable enough to be used without the need for a radiation check after washing.

Documents: Author: R. H. Black. Title: Protecting and Cleaning Hands Contaminated by Synthetic Fallout Under Field Conditions. Document Type: Report. Date: 27 August 1958

NAVY 1944–1974 (CONTINUED)

Caylor-Nickel Clinic, Bluffton, IN

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1947	ONR-41	A study of the effects of radiation on the microscopic vascular supply of various organs of the body by means of microradiography

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

George William Hooper Foundation, College of Dentistry, University of California, San Francisco, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1950	ONR-44	Oral and alimentary effects of ingestion of radioactive elements

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1950	ONR-45	Oral and alimentary effects of ingestion of radioactive elements

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Haile Selassie I University, Addis Ababa, Ethiopia

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	NMRU3-10	Some effects of louse-borne relapsing fever on the function of the heart

(For abstract and documentation, see Ahmadu Bello University, Zaria, Nigeria.)

Hammersmith Hospital, London, England

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	NMRU3-10	Some effects of louse-borne relapsing fever on the function of the heart

(For abstract and documentation, see Ahmadu Bello University, Zaria, Nigeria.)

NAVY 1944–1974 (CONTINUED)

Harlem City Hospital, New York, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-23	Radiation injury to the capillary wall

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Harvard Medical School, Cambridge, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1949	ONR-02	Circulating red cell volume and body hematocrit in normal pregnancy and puerperium by direct measurement, using radioactive red cells

(For abstract and documentation, see Boston Lying-In Hospital, Boston, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1949	ONR-03	Persistence and utilization of maternal iron for blood formation during infancy

(For abstract and documentation, see Boston Lying-in Hospital, Boston, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1948	ONR-26	Intracellular changes in trauma, depletion and repair with special reference to burns

Abstract: From 1948 until a presently undetermined date, researchers from Harvard Medical School and Massachusetts General Hospital, Boston, MA, studied intracellular changes as a result of trauma with a special focus on burns. The objective of the study was to improve therapy of trauma through study of its cellular and metabolic effects. Radioactive chromium-tagged red cells were used to measure red cell destruction. As of June 1953, 116 burn patients participated in the study. To date, no information on additional patients' radiation exposures, or research results is available.

Documents: Author: Oliver Cope. Title: Intracellular Changes in Trauma, Depletion and Repair with Special Reference to Burns, Covering Period from 01 January 1953 to 30 June 1953. Document Type: Report. Date: 29 July 1953

Author: Oliver Cope, M.D. Title: Annual Progress Report. Title of Project: Intracellular Changes in Trauma, Depletion and Repair—with Special Reference to Burns. Document Type: Report. Date: 26 January 1954

NAVY 1944–1974 (CONTINUED)

Harvard Medical School, Cambridge, MA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	ONR-25	A study of cellular biochemistry in surgical patients
---------	--------	---

Abstract: The inclusive dates for this study at Massachusetts General Hospital and Harvard Medical School, Boston, MA, are presently undetermined. Researchers studied the urinary excretion of potassium-42 (K-42) and measured the state of potassium metabolism at the time of injection and the ratios of potassium in tissues and body fluids. A status report indicated that eighty-two surgical patients had participated in this project by January 1948. Seven of these patients also participated in measurements of total body water, whereby investigators measured the dilution of a measured infusion of heavy water. The average total body water measurement was found to be 70.9 percent. Initial findings indicated that patients, both well and ill, exhibited a constancy in their metabolism of a single tracer dose of K-42. The total body exchangeable potassium measured by dilution of K-42 varied over a wide range and was difficult to interpret relative to body weight. Researchers did not find a striking increase in the urinary excretion of potassium after trauma. With rare exceptions, the researchers also did not observe mass shifts of potassium independent of nitrogen, which may have been interpreted as alteration of intracellular chemistry without loss of protoplasm. Studies on cell equilibrium with K-42 indicated that there was a nonexchangeable fraction of potassium in red cells; therefore, this cell could not be used for the calculation of total body potassium. After forty hours the potassium in urine, muscle and plasma had reached equilibrium. A simple bedside method of estimating urinary potassium by precipitation as the perchlorate had also been developed.

Documents: Authors: Oliver Cope; Francis D. Moore. Title: A Study of Cellular Biochemistry in Surgical Patients. Document Type: Report. Date: 30 April 1947

Authors: Oliver Cope; Francis D. Moore. Title: A Study of Cellular Biochemistry in Surgical Patients. Document Type: Report. Date: 15 January 1948

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	ONR-33	The investigation of the biological effects of radioactive sulfur
---------	--------	---

Abstract: The dates for this study are presently undetermined. Researchers from Harvard Medical School proposed to study the irradiational effects of sulfur-35, its usefulness in the treatment of hyperadrenocorticism and hypertension, and its utility in studying fundamental aspects of sulfur metabolism. To date, no information is available on the number of participants or research results.

Documents: Title: Application for Aid in the Investigation of the Biological Effects of Radioactive Sulfur. Document Type: Proposal. Date: 1948 est.

NAVY 1944–1974 (CONTINUED)

Indiana University Medical Center, Indianapolis, IN

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-13	Functional venography of the lower extremities

At the time of publication there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Institute for Cancer Research, New York, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1948	ONR-04	Effect of total thyroidectomy on function of metastatic thyroid cancer

(For abstract and documentation, see Massachusetts Institute of Technology, Cambridge, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	ONR-24	Determination of the effect of high dosage betatron irradiation to the pituitary and hypothalamus in man

(For abstract and documentation, see James Ewing Hospital, New York, NY.)

Institute of Dermatology, London, England

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	NMRU3-10	Some effects of louse-borne relapsing fever on the function of the heart

(For abstract and documentation, see Ahmadu Bello University, Zaria, Nigeria.)

James Ewing Hospital, New York, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	ONR-24	Determination of the effect of high dosage betatron irradiation to the pituitary and hypothalamus in man

Abstract: In March 1955, researchers at the Sloan-Kettering Institute for Cancer Research and the James Ewing Hospital, New York, NY, proposed to study the effects of high dosage betatron irradiation

NAVY 1944–1974 (CONTINUED)

James Ewing Hospital, New York, NY (continued)

to the pituitary and hypothalamus in humans. The objectives of this study were to determine whether betatron irradiation at a dosage of 12,000 to 15,000 rads would result in complete ablation of the pituitary and end-organ functions and to determine histological radiation changes of the pituitary, hypothalamus, and brain tissues. The number of participants is currently unknown; however, the proposal planned to use cancer patients hospitalized in the research and metabolic units of the James Ewing Hospital. Young patients with good nutrition, a life expectancy of more than six months, and intact gonadal, adrenal, and thyroidal functions were preferred. The proposal indicated that a twenty-three million volt betatron machine would be used to deliver 12,000 to 15,000 rads by a bitemporal route. The irradiation field would include the pituitary, the stalk, and the hypothalamus. It was also to include the tip of the temporal lobes of the cerebrum. It was expected that alteration of pituitary and end-organ functions would begin to occur at the end of six weeks to three months following the completion of irradiation. At the present time, no information is available on the results of this study.

Documents: From: John E. Flynn. To: Chief of Naval Research. Subject: Proposal on "Determination of the Effect of High Dosage Betatron Irradiation to the Pituitary and Hypothalamus in Man" from Sloan-Kettering Institute [includes related correspondence and research proposal]. Document Type: Memorandum. Date: 15 March 1955

Johns Hopkins University, Baltimore, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1949	ONR-42	X-ray camera for use on human centrifuge

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Kasr-el-Aini Hospital, Cairo, Egypt

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	NMRU3-03	Bilharzial splenomegaly and refractory anemia

(For abstract and documentation, see Cairo University, Cairo, Egypt.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	NMRU3-24	Bilharzial splenomegaly and refractory anemia

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

NAVY 1944–1974 (CONTINUED)

Kasr-el-Aini Hospital, Cairo, Egypt (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	NMRU3-22	Symptomatic, radiological, and functional improvement following treatment of urinary schistosomiasis in Egypt

(For abstract and documentation, see Ain-Shams University, Cairo, Egypt.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1968	NMRU3-18	Urinary blood loss in Schistosoma haematobium infection in Egyptian farmers

Abstract: In 1968, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, with investigators at Kasr-el-Aini Hospital in Cairo, Egypt, assessed blood and iron losses accompanying schistosomal infections. Eighteen Egyptian male patients infected with Schistosoma haematobium participated in this study. Iron-59 labeled red blood cells were used to measure urinary blood and iron loss. Results of this study are unavailable at this time.

Documents: Title: Urinary Blood Loss in Schistosoma Haematobium Infection in Egyptian Farmers. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU3-14	Intestinal protein loss in schistosomal polyposis of colon

Abstract: From a presently undetermined date until 1970, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, with investigators at Kasr-el-Aini Hospital in Cairo, Egypt, determined the level of intestinal protein loss resulting from Schistosoma mansoni infections. Six male Egyptian patients with schistosomal infections accompanied by colonic polyposis participated. Chromium-51 labeled human albumin was used to measure intestinal protein loss. Excessive protein loss was shown in five of the six patients.

Documents: Title: Intestinal Protein Loss in Schistosomal Polyposis of Colon. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU3-15	Chronic urinary Salmonella carriers with intermittent bacteraemia

(For abstract and documentation, see Abbassia Fever Hospital, Cairo, Egypt.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU3-16	Urinary schistosomiasis treated with niridazole (Ambilhar): quantitative evaluation

(For abstract and documentation, see Abbassia Fever Hospital, Cairo, Egypt.)

NAVY 1944–1974 (CONTINUED)

Long Island Jewish Hospital, New Hyde Park, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1958	NHSTALB-14	Influence of chelates on the metabolism of radioyttrium
------	------------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1961	NHSTALB-06	Therapy of multiple myeloma with radioyttrium
------	------------	---

Abstract: From 1961 until a presently undetermined date, researchers at the Long Island Jewish Hospital in New Hyde Park, NY, assessed the use of radioyttrium (Y-90) to treat bone lesions. Eleven patients with multiple myeloma participated in this clinical trial. All patients had largely become unresponsive to other modalities of therapy. Y-90 was administered intravenously as a simple dose of Y-90 (0.06 to 0.30 millicurie per kilogram) chelated with an excess of N'hydroxyethylenediamine triacetic acid and containing 0.05 milligram Y-89 per kilogram as a carrier. A good clinical response in the initial course was reported in six patients. Duration of remission was two to seventeen months, with subsequent courses unsuccessful. Researchers stated that, with the use of Y-90 as the initial agent or earlier in the course of the disease, remission could be more far reaching and retreatment more effective.

Documents: Authors: J. Greenber et al. Title: Therapy of Multiple Myeloma with Radioyttrium (Y-90). Journal: Journal of Laboratory & Clinical Medicine, vol. 59, issue 6. Document Type: Journal Article. Date: 1961

Massachusetts General Hospital, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1948	ONR-26	Intracellular changes in trauma, depletion and repair with special reference to burns
------	--------	---

(For abstract and documentation, see Harvard Medical School, Cambridge, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1948	ONR-38	Response of cells (Desquamate) to deep radiation
------	--------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	ONR-25	A study of cellular biochemistry in surgical patients
---------	--------	---

(For abstract and documentation, see Harvard Medical School, Cambridge, MA.)

NAVY 1944–1974 (CONTINUED)

Massachusetts Institute of Technology, Cambridge, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1948	ONR-04	Effect of total thyroidectomy on function of metastatic thyroid cancer

Abstract: In 1948, researchers at the Thyroid Clinic of Massachusetts Hospital in Boston, MA; Memorial Hospital and Sloan-Kettering Institute in New York, NY; and the Massachusetts Institute of Technology in Cambridge, MA, determined the effect of total thyroidectomy on metastatic thyroid cancer. Twenty-one patients participated in this study, which used trace amounts of radioactive iodine to diagnose thyroid cancer. Radiation exposures and results of this study are unavailable at this time.

Documents: Title: Effect of Total Thyroidectomy on Function of Metastatic Thyroid Cancer. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1949	ONR-02	Circulating red cell volume and body hematocrit in normal pregnancy and puerperium by direct measurement, using radioactive red cells

(For abstract and documentation, see Harvard Medical School, Cambridge, MA.)

Medical College of Virginia, Richmond, VA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	NNMC-096	High dose, preoperative supervoltage irradiation for osteogenic sarcoma

Abstract: From 1955 to 1969, researchers from the Medical College of Virginia in Richmond, VA, and the National Naval Medical Center in Bethesda, MD, evaluated preoperative supervoltage radiation therapy in conjunction with surgery for treating osteogenic sarcoma. Seventeen patients with biopsy-confirmed osteogenic sarcoma participated in this study. Radiation therapy was by 2 MeV roentgen rays or by cobalt-60 beam, with treatment times varying from twenty-one to eighty-two days. Dosage administered was from 6,000 to 8,600 rads. Surgery was performed after irradiation in twelve of the seventeen patients. A combined approach in the management of osteogenic sarcoma offered a better chance of survival and appeared to be a more rational approach than any other single modality at the time.

Documents: Authors: R. Lewis Royster; Lt. Comdr., MC, USNR et al. Title: High Dose, Preoperative Supervoltage Irradiation for Osteogenic Sarcoma. Journal: Unknown, vol. 114, issue 3. Document Type: Journal Article. Date: March 1972

Meharry Medical College, Nashville, TN

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1948	ONR-35	Study of treatment of neoplasm by direct infiltration with radio-active colloids

Abstract: From March 1948 until February 1949, researchers at the Meharry Medical College, Nashville, TN, studied the treatment of neoplasms by direct infiltration with radioactive colloids. To date, no

NAVY 1944–1974 (CONTINUED)

Meharry Medical College, Nashville, TN (continued)

information is available on the number of participants. The direct infiltration of radioactive metallic gold colloids was carried out in a series of state three and four carcinomas with the intention of finding the beta ray tolerance of various types of tissue. The isotope used was gold-198 (Au-198). Au-198 was considered useful because, once instilled into the tissue, it remained at the point of deposition and allowed the irradiation from billions of point sources of beta radiation to the nearby tissues without affecting the surrounding normal tissue or other structures. The Au-198 had a cross section of thermal neutrons that was approximately from 100 to 200 times greater than that of most elements. It was therefore very economical to produce and presumably offered effective means of treating tumor tissue. This same colloid could be employed by the intravenous administration with the subsequent uptake by the phagocytic system, for treatment of diseases of the lymphoidmacrophage system such as in diseases of lymphosarcoma, Hodgkin’s disease, and lymphatic leukemia.

Documents: Title: Study of Treatment of Neoplasm by Direct Infiltration with Radioactive Colloids. Document Type: Abstract. Date: 1949 est.

Memorial Hospital, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1948	ONR-04	Effect of total thyroidectomy on function of metastatic thyroid cancer

(For abstract and documentation, see Massachusetts Institute of Technology, Cambridge, MA.)

Ministry of Health, United Arab Republic

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	NMRU3-17	Histological and lymphangiographic studies in patients with clinical lepromatous leprosy

Abstract: In 1969, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, with investigators at St. Clare’s Hospital in New York, NY, and the Leprosy Control Section of the Ministry of Health for the United Arab Republic studied clinical lepromatous leprosy. The histology of inguinal lymph nodes and bone marrow of lepromatous patients was characterized. Changes in histology were related to lymphangiographic (x-ray) findings in five of ten patients participating. Radiation exposures and results of this study are unavailable at this time.

Documents: Title: Histological and Lymphangiographic Studies in Patients with Clinical Lepromatous Leprosy. Document Type: Event Profile. Date: 1994

NAVY 1944–1974 (CONTINUED)

National Institutes of Health, Bethesda, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-125	Total body retention of orally administered 47-calcium in primary hyperparathyroidism

Abstract: From a presently undetermined date until 1974, researchers at the National Naval Medical Center and the National Institutes of Health, both in Bethesda, MD, studied total body retention of orally administered calcium-47 (Ca-47) tracer (one to three microcuries). The purpose of the study was to measure calcium retention in patients with various disorders of calcium metabolism. Researchers reported on Ca-47 retention in thirty-three patients with primary hyperparathyroidism, nine individuals with idiopathic hypercalciuria, three patients with hypercalcemia, and nineteen normal subjects. Using a whole-body radiation detector, the researchers measured the total body retention of Ca-47 seven days after oral administration of the isotope. The percent retention of Ca-47 varied with the calcium metabolic status of each patient. From these measurements, the researchers concluded that whole-body retention of orally administered Ca-47 may prove to be a useful tool in detecting hyperparathyroidism in patients with mild hypercalcemia or hypercalciuria.

Documents: Authors: L. E. Mallette et al. Title: Total Body Retention of Orally Administered 47-Calcium in Primary Hyperparathyroidism. Journal: Journal of Clinical Endocrinol. Metab., vol. 40, issue 4. Document Type: Journal Article. Date: 1974

National Naval Medical Center, Bethesda MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1946	NMRI-01	Biological basis of antimony compounds containing radioactive isotopes, the blood-tissue exchange, and excretion of antimony in humans given a single dose of tartar emetic

Abstract: From 1946 until a presently undetermined date, researchers from the National Naval Medical Center in Bethesda, MD, evaluated the distribution and retention time of antimony in the human body. At the time, antimony was a standard treatment for parasites causing elephantiasis. Two male ambulatory patients from the U.S. Naval Hospital in Bethesda, MD, participated. The radioactive antimony was incorporated into tartar emetic, radioactivity was measured in blood and blood fractions, and total excretion was monitored. Organ uptake (e.g., brain, thyroid) was measured by an externally placed Geiger counter. Estimated radiological exposure was up to three roentgen per day.

Documents: Title: Biological Studies of Antimony Compounds Containing Radioactive Isotopes: III, the Blood-Tissue Exchange and Excretion of Antimony in Humans Given a Single Dose of Tartar Emetic [Report No. 1]. Document Type: Report. Date: 26 April 1946

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1950	NNMC-003	Practical radioisotope therapy
------	----------	--------------------------------

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1951	NNMC-105	Use of radioactive colloidal gold (Au-196) in pleural effusions and ascites associated with malignancy
------	----------	--

Abstract: From 1951 to 1952, researchers from the National Naval Medical Center in Bethesda, MD, evaluated intracavitary administration of radioactive colloidal gold in malignancies involving the chest and abdominal cavities. Nineteen patients, both male and female, were treated. Doses of radiogold ranged from 41 to 148.8 millicuries, with some patients receiving more than one injection. Patient response to the therapy was encouraging, especially when treated before reaching a terminal state. From the results of the study, investigators concluded that intracavitary use of radioactive colloidal gold should be accepted as a valid radiotherapeutic procedure.

Documents: Authors: E. R. King et al. Title: The Use of Radioactive Colloidal Gold (Au-196) in Pleural Effusions and Ascites Associated with Malignancy. Journal: American Journal of Roentgenology, vol. 68, issue 3. Document Type: Journal Article. Date: September 1952

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1952	NNMC-001	Preliminary report on the use of gallium-72 in clinical tracer studies
------	----------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1952	NNMC-144	Radium inhalation accident—radium excretion study
------	----------	---

Abstract: From 1952 to 1956, researchers from the Naval Hospital in Bethesda, MD, studied the excretion of radium following accidental inhalation. Two patients admitted to the Naval Hospital following an accidental radium spill participated. The excretion of radium in one patient was followed for more than one year. Breath analysis for radon was considered to give a poor index of exposure in these cases. The amount of radium inhaled was estimated from excretion data. It was found that 76 percent of the inhaled radium was excreted in the first five days. Feces contained 97 percent of the eliminated radium. Excretion data illustrated the exponential decrease of the

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

coefficient of excretion. Suggestions for therapy were also made. The efficacy of different methods of determining the body radium content was reviewed.

Documents: Authors: W. B. Looney, M.D.; V. E. Archer, M.D. Title: Radium Inhalation Accident—Radium Excretion Study. Journal: American Journal of Roentgenology, vol. 75, issue 3. Document Type: Journal Article. Date: March 1956

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	NNMC-004	Therapeutic use of radioisotopes from a practical level

Abstract: In 1955, researchers from the National Naval Medical Center in Bethesda, MD, reviewed various treatments involving radionuclides and methods for selecting the appropriate isotope for treatment of various diseases. The therapeutic characteristics of phosphorus-32, gold-198, and iodine-131 were reviewed and compared. All were routinely used in clinical therapeutic procedures at the time. In selecting a radioisotope for clinical therapeutic administration, the following factors were considered: toxicity of the parent element, biochemical and chemical nature of the parent element, half-life of the radioisotope, energy and type of emissions of the radioisotope, and the probability of biologic localization of the isotope in the desired organ. Despite restrictions, the isotopes were found to furnish acceptable treatment for the following conditions: polycythema vera, chronic myelogenous leukemia, chronic lymphatic leukemia, effusions complicating spread of various malignant conditions to the serosal membranes of the body, hyperthyroidism, metastatic thyroid cancer, and some forms of chronic heart disease.

Documents: Author: E. R. King, Capt., MC, USN. Title: The Therapeutic Use of Radioisotopes from a Practical Level. Journal: Journal of American Geriatrics, vol. IV. Document Type: Journal Article. Date: February 1956

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	NNMC-096	High dose, preoperative supervoltage irradiation for osteogenic sarcoma

(For abstract and documentation, see Medical College of Virginia, Richmond, VA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	NNMC-140	Late effects (25 to 40 years) of the early medical and industrial use of radioactive materials, part I

Abstract: In 1955, researchers from the Naval Hospital in Bethesda, MD, conducted a retrospective study on the long-term effects of internally deposited radioactive materials from early medical and industrial use. Information was gathered from patients who had received radium for medical purposes and individuals who had been employed in the luminous-dial painting industry. To date, no information is available on the number of study participants. The clinical information served as a guide for diagnosis, management, and treatment of patients who received harmful amounts of radioactive materials. The radiobiological data obtained by refined techniques gave a better understanding of the manner in which changes were produced by internally deposited

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

radioactive elements. The information established more accurate maximum permissible levels of body burden for radioelements in use.

Documents: Title: Late Effects (25 to 40 Years) of the Early Medical and Industrial Use of Radioactive Materials, Part I. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	NNMC-006	Present status of radioiodine in thyroid disease

Abstract: In 1956, researchers at the National Naval Medical Center in Bethesda, MD, conducted an overview of the principal uses of radioiodine in the treatment and diagnosis of thyroid disease. The overview included the use of radioiodine across the general medical community and specific protocols for treatment at the National Naval Medical Center. The findings of several clinical thyroid studies were presented and the results compared to other research.

Documents: Title: Present Status of Radioiodine in Thyroid Disease. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	NNMC-120	Use of radioisotopes in diagnostic hematologic studies

Abstract: In 1956, researchers at the National Naval Medical Center in Bethesda, MD, studied the fate of radioactive iron, iron metabolism, and the distribution of labeled red blood cells (RBCs). To date, no information is available on the number of study participants. RBCs were drawn from patients, labeled with Fe-59, and reinjected. Rate of RBC production, total red cell volume, and RBC life spans were analyzed, and normal values for such studies were determined. The rate of Fe-59 disappearance from plasma, the incorporation of radioactive iron into RBCs, and the localization of Fe-59 in the bone marrow, liver, and spleen were assayed. Results of this study are unavailable at this time.

Documents: Title: Use of Radioisotopes in Diagnostic Hematologic Studies. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	NNMC-141	Late effects (25 to 40 years) of the early medical and industrial use of radioactive materials, part II

Abstract: In 1956, researchers from the Naval Hospital in Bethesda, MD, conducted a retrospective study on the long-term effects of internally deposited radioactive material from early medical and industrial use. Information was gathered from patients who had received radium for medical purposes and individuals who had been employed in the luminous-dial-painting industry. To date, no information is available on the number of study participants. The clinical information served as a guide for diagnosis, management, and treatment of patients who received or ingested harmful amounts of radioactive materials. The radiobiological data obtained by refined

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

techniques gave a better understanding of the manner in which changes were produced by internally deposited radioactive elements. The information established more accurate maximum permissible levels of body burden.

Documents: Title: Late Effects (25 to 40 Years) of the Early Medical and Industrial Use of Radioactive Materials, Part II. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	NNMC-142	Late effects (25 to 40 years) of the early medical and industrial use of radioactive materials, part III

Abstract: In 1956, researchers from the Naval Hospital in Bethesda, MD, conducted a retrospective study on the long-term effects of internally deposited radioactive material from early medical and industrial use. Information was gathered from patients who had received radium for medical purposes and individuals who had been employed in the luminous-dial-painting industry. To date, no information is available on the number of study participants. The clinical information served as a guide for diagnosis, management, and treatment of patients who received or ingested harmful amounts of radioactive materials. The radiobiological data obtained by refined techniques gave a better understanding of the manner in which changes were produced by internally deposited radioactive elements. The information established more accurate maximum permissible levels of body burden.

Documents: Title: Late Effects (25 to 40 Years) of the Early Medical and Industrial Use of Radioactive Materials, Part III. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	NMRI-15	Beta radiation lesion of the skin

Abstract: In 1956, researchers at the Naval Medical Research Institute in Bethesda, MD, presented the case report of an Air Force officer who developed a skin lesion several weeks after an accident involving the spillage of radioactive materials. The officer, who was in charge of the transportation of radioactive samples from the Pacific proving grounds to the United States, developed a skin lesion on his forehead and right eyebrow region. Upon examination, physicians observed erythema, dry scaly desquamation, depigmentation, symptoms of burning and itching, increased sensitivity to sunlight, hyperesthesia, and epilation of the eyebrows (with regrowth of hair). These symptoms and the minimal histological changes, seen particularly in the elastic tissue, were considered consistent with radiation damage to the skin. A diagnosis of beta radiation lesion was made. Physicians also noted regrowth of white hair in the affected region of the right eyebrow, which was formerly black in color. This feature had been previously noted in irradiated animals but not in humans. Investigators considered it worthwhile to present the case because lesions resulting from this type of contamination were thought to be more commonly encountered as a result of the increasingly widespread use of atomic energy at the time.

Documents: Authors: Robert A. Conard, Capt., USN; Carl F. Tessmer, Lt. Col., MC. Title: Beta Radiation Lesion of the Skin. Document Type: Report. Date: 6 February 1956

Authors: Robert A. Conard, M.D.; Carl F. Tessmer, M.D. Title: Beta Radiation Lesion of the Skin. Journal: A.M.A. Archives of Dermatology, vol. 76, no. 6. Document Type: Journal Article. Date: December 1956/1957

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1957	NNMC-005	Evaluation of pancreatic exocrine function and intestinal absorption with radioactive fat

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1957	NNMC-007	Use of radioisotopes in diagnostic hematological procedures. [Part I] The application of the B-12 Co-60 test in the diagnosis of macrocytic anemia's and malabsorption states

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-117	Evaluation of battery of thyroid function studies

Abstract: From a presently undetermined date until 1974, researchers from the National Naval Medical Center in Bethesda, MD, conducted a retrospective study. The purpose of the study was to evaluate a number of thyroid function studies conducted by the Radioisotope Laboratory at the U.S. Naval Hospital in Bethesda, MD. From October 1948 to October 1956, more than 2,500 iodine-131 (I-131) thyroid studies were performed. Concerned with the variable results inherent in procedures used in thyroid function evaluation, researchers sought to improve the overall degree of accuracy in thyroid testing by identifying the most reliable techniques. Researchers reviewed material from more than 400 cases of patients referred to the Radioisotope Laboratory for thyroid function evaluation. Patients were interviewed, physically evaluated, and given a tracer dose of forty microcuries of I-131 on fasting stomach. After twenty-four hours, studies of twenty-four hour uptake, protein bound I-131 (PBI-131) conversion ratio, saliva PBI-131 ratio, and chemical PBI were performed. Clinical diagnosis was then compared to laboratory diagnosis. From this review of thyroid function studies, the researchers concluded that careful radioisotope procedures with the most reliable results were of little value unless the clinician was aware of the procedures' limitations. Researchers felt that the laboratory should not serve as a substitute for good history taking and careful physical examination and that thyroid function studies involving radioiodine complement the clinician's opinion and confirm diagnosis to a high degree of accuracy.

Documents: Authors: Lt. Charles R. Henkelmann, M.C. et al. Title: Evaluation of a Battery of Thyroid Function Studies. Journal: Medical Annals of the District of Columbia, vol. 26, issue 4. Document Type: Journal Article. Date: April 1957

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-118	Tumor localization with radioisotopes

Abstract: From a presently undetermined date until 1957, researchers from the U.S. Naval Hospital, National Naval Medical Center in Bethesda, MD, conducted a review of the efficiency of radioisotopes in defining the extent of tumors in various areas of the body. The researchers reported on the advantages and disadvantages of several isotopes in the evaluation of various types of tumors. An example of a gallium scan done on a sixty-seven-year-old man with prostatic carcinoma with metastases to the bone was also presented in the review.

Documents: Authors: E. R. King, Capt., MC, USN; C. R. Henklemann, Lt., MC, USNR. Title: Tumor Localization with Radioisotopes. Journal: Southern Medical Journal, September 1957. Document Type: Journal Article. Date: September 1957

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1960	NNMC-087	Use of total-body radiation in the treatment of far-advanced malignancies

(For further information, see Chapter 2—“Total-Body and Partial-Body Irradiation Studies.”)

Documents: Author: Capt. E. Richard King, MC, USN. Title: Use of Total-Body Radiation in the Treatment of Far-Advanced Malignancies. Journal: The Journal of the American Medical Association, vol. 177, no. 9. Document Type: Journal Article. Date: 2 September 1961

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1960	NNMC-088	Taurine excretion in humans treated by total-body radiation

(For further information, see Chapter 2—“Total-Body and Partial-Body Irradiation Studies.”)

Documents: Authors: Lt. Ralph R. Cavalieri, MC, USNR; Milton Van Metre, Lt., MSC, USN; Capt. R. W. Chambers, Jr., MSC, USN; Capt. E. Richard King, MC, USN. Title: Taurine Excretion in Humans Treated by Total-Body Radiation. Journal: Journal of Nuclear Medicine, vol. 1. Document Type: Journal Article. Date: 1960

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1960	NNMC-089	Hyaline membrane following total-body radiation: relation to lung plasminogen activator

(For further information, see Chapter 2—“Total-Body and Partial-Body Irradiation Studies.”)

Documents: Authors: W. H. Fleming; J. E. Szakacs; T. C. Hartney; E. R. King. Title: Hyaline Membrane Following Total Body Radiation. Relation to Lung Plasminogen Activator. Journal: The Lancet, vol. 2, issue 5. Document Type: Journal Article. Date: 5 November 1960

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1962	NNMC-109	Tuberculin conversion

Abstract: From 1962 until a presently undetermined date, researchers from the National Naval Medical Center in Bethesda, MD, surveyed immune responses to tuberculin in shipboard Navy personnel after a suspected case of active tuberculosis was reported in a fellow crew member. The tuberculin response of nearly 1,000 men on board the USS Long Beach, berthed in Philadelphia, PA, was followed for one year. Mantoux tuberculin tests were done on the entire crew following the diagnosis of the one active case. All negative reactions were retested a second time, with further retesting at one-and-one-half, three, six, and twelve month intervals. Standard chest x-rays were obtained for all tuberculin-positive personnel and were repeated with each succeeding study. The incidence of tuberculin seroconversion was found to be high even though no active tuberculosis was detected. Most of the men manifesting seroconversion had tuberculin reactions that were weak and highly variable. Researchers concluded that cross-reactions from nontuberculous organisms must be considered when evaluating tuberculin test results obtained in the investigation of tuberculosis. The findings of the study were published in 1967.

Documents: Author: Lt. Cmdr. Charles W. Och, MC, USN. Title: Tuberculin Conversion. Journal: The Journal of the American Medical Association, vol. 200, no. 12. Document Type: Journal Article. Date: 19 June 1967

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	NNMC-134	Aortic insufficiency and pelvospondylitis in a seropositive female with rheumatoid nodules

Abstract: From 1964 to 1970, researchers at the Naval Hospital in Bethesda, MD, the Naval Hospital in Portsmouth, VA, and the Medical College of Virginia School of Medicine presented a case report on one forty-five-year-old woman with seropositive, nodular rheumatoid arthritis who had pelvospondylitis and symptomatic aortic insufficiency. X-ray changes of the pelvospondylitis suggested ankylosing spondylitis.

Documents: Authors: Wood. G. Van Valkenburgh et al. Title: Aortic Insufficiency and Pelvospondylitis in a Seropositive Female with Rheumatoid Nodules. Journal: Arthritis and Rheumatism, vol 15, no. 5, issue September-October 1972. Document Type: Journal Article. Date: September-October 1972

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	NNMC-116	Air cholangiogram as unusual sequela to thoracocentesis

Abstract: In 1969, researchers at the National Naval Medical Center in Bethesda, MD, presented a case report on one thirty-three-year-old man treated for pneumonia at an unidentified hospital. A massive right pleural effusion developed despite therapy, and thoracocentesis was attempted. To define the level of the diaphragm and guide reinsertion of the thoracocentesis needle, twenty milliliters of air was injected. During the procedure, air was inadvertently introduced beneath the diaphragm and into the liver capsule. X-rays taken following the procedure showed a subdiaphragmatic collection of air; the following day, x-rays showed the development of air

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

within the gall bladder and bile ducts (air cholangiogram). X-rays taken on the third day after the procedure showed no air. The patient was then transferred to the Naval Hospital, Bethesda, where a large quantity of purulent material was removed by multiple thoracocentesis. With continued antibiotic therapy, the patient recovered and was discharged.

Documents: Authors: Lt. Cmdr. Elliot Perlin, MC, USN et al. Title: The Air Cholangiogram as an Unusual Sequela to Thoracocentesis. Journal: The Journal of the American Medical Association, vol. 210, no. 12. Date: 22 December 1969

Title: Medline Express: The Air Cholangiogram as an Unusual Sequela to Thoracocentesis. Document Type: Search Printout. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NNMC-097	Enhanced blood coagulation and fibrolysis in a patient with amyloidosis

(For abstract and documentation, see Armed Forces Radiobiology Research Institute, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-008	Use of radioisotopes in diagnostic hematologic procedures, Fe-59 erythrokinetic studies

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-009	Use of radioisotopes in diagnostic hemotologic procedures, simultaneous Cr-51 and Fe-59 studies

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-012	Pancreatic exocrine function: a simplified test using radioactive fat excretion

Abstract: From a presently undetermined date until 1957, researchers at the Naval Hospital in Bethesda, MD, conducted this study. The purpose of the investigation was to develop a nuclear medicine test to evaluate pancreatic function. The twenty-one male and female patients who participated in the study ranged in age from eleven to seventy years old. Pancreatic digestion was determined through the use of the radioiodinated fat, triolein-iodine-131 (triolein-I-131). Adult patients were given twenty-five microcuries of radioactive fat (child: five microcuries). The products of the fat digestion, which still retain the I-131, are normally absorbed by the intestinal

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

walls. Failure to readily absorb the tagged fat was detected by I-131 in stool specimens and was indicative of pancreatic exocrine malfunction. Patients drank a suspension of charcoal and Lugol's solution to indicate intestinal passage and reduce uptake of I-131 by the thyroid and then ingested the triolein-I-131 in a carrier of peanut oil-emulsifying agent-water. Elevated excretion of the product was observed in patients with chronic pancreatitis, malabsorption syndromes, and subtotal gastrectomies.

Documents: Authors: Richard P. Spencer, Lt., MC, USNR; Thomas G. Mitchell, Lt., MSC, USN. Title: Pancreatic Exocrine Function: A Simplified Test Using Radioactive Fat Excretion. Journal: American Journal of Digestive Disease, vol. 2, issue 12. Document Type: Journal Article. December 1957

Start Date Number Title

Unknown NNMC-014 Late follow-up studies after internal deposition of radioactive material

Abstract: From a presently undetermined date until 1956, researchers at the National Naval Medical Center in Bethesda, MD conducted a pilot study of the long-term effects of thorotrast, a radioactive contrast medium and a colloidal suspension of thorium dioxide. Thirty-five patients participated in this follow-up study thirty-five years after exposure. Participants did not receive new exposures to thorium or radium during the course of this retrospective study; however, they did receive x-rays as a part of this study. The researchers found that thorium was deposited in the reticuloendothelial system and remained throughout the life of the patient. The major sites of deposition were the liver, spleen and bone marrow. Increased density of the liver and spleen were usually found on roentgenographic examination. Induration and contraction may have been present at the sites of injection in the neck and arms. A small number of primary hepatic tumors, leukemias, and hematological disorders were found. These results led the researchers to call for further studies of large numbers of patients in order to determine if the number of the disorders was significant when compared to suitable control groups.

Documents: Authors: William B. Looney; Martin Colodzin. Title: Late follow-up studies after internal deposition of radioactive materials: Journal: Journal of the American Medical Association, vol. 160, issue 1. Document Type: Journal Article. Document Date: 07 January 1956

Start Date Number Title

Unknown NNMC-015 Excretion of thorium and thorium daughters after Thorotrast administration

Abstract: From a presently undetermined date until 1956, researchers at the National Naval Medical Center in Bethesda, MD, investigated the excretion of thorium and thorium decay products after Thorotrast administration. Conclusions were based on whole-body studies in two patients and additional analysis of individual organ uptake. Based on these analyses and further calculations, results suggested ways that this information could benefit use of and knowledge relating to Thorotrast dosimetry. This study helped identify those tissues that, because of high thorium content, should be regarded as particularly vulnerable and furnished a basis for calculation of the average dose rate to vulnerable organs. Further guidance was provided for calculations of integral dose, taking into account thorium excretion and tissue redistribution.

Documents: Title: Excretion of Thorium and Thorium Daughters After Thorotrast Administration. Document Type: Event Profile. Date: 1994

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-020	Whole body retention of orally administered calcium-47
---------	----------	--

Abstract: From a presently undetermined date until 1972, researchers from the National Naval Medical Center in Bethesda, MD, developed a method for measuring calcium retained after oral ingestion. One-hundred-two patients participated. Calcium-47 retention was measured by whole-body counting and analysis of turnover rates in plasma. Comparison of calcium retention measurements helped distinguish hyperparathyroidism, sarcoidosis, and excessive calcium excretion in urine. The test was reproducible, required small doses of tracer, and was suitable for outpatient work.

Documents: Authors: J. Sode et al. Title: Whole Body Retention of Orally Administered Calcium-47. Journal: U. S. Navy Medicine, vol. 59. Document Type: Abstract. Date: June 1972

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-021	Total body potassium (K) as a reference standard for normality of red blood cell mass
---------	----------	---

Abstract: From a presently undetermined date until 1962, researchers from the National Naval Medical Center in Bethesda, MD, investigated a more accurate method of determining red cell mass (RCM). This study correlated total-body (naturally occurring) potassium-42 to RCM determined by chromium-51 labeling. Researchers compared measurements of total-body potassium (TBK) to weight as an indicator of RCM. Seventeen individuals participated. Findings indicated that TBK was a better reference standard for normality of RCM than body weight.

Documents: Authors: J. Sode et al. Title: Total Body Potassium (K) as a Reference Standard for Normality of Red Blood Cell Mass. Journal: U. S. Navy Medicine. Document Type: Abstract. Date: 1962

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-085	Studies of radiogallium as a diagnostic agent in bone tumors
---------	----------	--

Abstract: From a presently undetermined date until 1951, researchers at the National Naval Medical Center in Bethesda, MD, used gallium-72 (radiogallium, Ga-72) to identify lesions in bone. Beyond development of methods for detecting localized Ga-72 in the body, this study also quantified Ga-72 localization in cancerous bone lesions in eighteen patients. Geiger counting techniques were applied to the skin surface to detect accumulations of radiogallium. Intravenous tracer doses of Ga-72 were selectively concentrated within osteogenic and osteolytic bone lesions in fifteen of eighteen cases of primary and secondary bone malignancies. Early metastases to bone were identified with tracer Ga-72 before changes could be detected by x-ray films. Concentration of tracer amounts of Ga-72 in malignancies involving bone was nearly 20 times that found in adjacent bone.

Documents: Authors: Comdr. W. C. Mulry, MC, USN; Comdr. H. C. Dudley, MSC, USN. Title: Studies of Radiogallium as a Diagnostic Agent in Bone Tumors. Journal: Journal of Laboratory & Clinical Medicine, vol. 37, issue 2. Document Type: Journal Article. Date: February 1951

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-086	Thyroid parameters during triiodothyronine

Abstract: From a presently undetermined date until 1957, researchers at the National Naval Medical Center in Bethesda, MD, examined iodine uptake in normal and hyperthyroid individuals before and after triiodothyronine administration. Studies were conducted on twenty-four-hour iodine-131 (I-131) uptake, serum radioiodine conversion ratio, saliva protein-bound iodine (PBI-131), and chemical PBI. Twenty-six clinically euthyroid and hyperthyroid patients participated. One hundred microcuries of I-131 were given orally in distilled water to the fasting patients. Thyroid I-131 uptake was determined twenty-four hours later, and blood and saliva samples were collected for analysis. Patients then took twenty-five micrograms of triiodothyronine three times a day for eight days. Before the second set of studies was conducted, background readings from the thyroid, blood, and saliva were obtained to correct for residual radioactivity from the first tests. A second 100-microcurie dose of I-131 was then administered, and the tests were repeated. Results showed that diagnosis of hyperthyroidism based solely on twenty-four-hour I-131 uptake is insufficient in some non-thyrotoxic patients, and the serum radioiodine conversion ratio clearly delineated hyperthyroidism. No correlation was found between pre- and post-suppression values in chemical PBI. With patients of sufficient diagnostic difficulty to warrant a triiodothyronine study, additional tests should be given for conversion ratio and saliva PBI as well as twenty-four-hour I-131 uptake.

Documents: Title: Thyroid Parameters During Triiodothyronine. Document Type: Event profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-090	Photoscanning of bone lesions utilizing strontium-85

Abstract: From a presently undetermined date until 1961, researchers from the National Naval Medical Center in Bethesda, MD, evaluated the feasibility of detecting fractures, metastatic cancer, eosinophilic granulomas, chondromas, osteomyelitis, and Paget's disease by photoscanning selected skeletal areas using strontium-85 (Sr-85). This study was the first published report of an actual bone scan. Two hospitalized patients participated. Between twenty and sixty microcuries of Sr-85 were given intravenously. Twenty-four hours after administering the isotope, scanning was conducted with a Picker magnascanner. This delay allowed for localization of the isotope. Results showed that photoscanning of bone lesions was practical, desirable, and informative. Sr-85 localization appeared to occur only in areas of increased osteoblastic activity and was thereby considered an excellent means of evaluating bone repair.

Documents: Authors: Lt. Comdr. William H. Fleming, MC, USNR et al. Title: Photoscanning of Bone Lesions Utilizing Strontium-85. Journal: Radiology, vol. 77. Document Type: Journal Article. Date: October 1961

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-091	Therapeutic trials of radiogallium (Ga-72)

Abstract: From a presently undetermined date until 1952, researchers from the National Naval Medical Center and the Naval Medical Research Institute in Bethesda, MD, evaluated cancer using gallium-72

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

(radiogallium, Ga-72), which localizes in bone lesions. Four adult cancer patients participated. One milliliter of radiogallium citrate solution was administered intravenously by a gravity-flow arrangement. Urine was collected at twenty-four-hour intervals for ninety-six hours after injection, and the retention of Ga-72 was estimated by radioassay performed on the urine specimens. Results of the study showed that stable-gallium toxicity limits the amount of radiogallium that can be administered. Consequently, Ga-72 was not considered to be an effective therapeutic agent.

Documents: Authors: Comdr. E. R. King, MC, USN; Lt. L. W. Brady, MC, USN; Comdr. H. C. Dudley, MC, USN. Title: Therapeutic Trials of Radiogallium (Ga-72). Journal: American Medical Association Archives of Internal Medicine, vol. 90. Document Type: Journal Article. Date: December 1952

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-092	Tc-99m-EHDP bone scanning in breast cancer

Abstract: The inclusive dates for this study conducted at the National Naval Medical Center in Bethesda, MD, are presently undetermined. Researchers evaluated preoperative and postoperative bone scans performed with technetium-99m (Tc-99m) compounds in the management of breast cancer. One hundred fifteen female patients with biopsy proven carcinoma had preoperative bone scans. Whole-body dual-probe rectilinear scans taken three to five hours after a fifteen millicurie administration of Tc-99m-polyphosphate or Tc-99m-EHDP were supplemented as needed with gamma camera images. The low incidence (5 percent) of positive preoperative bone scans in the series may have been related to early diagnosis, as 109 of the 115 patients were operative stage I or II. The high incidence of negative to positive conversions postoperatively (23 percent) indicated the value of serial postoperative scanning and underscored the importance of a preoperative baseline scan. The incidence of bone metastases was much higher in post-menopausal patients with breast carcinoma, both pre- and post-operatively.

Documents: Authors: Frederic H. Gerber; James J. Goodreau; Peter T. Kirchner. Title: Tc-99m-EHDP Bone Scanning in Breast Carcinoma. Journal: Journal of Nuclear Medicine, vol. 16, no. 6. Document Type: Journal Article. Date: Unknown

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-093	Diagnosis of obstructive uropathy with serial Anger camera images

Abstract: The inclusive dates for this study conducted at the National Naval Medical Center in Bethesda, MD, are presently undetermined. Researchers employed rapid sequence imaging of the urinary tract with the Anger camera after intravenous injection of chelated radionuclides (ytterbium-169-DTPA, indium-131m-DTPA, technetium-99m-DTPA) to diagnose urinary tract obstructions. Thirty patients participated. Final diagnoses were based on a combination of clinical follow-up, excretory urograms, retrograde pyelograms, and operative or autopsy findings. In twenty-six of thirty patients, the rapid sequence of radionuclide images correctly predicted the presence of ureteropelvic or ureteral obstruction or caliectasis in the absence of obstruction and often allowed determination of kidney size.

Documents: Authors: P. T. Kirchner et al. Title: Diagnosis of Obstructive Uropathy with Serial Anger Camera Images. Journal: Journal of Nuclear Medicine, vol. 12, issue 6. Document Type: Journal Article. Date: Unknown

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-094	Kinetics of chelated radiopharmaceuticals in cisternography
---------	----------	---

Abstract: The inclusive dates for this study conducted at the National Naval Medical Center in Bethesda, MD, are presently undetermined. As chelated tracers (CTs) are commonly used in cisternography, the rate and site of absorption of tracer from cerebrospinal fluid (CSF) and biological half-life are important data for both diagnostic and dosimetric purposes. Researchers studied tracer kinetics in a presently undetermined number of patients undergoing cisternographic studies with ytterbium-169-DTPA. Serial whole-body counting, serial blood samples, and serial quantification of spinal and head activity over a forty-eight to seventy-two-hour period were performed. Researchers determined that CTs may be absorbed from the CSF into the blood, not only in the parasagittal areas but also at lower levels in the lumbothoracic area. The amount of CT that reaches the basal cistern, ventricles, and parasagittal areas depends in part on the rate of absorption at lower levels. Researchers attributed variable lumbar absorption rates in different patients to possible leakage of CSF from the subarachnoid space to extracellular fluid at the injection site.

Documents: Authors: Peter T. Kirchner; K. McKusick; H. N. Wagner, Jr. Title: Kinetics of Chelated Radiopharmaceuticals in Cisternography. Journal: Journal of Nuclear Medicine, vol. 13, issue 6. Document Type: Journal Article. Date: Unknown

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-106	Circulating white blood cell volume in leukemia
---------	----------	---

Abstract: From a presently undetermined date until 1958, researchers from the Naval Hospital in Bethesda, MD, investigated the development of a method to adequately indicate the status of an anemia. Researchers evaluated two techniques for determining white blood cell (WBC) volume. Two male patients, one with chronic lymphatic leukemia and one with chronic granulocytic anemia, participated. The patient with leukemia was treated with irradiation of the spleen, and both were given therapeutic doses of radiophosphorous. The first method involved determining WBC volume by tagging red blood cells (RBCs) with fifty microcuries of radiochromium (Cr-51) and calculating the difference between total volume and red cell plus plasma volume. Whole blood was mixed with Cr-51, and the patients' own RBCs were separated out and reinjected. Twenty minutes after reinjection, venous blood was drawn for hematocrit determination and scintillation counting. A second technique, specifically labeling the WBCs, was found to have serious limitations and was therefore not used. Researchers found that WBC volume generally paralleled the peripheral white cell count but that discrepancies between the two deserved further study.

Documents: Authors: Richard P. Spencer, Lt., MC, USNR et al. Title: Circulating White Blood Cell Volume in Leukemia. Journal: U.S. Armed Forces Medical Journal, vol. IX, no. 2. Document Type: Journal Article. Date: February 1958

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-108	Serum iron binding in the presence of cryoglobulin
---------	----------	--

Abstract: The inclusive dates for this study conducted at the National Naval Medical Center in Bethesda, MD, are presently undetermined. Investigators examined whether the immunoglobulin, cryoglobulin, would bind iron or interfere with normal iron handling. A case report was presented from one twenty-five-year-old female patient with Hodgkin's disease. Forty microcuries of iron-59 (Fe-59) were administered intravenously. Two hours after injection, blood was drawn and cryoglobulin isolated. Three minute counts with a scintillation counter were performed. Researchers determined plasma iron binding to be specific, as Fe-59 added to the blood was not bound by cryoglobulin, and no increased Fe-59 counts could be demonstrated in the gamma-globulin fraction of the patient's blood proteins. The study was published in 1957.

Documents: Authors: Richard P. Spencer; Donald R. Davis. Title: Serum Iron Binding in the Presence of a Cryoglobulin. Journal: Clinica Chemica Acta, vol. 2, issue 1957. Document Type: Journal Article. Date: 1957

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-115	Radioisotopic monitoring of intrathecal methotrexate (MTX)
---------	----------	--

Abstract: The inclusive dates for this study conducted at the National Naval Medical Center in Bethesda, MD, are presently undetermined. Intrathecal administration of methotrexate (MTX) in the therapy of leukemia was investigated. The technique estimated the amount of MTX reaching the intracranial cerebrospinal fluid (CSF) space by monitoring the movement of a radioactive tracer routinely used in cisternography, indium-111-chelate (In-111), injected with MTX. Six children and three adults with leukemia or lymphoma received a total of thirty-six injections of MTX-In-111 mixture via lumbar puncture followed by serial gamma camera images of the spine and head. Lumbar intrathecal injection was found to be highly unreliable for intracranial delivery of MTX and possibly other drugs. The radioisotopic monitoring allowed for a quantitative assessment of drug movement following lumbar CSF injection. The study was published in 1972.

Documents: Subject: Radioisotopic Monitoring of Intrathcal Methotrexate (MTX) Therapy. Document Type: Abstract. Date: 1972 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-125	Total body retention of orally administered 47-calcium in primary hyperparathyroidism
---------	----------	---

(For abstract and documentation, see National Institutes of Health, Bethesda, MD.)

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-136	Radioisotopic localization of the placenta with indium (In-113m)
---------	----------	--

Abstract: The inclusive dates for this study proposed by researchers from the National Naval Medical Center, Bethesda, MD, are presently undetermined. The purpose of the study was to localize placenta using indium-113m (In-113m) to aid in the management of cases of antepartum bleeding. One millicurie of In-113m was to be mixed with the threshold volume of patients' plasma and be reinjected into the patient. After ten minutes, a photoscan of the abdomen was to be taken. Researchers felt that In-113m had an advantage over other radioisotopes in this procedure because of its rapid decay, shorter half-life, and higher photon output, yet a reduced amount of absorbed radiation from an initially small dose injected. To date, no information is available on the number of study participants.

Documents: Authors: Comdr. R. C. Cefalo et al. Title: Radioisotopic Localization of the Placenta with Indium (In-113m). Document Type: Proposal. Date: 1964–68 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-139	Autoradiographic and histopathological studies of thorium dioxide patients
---------	----------	--

Abstract: From a presently undetermined date until 1955, researchers from the Naval Hospital in Bethesda, MD, the University of Utah, and the University of Copenhagen in Denmark studied biopsy material from two patients who had died ten and nineteen years after diagnostic thorium dioxide (thorotrast) administration. Materials were studied histopathologically, autoradiographically, and radiochemically. Researchers hoped to learn of the late effects of thorium dioxide in order to protect personnel who may be exposed to thorium.

Documents: Author: Lt. William B. Looney, MC, USNR. Title: The Initial Medical and Industrial Use of Radioactive Materials (1915–1940). Journal: Unknown. Document Type: Journal Article. Date: November 1954

Authors: Lt. W. B. Looney, MC, USNR; J. S. Arnold; H. Levi; W. S. Jee. Title: Autoradiographic and Histopathological Studies of Thorium Dioxide Patients. Journal: A.M.A. Archives of Pathology, vol. 60. Document Type: Journal Article. Date: 1955

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-143	Investigation of late clinical findings following Thorotrast (thorium dioxide) administration
---------	----------	---

Abstract: From a presently undetermined date until 1960, researchers at the Naval Hospital in Bethesda, MD, investigated long-term effects following Thorotrast (thorium dioxide) administration. Thorotrast patients were an important source of clinical material for evaluation of the effects of continuous low level irradiation. In view of its potential use as breeder material in nuclear reactors, information was needed regarding radiobiologic aspects of thorium. Information about radium isotopes of the thorium decay series was needed because of their presence in the

NAVY 1944–1974 (CONTINUED)

National Naval Medical Center, Bethesda MD (continued)

skeletons of luminous-dial workers. Biological information about any member of the actinide series improved the understanding of the whole group (e.g., plutonium, uranium). Thorium patients constituted a source of clinical data in the evaluation of maximum permissible levels of body burden for radioelements currently used. A total of thirty-five patients participated. The results indicated there were relatively few deleterious effects directly attributable to Thorotrast in these patients. The occurrence of one, and presumably two, rare hepatic tumors of mesodermal origin in this series of patients indicated that a relationship existed between Thorotrast administration and hepatic tumor induction. These hepatic tumors emerged as the predominant tumors in Thorotrast patients. A better understanding of chemical and radiation carcinogenesis would answer whether tumor induction in Thorotrast patients was the result of the presence of thorium, a result of radiation from the thorium decay series, or a combination of both. Because Thorotrast was widely used in the United States, coordinated follow-up studies nationwide were recommended.

Documents: Title: Investigation of Late Clinical Findings Following Thorotrast (Thorium Dioxide) Administration. Document Type: Event Profile. Date: 1994

National Tsing Hua University, Hsinchu, Taiwan

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NMRU2-09	Cesium-137 turnover rates in human subjects of different ages

Abstract: In 1972, researchers at the Naval Medical Research Unit Number 2 stationed in Taipei, Taiwan, and the National Tsing Hua University in Hsinchu, Taiwan, studied cesium-137 (Cs-137) turnover rates in humans. A family of five participated in the study. The members of the family were a forty-year-old male, a thirty-nine year old female, and three male children, twelve, ten, and six years old. The family had lived in a home where radioactive contamination was detected. A one gram cesium chloride source, purchased from Oak Ridge National Laboratory and dispensed by a medical doctor, had been stored in a lead-shielded container in a corner of the family's kitchen for more than ten years. During that time, the house was flooded twice by water. As a result, the container corroded and leaked, allowing contamination to spread throughout the house and surrounding grounds. After the source was discovered, it was removed and the area decontaminated. Initial Cs-137 body burdens in family members were estimated by whole-body counting. Arrangements were then made to follow the turnover rates of Cs-137 in the family members by periodically estimating their Cs-137 body burden from twenty-four hour Cs-137 urinary excretion and whole-body counting. Data indicated a correlation between the rate of biological turnover and age of the participant.

Documents: Title: Cesium-137 Turnover Rates in Human Subjects of Different Ages. Document Type: Search Printout. Date: 1994 est.

Authors: P. S. Weng; W. M. Beckner. Title: Cesium-137 Turnover Rates in Human Subjects of Different Ages. Journal: Health Physics, vol. 25, no. 6. Document Type: Journal Article. Date: December 1973

NAVY 1944–1974 (CONTINUED)

National Tsing Hua University, Hsinchu, Taiwan (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU2-03	Muscle copper, zinc, and manganese levels in Wilson's disease: studies with use of neutron activation analysis

Abstract: From a presently undetermined date until 1970, researchers at the Naval Medical Research Unit 2 stationed in Taipei, Taiwan, with investigators at the National Tsing Hua University in Hsinchu, Taiwan, studied trace metals in muscle biopsies. This study determined muscle copper, zinc, and manganese concentrations using neutron-activation analysis to evaluate muscle biopsy as a diagnostic procedure, and analyzed tissue stores of copper in Wilson's disease patients. Fourteen patients with Wilson's disease, ten of their parents and siblings, and twelve healthy individuals participated. Of the fourteen patients with Wilson's disease, seven were females aged eleven to twenty-nine and seven were males aged fifteen to twenty-five. None of the participants was exposed to radiation. It was an in vitro study where tissue samples were removed from the participants and evaluated in laboratory tests. Although patients with Wilson's disease had a significant increase in mean muscle copper concentration when compared with that of controls, there was too much overlap for this to be a useful diagnostic test. Ten of the fourteen patients with Wilson's disease were estimated to have an increased amount of copper in their muscle tissues. This amount of copper was small when compared with the excess copper in the liver and central nervous system of patients with Wilson's disease and suggested that the muscle was only a secondary site for deposition of copper. Muscle copper concentration did not correlate with age, sex, or the length of time patients had received penicillamine therapy or with their clinical status.

Documents: Authors: M. L. Leu et al. Title: Muscle Copper, Zinc and Manganese Levels in Wilson's Disease: Studies with the Use of Neutron Activation Analysis. Journal: Journal of Laboratory & Clinical Medicine, vol. 76, no. 3. Document Type: Journal Article. Date: September 1970

Title: Muscle Copper, Zinc, and Manganese Levels in Wilson's Disease: Studies with the Use of Neutron Activation Analysis. Document Type: Search Printout. Date: 1994 est.

Naval Blood Research Laboratory, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	NHCHEL-001	Blood volume studies (Cr-51 and I-125)

(For abstract and documentation, see Boston University School of Medicine, Boston, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	NHCHEL-002	Red blood cell survival studies (Cr-51 and I-125)

(For abstract and documentation, see Boston University School of Medicine, Boston, MA.)

NAVY 1944–1974 (CONTINUED)

Naval Blood Research Laboratory, Boston, MA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1964	NHCHEL-003	Platelet survival studies (Cr-51 and I-125)
------	------------	---

(For abstract and documentation, see Boston University School of Medicine, Boston, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1964	NHCHEL-004	Blood volume studies (Cr-51 and I-125)
------	------------	--

(For abstract and documentation, see Boston University School of Medicine, Boston, MA.)

Naval Blood Research Laboratory, Chelsea, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1964	NHCHEL-001	Blood volume studies (Cr-51 and I-125)
------	------------	--

(For abstract and documentation, see Boston University School of Medicine, Boston, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1964	NHCHEL-002	Red blood cell survival studies (Cr-51 and I-125)
------	------------	---

(For abstract and documentation, see Boston University School of Medicine, Boston, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1964	NHCHEL-003	Platelet survival studies (Cr-51 and I-125)
------	------------	---

(For abstract and documentation, see Boston University School of Medicine, Boston, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1964	NHCHEL-004	Blood volume studies (Cr-51 and I-125)
------	------------	--

(For abstract and documentation, see Boston University School of Medicine, Boston, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1973	NHCHEL-010	Correctional compression osteotomy of distal tibia
------	------------	--

Abstract: In 1973, researchers from the Naval Hospital in Chelsea, MA, tested new methods for correcting improperly aligned, healed fractures of the tibia. The method was used on well-healed but

NAVY 1944–1974 (CONTINUED)

Naval Blood Research Laboratory, Chelsea, MA (continued)

malunited fractures with significant deformity and pain in the ankles or feet. Three patients participated, and corrective osteotomies were successful. Radiation exposures are not available at this time.

Documents: Author: Navy. Title: Abstract of Progress: Correctional Compression Osteotomy. Document Type: Abstract. Date: 1973 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NHCHEL-012	Effects of position on results of gastric analysis
---------	------------	--

Abstract: The inclusive dates for this study conducted at the Naval Hospital in Chelsea, MA, are presently undetermined. The purpose of the study was to evaluate gastric acidity in patients under rigid controls, by the method of Kay, in several body positions with the fluoroscopic placement of the collection in the same patient. Then the study was repeated without regard for placement and positions. Twenty patients participated. To date, the results of the study are undetermined.

Documents: Author: Navy. Title: Abstract of Progress: Effect of Position on Results of Gastric Analysis. Document Type: Abstract. Date: 1973 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	ONR-16	Analysis of erythrocyte survival curves obtained simultaneously by Cr-51 and automated differential agglutination technic (sic)
---------	--------	---

(For abstract and documentation see Boston University School of Medicine, Boston, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NHCHEL-023	Effects of hyperbaric exposure on human platelets
---------	------------	---

Abstract: From a presently undetermined date until June 1974, researchers at the Naval Blood Research Laboratory in Chelsea, MA, studied the effects of hyperbaric exposure on human platelets. Six healthy, male divers ranging from twenty-two to forty-one years of age participated in the project. The purpose of the study was to investigate platelet survival and function and to determine whether the thrombocytopenia (an abnormal decrease in the number of platelets) occurred as a result of decreased platelet survival. Thrombocytopenia and changes in blood coagulation were reported in healthy individuals and animals subjected to hyperbaric exposure. Blood coagulation studies were also performed to determine whether exposure to compression-decompression produced intravascular coagulation. The data suggested a correlation between decreased platelet count and decreased platelet production.

Documents: Authors: C. R. Valeri et al. Title: Effects of Hyperbaric Exposure on Human Platelets. Journal: Aerospace Medicine, vol. 45, issue 6. Document Type: Journal Article. Date: June 1974

NAVY 1944–1974 (CONTINUED)

Naval Blood Research Laboratory, Chelsea, MA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-18	The relation between response to hypotonic stress and the Cr-51 recovery in vivo of preserved platelets

Abstract: From a presently undetermined date until 1974, researchers at the Naval Blood Research Laboratory in Chelsea, MA, examined platelet response to hypotonic stress. Platelet response to hypotonic stress was used to estimate the chromium-51 (Cr-51) recovery in vivo of liquid- and freeze-preserved platelets. This simple in vitro test was examined to see if it would prove helpful in determining and controlling the quality of preserved platelets. Twenty-six healthy male volunteers ranging in age from twenty to thirty-five years participated in the study. The results indicated that the response to hypotonic stress was not related to the Cr-51 T-1/2 value of the preserved platelets but was related to the number of irreversibly damaged platelets removed within two hours after transfusion.

Documents: Authors: C. R. Valeri; H. Feingold; L. D. Marghionni. Title: The Relation Between Response to Hypotonic Stress and the 51Cr Recovery in Vivo of Preserved Platelets. Journal: *Transfusion*, vol. 14, no. 4. Document Type: Journal Article. Date: July-August 1974

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-17	Lifespan of preserved red cells

(For abstract and documentation, see Boston University Medical Center, Boston, MA.)

Naval Hospital, Bethesda, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1950	NMRI-07	Study of radiogallium as a diagnostic agent in bone tumors

Abstract: From 1950 until 1951, researchers at the Naval Medical Research Institute and the Naval Hospital, both in Bethesda, MD, used gallium-72 (radiogallium, Ga-72) to identify bone lesions. Beyond development of methods for detecting localized Ga-72 in the body, this study also quantified Ga-72 localization in cancerous bone lesions in eighteen patients. Geiger counting techniques were applied to the skin surface to detect accumulations of radiogallium. Intravenous tracer doses of Ga-72 were selectively concentrated within osteogenic and osteolytic bone lesions in fifteen of eighteen cases of primary and secondary bone malignancies. Early metastases to bone were identified with tracer Ga-72 before changes could be detected by x-ray films. Concentration of tracer amounts of Ga-72 in malignancies involving bone was nearly twenty times that found in adjacent bone.

Documents: Authors: W. C. Mulry; H. C. Dudley. Title: Studies of Radiogallium as a Diagnostic Agent in Bone Tumors. Document Type: Report. Date: 1 March 1951

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Bethesda, MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1952	NNMC-144	Radium inhalation accident—radium excretion study

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1954	NNMC-138	Late clinical changes following the internal deposition of radioactive materials

Abstract: In 1954, researchers from the Naval Hospital in Bethesda, MD, conducted a retrospective study on the effects of internally deposited radioactive materials. Information on fifty radium medical patients, twenty-eight luminous dial workers, and 4,955 Thorotrast patients was reviewed. The results indicated that clinical information served as a guide for diagnosis, management, and treatment of patients who may ingest or receive harmful amounts of radioactive materials. Radiobiologic data obtained by new and refined techniques gave a better understanding of the manner in which changes were produced by internally deposited radioelements. This information established more accurate maximum permissible levels of body burden for radioelements in use.

Documents: Author: Lt. William B. Looney, MC, USNR. Title: The Initial Medical and Industrial Use of Radioactive Materials (1915–1940). Journal: Unknown. Document Type: Journal Article. Date: November 1954

Authors: W. B. Looney, M.D. Title: Late Clinical Changes Following the Internal Deposition of Radioactive Materials. Journal: Annals of Internal Medicine, vol. 42, pp. 378-387. Document Type: Journal Article. Date: 1954

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	NNMC-140	Late effects (25 to 40 years) of the early medical and industrial use of radioactive materials, part I

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	NNMC-141	Late effects (25 to 40 years) of the early medical and industrial use of radioactive materials, part II

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	NNMC-142	Late effects (25 to 40 years) of the early medical and industrial use of radioactive materials, part III

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Bethesda, MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1960	NNMC-087	Use of total-body radiation in the treatment of far-advanced malignancies

(For further information, see Chapter 2—“Total-Body and Partial-Body Irradiation Studies.”)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	NNMC-134	Aortic insufficiency and pelvospondylitis in a seropositive female with rheumatoid nodules

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRI-08	Urinary excretion of gallium

Abstract: From a presently undetermined date until 1951, researchers from the Naval Medical Research Institute and the Naval Hospital, both in Bethesda, MD, examined the urinary excretion rate of gallium in cancer patients. The influence of activity and route of administration on the urinary excretion of gallium was assessed in animal studies, and a chemical method of measuring gallium in urine was established. Fifty cancer patients with cancerous bone lesions who had received gallium-72 intravenously participated in this study. Results of this study are unavailable at this time.

Documents: Authors: J. I. Munn; H. C. Dudley. Title: Urinary Excretion of Gallium. Document Type: Report. Date: 17 December 1951

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRI-11	Body fluids in hypertension and mild heart failure

Abstract: From a presently undetermined date until 1955, researchers from the Naval Medical Research Institute and the Naval Hospital, both in Bethesda, MD, investigated a more reliable and practical method for measuring extracellular fluid (ECF) in an effort to aid in the diagnosis and management of cardiac patients. ECF, estimated with the aid of 250 microcuries of radiosulfate (S-35), and blood volume (BV), estimated with the aid of fifteen microcuries of radiochromium (Cr-51)-labeled erythrocytes, were determined simultaneously using a single blood sample. ECF and BV in twenty-four patients with congestive heart failure (no edema) and eleven patients with uncomplicated hypertension were compared to values in thirty normal subjects. In patients with heart failure, ECF averaged 22.5 percent as compared with 16.1 percent in normal subjects. In hypertensive patients, ECF was normal (16.2). BV did not differ significantly in the three groups.

Documents: Authors: M. Walker; B. J. Duffy; H. W. Griffith. Title: Body Fluids in Hypertension and Mild Heart Failure. Document Type: Report. Date: 13 September 1955

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Bethesda, MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRI-15	Beta radiation lesion of the skin

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-010	Blood volume studies in thoracic surgical patients using radioactive iodinated human serum albumin

Abstract: From a presently undetermined date until 1955, researchers from Naval Hospitals in Portsmouth, VA, St. Albans, NY, and Bethesda, MD, conducted this study. The purpose of the investigation was to describe blood volume changes in a group of patients who underwent excisional pulmonary surgery. Sixty-five patients participated. Radioactive iodinated human serum albumin (RIHSA) was used in all of the studies. Three blood volume determinations were done in each case; studies were carried out one or two days preoperatively, immediately after operation, and seven days postoperatively. Approximately twenty microcuries of RIHSA were used for each determination. Results indicated that traditional gravimetric estimations of blood loss during intrathoracic surgery resulted in under-transfusion with deficits averaging about forty percent of the total blood loss. Researchers attributed red-cell deficit at the end of the first postoperative week to inadequate replacement of blood lost during surgery.

Documents: Authors: Clifford F. Storey, Capt., MC, USN; Charles G. Foster, Lt., MC, USNR; Thomas Mitchell, Lt., Junior Grade, MSC, USN. Title: Blood Volume Studies in Thoracic Surgical Patients Using Radioactive Iodinated Human Serum Albumin. Journal: Journal of Thoracic Surgery, vol. 30, issue 5. Document Type: Journal Article. Date: 1955

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-095	Radiolabeled chelates for visualization of kidney function and structure with emphasis on their use in renal insufficiency

Abstract: From a presently undetermined date until 1974, researchers from the Naval Hospital, Bethesda, MD studied radiolabeled chelates for the evaluation of renal (kidney) structure and function. Twelve patients participated in the study. Stable chelates of indium-111, indium-113m, chromium-51, ytterbium-169, and technetium-99m proved to be useful radiopharmaceuticals for evaluating renal structure and function. These radioactive chelates also had a high degree of success in visualizing the kidneys in patients with severe renal insufficiency. Other applications of renal imaging studies with radio-chelates included the detection of unilateral renal disease and obstructive uropathy, the differentiation of cysts and tumors, and the evaluation of function after renal transplantation.

Documents: Authors: Richard C. Reba; Kattadiyil P. Poullose; Peter T. Kirchner. Title: Radiolabeled chelates for visualization of kidney function and structure with emphasis on their use in renal insufficiency. Journal: Seminars in Nuclear Medicine, vol. 4, issue 2. Document Type: Journal Article. Document Date: April 1974

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Bethesda, MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-119	Clinical diagnostic studies of gastrointestinal tract utilizing radioisotopes

Abstract: From a presently undetermined date until 1958, researchers at the Naval Hospital in Bethesda, MD, conducted clinical diagnostic studies of the gastrointestinal tract using radioisotopes. The purpose of the study was to describe four procedures using radioisotopes, which aid in evaluating gastrointestinal activity. Five case studies were also presented. The four procedures used in this study were the Schilling Test (0.5 microcurie of cobalt-60), the trioleinoleic acid tests (25.0 microcuries of iodine-131), iron absorption (25.0 microcuries of iron-59), and labeled red cell excretion (35.0 microcuries of chromium-51). The first three techniques quantified absorption from the gastrointestinal tract and strengthened the diagnosis of malabsorption syndrome, differentiating it from defects of enzymatic digestion. Labeled cell excretion detected gastrointestinal hemorrhage permitted the quantitation of chronic gastrointestinal blood loss.

Documents: Authors: Richard P. Spencer, Lt., MC, USNR et al. Title: Clinical Diagnostic Studies of the Gastrointestinal Tract Utilizing Radioisotopes. Journal: Southern Medical Journal. Document Type: Journal Article. Date: November 1958

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-139	Autoradiographic and histopathological studies of thorium dioxide patients

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-143	Investigation of late clinical findings following Thorotrast (thorium dioxide) administration

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

Naval Hospital, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHCHEL-012	Effects of position on results of gastric analysis

(For abstract and documentation, see Naval Blood Research Laboratory, Chelsea, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHCHEL-020	Gallium-67 scanning for staging of carcinoma of breast

Abstract: The inclusive dates for this study conducted from the Naval Hospital in Boston are presently undetermined. Researchers studied the concentration of exogenously administered gallium-67 in

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Boston, MA (continued)

malignant tissue compared to normal tissue. To date, no information is available on the number of study participants. Whole-body scans were performed with a gamma camera seventy-two hours after isotope administration to patients with suspected or proven breast cancer. The results of the pathologic examination of the surgical specimens were then correlated with the results of the scan. Areas of increased isotopic concentration outside the breast were investigated in hopes of identifying sites of metastatic disease. Selected tumors other than those of the breast were also studied. Although definitive results of the study are not available at this time, careful, long-term follow-up was planned to fully evaluate the true clinical usefulness of the gallium-67 scan.

Documents: Authors: E. M. Braun; T. J. Lapine; D. G. Taylor. Title: Neoplastic Disease. Gallium-67 Scans in the Staging of Carcinoma of the Breast. Journal: U. S. Navy Medicine, vol. 59. Document Type: Abstract. Date: June 1972

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NHCHEL-021	Gallium scans in the staging of malignant diseases
---------	------------	--

Abstract: The inclusive dates for this study, conducted from the Naval Hospital in Boston, MA, and the Naval Hospital in Chelsea, MA, are presently undetermined. Researchers evaluated gallium-67 imaging of malignant tissue. By 1972, fifty-six patients with breast cancer, lung cancer, or lymphoma had participated. Whole-body scans were done with a gamma camera seventy-two hours after isotope administration. Scan results were correlated with other clinical measurements to evaluate the usefulness of the scan in staging malignant disease. Scans were found to be useful as a staging procedure.

Documents: Authors: E. M. Braun; T. J. Lapine. Title: Neoplastic Disease. Gallium-67 Scans in the Staging of Malignant Diseases. Journal: U. S. Navy Medicine. Document Type: Abstract. Date: 1972

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-031	Investigation of the transfer of iodine and thyroid hormone across the placenta in early human gestation
---------	----------	--

Abstract: The inclusive dates for this study are presently undetermined. Researchers from the Naval Hospital in Boston, MA, proposed to investigate the transfer of iodine and thyroid hormones across the placenta in early gestation. Researchers projected the inclusion of ten to fifteen pregnant women whose gestations were between twelve and twenty weeks and who were planning to undergo therapeutic abortions. No abortions were to be delayed to bring the patient into the range of study. Diagnostic amounts of iodine-131 (I-131) or thyroid hormone labeled with I-131 were to be administered at varying intervals before surgery. Immediately before surgery, maternal blood was to be obtained and studied. In addition, through serial samples, the rate of disappearance of I-131 from the maternal blood was to be measured. Following the procedure, fetal products were also to be obtained and analyzed. Results of this study are not available at this time.

Documents: Author: S. Barchet. Title: The Investigation of the Transfer of Iodine and Thyroid Hormone Across the Placenta in Early Human Gestation. Document Type: Proposal. Date: 1973 est.

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Charleston, SC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHCHA-002	Double blind prospective study of aerosolized steroids in croup

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Naval Hospital, Chelsea, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NHCHEL-017	Evaluation of hypophosphatemia and blood volume changes induced by parenteral hyperalimentation

Abstract: From 1971 to 1973, researchers from the Naval Hospital in Chelsea, MA, determined the effects of intravenous administration of total nutrient requirements via a central venous catheter on blood volume and blood phosphate levels. Improvements in the parenteral solution permitted the replacement of organic phosphates and reduced the deleterious effects of phosphate depletion. Patients receiving alimentation for up to one year did not have significant changes in blood volume or inorganic phosphates. Neither the number of participants nor radiation environments were specified in available documents.

Documents: Author: Navy. Title: Abstract of Progress: The Evaluation of Hypophosphatemia and Blood Volume Changes Induced by Parenteral Hyperalimentation. Document Type: Abstract. Date: 1972 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHCHEL-005	Study of carbon monoxide production during anesthesia as method of determining red blood cell survival

Abstract: From 1972 to 1973, researchers from the Naval Hospital in Chelsea, MA, studied methods of evaluating the red blood cell mass and turnover in surgical patients. Carbon monoxide is a product of hemoglobin breakdown. Calculation of hemoglobin mass and turnover was measured by placing patients on a closed breathing circuit and measuring respiratory excretion of carbon monoxide. Twenty-one patients participated. Neither the radiation environments nor results of the study were specified in available documents.

Documents: Title: Abstract of Progress: A Study of Carbon Monoxide Production During Anesthesia as a Method of Determining Red Blood Cell Hemolysis and Red Blood Cell Survival. Document Type: Abstract. Date: 1973 est.

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Chelsea, MA (continued)

Start Date Number Title

1972 NHCHEL-008 Clinical effects of beta-blockade on thyrotoxicosis

Abstract: From 1972 to 1973, researchers from the Naval Hospital in Chelsea, MA, examined Inderal, a beta-adrenergic receptor antagonist, to control symptoms of thyrotoxicosis. Ten patients participated. Improvement of symptoms was noted in varying degrees after administration of Inderal. The radiation environment was not specified in available documents.

Documents: Title: Abstract of Progress: Clinical Effects of Beta-Blockade on Thyrotoxicosis. Document Type: Abstract. Date: 1973 est.

Start Date Number Title

1972 NHCHEL-011 Effects of estrogen therapy on parameters of thyroid function in post-menopausal patient

Abstract: From 1972 to 1973, researchers at the Naval Hospital in Chelsea, MA, examined the effects of post-menopausal estrogen replacement therapy on serum levels of thyroxine-binding globulin and thyroid function. The number of subjects is unknown. Neither the results of this study nor the radiation environments were specified in available documents.

Documents: Author: Navy. Title: Abstract of Progress: The Effect of Estrogen Therapy on Parameters of Thyroid Function In Post-Menopausal Women. Document Type: Abstract. Date: 1973 est.

Start Date Number Title

1972 NHCHEL-013 Clinical cancer research in association with Eastern Cooperative Oncology Group (ECOG)

Abstract: From 1972 until a presently undetermined date, researchers from the Naval Hospital in Chelsea, MA, participated in a large-scale clinical cancer research effort. Eighteen patients encompassing a wide range of malignant diseases were treated with drug regimens designed by the Eastern Cooperative Oncology Group. Pooled with information from other institutions, the therapeutic regimen was evaluated statistically. Neither radiation environments nor results of this study were specified in available documents.

Documents: Title: Abstract of Progress: Clinical Cancer Research. Document Type: Abstract. Date: 1973 est.

Start Date Number Title

1972 NHCHEL-014 Detection of occult, venous thrombosis by “impedence meter” and I-125 fibrinogen

Abstract: From 1972 to 1973, researchers from the Naval Hospital in Chelsea, MA, tested the Codman Impedance Phlebograph for detecting occult venous thromboses. Two hundred one patients were screened using the phlebograph, followed by standard venographic studies. Strong correlations were found, and anticoagulant treatment decisions were based on phlebograph

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Chelsea, MA (continued)

tracings alone. Iodine-125 labeled fibrinogen was used as a tracer in these studies. Radiation exposures are not available at this time.

Documents: Title: Abstract of Progress: Detection of Occult Venous Thrombosis by an Impedance Meter and I-125 Fibrinogen. Document Type: Abstract. Date: 1972 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHCHEL-015	Treatment of acute and chronic edema secondary to lymphatic or venous insufficiency

Abstract: From 1972 to 1973, researchers from the Naval Hospital in Chelsea, MA, tested the Jobst Intermittent Compression Unit in the treatment of acute and chronic edema. Fifty patients participated, and use of the apparatus noticeably diminished edema with good symptomatic relief. Radiation environments were not specified in available documents.

Documents: Title: Abstract of Progress: Treatment of Acute and Chronic Edema Secondary to Lymphatic or Venous Insufficiency. Document Type: Abstract. Date: 1972 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHCHEL-016	Nitroblue tetrazolium test, its use in (a) diagnosis of postoperative fever, (b) appendicitis

Abstract: From 1972 until a presently undetermined date, researchers at the Naval Hospital in Chelsea, MA, evaluated the nitroblue tetrazolium test (NBT) in the diagnosis of postoperative fever. Eighteen patients participated. NBT was found to be a sensitive index of bacterial infection, and good correlations were found between significant infection, toxic granulation, and positive NBT response. Radiation environments were not specified in available documents.

Documents: Author: Navy. Title: Abstract of Progress: Nitroblue Tetrazolium Test. Document Type: Abstract. Date: 1972 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NHCHEL-009	Evaluation of vectorcardiogram on early detection of increased right heart work in asthma in children

Abstract: From 1973 until a presently undetermined date, researchers from the Naval Hospital in Chelsea, MA, studied the effects of asthma on the heart. Screening methods for detecting increased load on the right side of the heart, which sends blood to the lungs for oxygenation, were evaluated. Vectorcardiograms (VCG) were used to record the electrical activity of the heart. Eleven patients participated in the study. After a complete physical examination and medical history evaluation, skin tests for seventy-two common allergens were given. Pulmonary function studies, sweat electrolyte determinations, and serological tests were completed before the VCGs were administered. Clinical findings were correlated with VCG studies to decide whether an increased load on the right side of the heart existed. All VCGs were normal. Radiation environments were not specified in available documents..

Documents: Author: Navy. Title: Abstract of Progress: Evaluation of the Vectorcardiogram in Early Detection of Increased Right Heart Work in Asthma in Children. Document Type: Abstract. Date: 1973 est.

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Chelsea, MA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHCHEL-007	Treatment of ankle fractures by anatomic reduction and internal fixation with early motion

Abstract: The inclusive dates for this study conducted by researchers from the Naval Hospital in Chelsea, MA, are presently undetermined. This study assessed rigid internal fixation and early motion in the treatment of fresh ankle fractures of various kinds. This procedure was expected to improve post-fracture range of motion, decrease post-traumatic arthritis, and provide an early return to normal capabilities. The number of study participants is unknown. Neither radiation environments nor results of the study were specified in available documents.

Documents: Title: Abstract of Progress: Treatment of Ankle Fractures [includes proposal]. Document Type: Abstract. Date: 1973 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHCHEL-012	Effects of position on results of gastric analysis

(For abstract and documentation, see Naval Blood Research Laboratory, Chelsea, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHCHEL-018	Evaluation of cast brace in treatment of femoral shaft fractures

Abstract: The inclusive dates for this study are presently undetermined. Researchers from the Naval Hospital in Chelsea, MA, proposed to improve casting methods for fractures of the femur. The researchers hoped that the cast-brace would permit walking throughout the healing period, decrease healing duration, eliminate infection and other health problems, and allow the patient to resume normal activities four to six weeks after injury. At least twelve patients participated. Radiation environments were not specified in available documents.

Documents: Author: Navy. Title: Clinical Investigation Study Proposal: Evaluation of the Cast Brace in the Treatment of Femoral Shaft Fractures. Document Type: Proposal. Date: 1972 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHCHEL-019	Heparin anticoagulation by continuous intravenous infusion

Abstract: The inclusive dates for this study conducted are presently undetermined. Researchers from the Naval Hospital in Chelsea, MA, proposed to determine the reliability of activated partial thromboplastin time (APTT) in monitoring anticoagulant effects. The researchers hoped when APTT was constantly maintained within defined limits through continuous intravenous (IV) infusion of anticoagulants, the incidence of complications would decrease. Ten patients were to be treated by subcutaneous and intermittent administration of heparin followed by serial APTTs. All patients without evidence of pulmonary embolisms were to be treated with an initial IV dose of heparin followed by a twenty-four-hour infusion. Patients with pulmonary embolisms were to be

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Chelsea, MA (continued)

treated with an initial dose of heparin only. The results of this study are not available at this time. Radiation environments were not specified in available documents.

Documents: Author: Navy. Title: Heparin Anticoagulation by Continuous Intravenous Infusion. Document Type: Proposal. Date: 1974 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NHCHEL-020	Gallium-67 scanning for staging of carcinoma of breast
---------	------------	--

(For abstract and documentation, see Naval Hospital, Boston, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NHCHEL-021	Gallium scans in the staging of malignant diseases
---------	------------	--

(For abstract and documentation, see Naval Hospital, Boston, MA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	ONR-17	Lifespan of preserved red cells
---------	--------	---------------------------------

(For abstract and documentation, see Boston University Medical Center, Boston, MA.)

Naval Hospital, Great Lakes, IL

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1970	NNMC-022	Evaluation of cervical spine injuries using cineroentgenography
------	----------	---

Abstract: From 1970 until 1974, researchers from the Naval Hospital in Great Lakes, IL, investigated routine motion studies for evaluation of painful or injured necks. Thirty-four patients participated. Twenty-seven were examined by cineroentgenography (x-ray series made into a motion picture), the rest by audiovisual fluoroscopy (videotaping fluoroscope images as they appeared on the screen). Mean radiation exposure rates using fluoroscopy were reduced by a factor of eleven, and the resulting images were of a greater quality. Additionally, patients were more comfortable and exams took less time to conduct.

Documents: Authors: C. W. Ochs; W. D. Carver; J. B. Oldershaw; D. W. Cloos. Title: Evaluation of Cervical Spine Injuries Using Cineroentgenography. Journal: U. S. Navy Medicine. Document Type: Journal Article. Date: 1972

Authors: C. W. Ochs; W. D. Carver; J. B. Oldershaw; D. W. Cloos. Title: Evaluation of Cervical Spine Injuries Using Cineroentgenography. Document Type: Abstract. Date: 1972

Authors: Capt. Charles W. Ochs, MC, USN; Comdr. John S. Romine, MC, USNR; Comdr. John B. Oldershaw, MC, USN; Lt. David W. Cloos, MC, USNR. Title: Radiographic Examination of the Cervical Spine in Motion. Journal: U. S. Navy Medicine, vol. 64. Document Type: Journal Article. Date: July 1974

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Great Lakes, IL (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHGL-001	Correlation of exercise tolerance testing and coronary angiography
Abstract:	From 1972 until a presently undetermined date, researchers from the Naval Hospital in Great Lakes, IL, investigated correlations between exercise (stress) testing and coronary angiography. To date, no information is available on the number of subjects. Anatomic abnormalities were correlated with EKG changes. Patients undergoing coronary arteriography were exposed to submaximal exercise tolerance testing using a bicycle ergometer to provide graded stress exposure. Results of this study are not available at this time.	
Documents:	Author: R. Landesman. Title: Correlation of Exercise Tolerance Testing and Coronary Angiography. Document Type: Abstract. Date: 1972	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHGL-002	Diagnostic accuracy of fiber optic duodenoscopy in upper gastrointestinal diseases
Abstract:	In 1972, researchers from the Naval Hospital in Great Lakes, IL, retrospectively reviewed the diagnostic accuracy of fiber optic duodenoscopy. Two hundred five patient histories were reviewed, and a total of two hundred twenty-five upper gastrointestinal endoscopy procedures were analyzed. The clinical usefulness of the procedure was determined by comparing the predominant endoscopic findings with radiological findings and subsequent clinical care. Clinical symptoms and response to therapy correlated well with endoscopic findings.	
Documents:	Author: J. O. Stauffer. Title: Evaluation of the Diagnostic Accuracy of Fiber Optic Duodenoscopy in Upper Gastrointestinal Diseases. Document Type: Report; Abstract. Date: 1972	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHGL-003	Bedside study of CVP [central venous pressure] and wedge pressure in acute myocardial infarction
Abstract:	From 1972 until a presently undetermined date, researchers from the Naval Hospital in Great Lakes, IL, investigated left and right heart filling pressure disparity in acute myocardial infarction. Additionally, wedge pressure (the blood pressure in a vein reflecting filling pressure to the ventricle) was correlated with the magnitude of the p-terminal force in patients with congestive failure and pulmonary edema. Neither results of this study nor radiation environments were specified in available documents.	
Documents:	Author: H. J. Palay. Title: Bedside Study of CVP and Wedge Pressure in Acute Myocardial Infarction. Document Type: Abstract. Date: 1972	

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Great Lakes, IL (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	NHGL-004	Evaluation of time-saving potential of persistence scope
------	----------	--

Abstract: From 1972 to 1973, researchers from the Naval Hospital in Great Lakes, IL, evaluated the use of a persistence scope, or storage oscilloscope, in positioning patients for nuclear medicine scans. To date, no information is available on the number of participants. Because the equipment stores individual signals and displays them as an integrated image, it simplified positioning of the patients. Researchers concluded that, while this equipment was not the most significant factor in reducing the patient positioning time, the use of the scope during the study built confidence in the technicians conducting the scans. The persistence scope was recommended for all hospitals with a Pho-Gamma camera.

Documents: Title: #NHGL-04: Evaluation of Time-Saving Potential of Persistence Scope. Document Type: Abstract. Date: 1972
 Author: C. P. Meyers. Title: Evaluation of Time-Saving Potential of Persistence Scope. Journal: U. S. Navy Medicine, vol. 61, issue 6. Date: June 1973.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	NHGL-005	To evaluate percutaneous cervical cordotomy in management of pain
------	----------	---

Abstract: From 1972 until a presently undetermined date, researchers from the Naval Hospital in Great Lakes, IL, evaluated interruption of the lateral spinothalamic tract at the level of the cervical spinal cord for relief of intractable pain using electrodes placed through the skin. Percutaneous electrode placement was guided radiographically. To date, no information is available on the number of subjects. Results of this study are not available at this time.

Documents: Author: J. B. Oldershow. Title: Percutaneous Cervical Cordotomy. Document Type: Abstract. Date: 1972

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	NHGL-070	Dynamic scintiphotography on the evaluation of renal disease
------	----------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	NHGL-071	Diagnosis of early arthritis by joint scintiphotography
------	----------	---

Abstract: In 1972, researchers from the Naval Hospital in Great Lakes, IL, evaluated technetium-99m (Tc-99m) pertechnetate scintiphotography for early diagnosis of arthritis. Twenty-one patients with

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Great Lakes, IL (continued)

arthralgia participated in this study. Ten patients undergoing brain imaging were studied as examples of normal scans. Scintiphography easily distinguished joints that were obviously clinically inflamed, and radioactivity was concentrated to a greater extent than with existing techniques. However, patients with arthralgia had normal scans, and the technique was not helpful as a diagnostic aid.

Documents: Authors: G. J. Weir; R. E. Easterday. Title: Diagnosis of Early Arthritis by Joint Scintiphography. Journal: U. S. Navy Medicine, vol. 61, issue 6. Document Type: Journal Article. Date: June 1973

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHGL-072	Radioisotopic determination of glomerular filtration rate (GFR) and effective renal plasma flow (ERPF)

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NNMC-023	Evaluation of available kits for radioimmunoassay

Abstract: From 1972 until a presently undetermined date, researchers from the Naval Hospital, Great Lakes, IL evaluated available kits for radioimmunoassay. Forty-six patients participated in this in vitro study. As kits became available, they were checked for accuracy, reproducibility, ease of performance and clinical usefulness. Accuracy and reproducibility of a direct measurement of free thyroxine was previously reported in detail. This test was routinely used in place of the combined resin uptake and total thyroxine measurements. It was not, however, proven as accurate as the total thyroxine measurement, nor as useful in difficult cases. Human growth hormone radioimmunassay was offered routinely. It proved necessary to make runs at least monthly to maintain technical familiarity. Angiotension I was assayed to assess renin activity. This test proved accurate and reproducible and was offered as a routine clinical test. Assay of immunoglobulin E was briefly evaluated. The test appeared satisfactory but clinical demand did not justify further exploration.

Documents: Authors: G. J. Weir, Jr.. Title: Evaluation of commercially available kits for radioimmunoassay. Document Type: Abstract. Document Date: 1972 est.

Title: Regarding radioimmunoassay and other in vitro isotopic techniques. Document Type: Protocol. Document Date: 1972 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NNMC-025	Evaluation of role of thyrotrophic hormone (TSH) in simple and multinodular goiter and thyroid carcinoma

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Great Lakes, IL (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	NNMC-026	Diagnosis of early arthritis by joint scintiphotography
------	----------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	NNMC-027	Diagnosis of urinary tract obstruction by scintiphotography
------	----------	---

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	NNMC-028	Dynamic scintiphotography in the evaluation of renal disease
------	----------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1974	NNMC-033	Effect of cholecystectomy on the constituents and size of the bile acid pool
------	----------	--

Abstract: In 1974, researchers at the Naval Hospital in Great Lakes, IL proposed to examine the composition and size of the total bile acid pool after cholecystectomy and what relationship the altered physiology may have to patients who later form de novo common duct stones. Researchers projected that fifteen individuals would participate in the study. Ten of the participants were to be patients with diagnosed cholelithiasis and/or choledocholithiasis and five were to be age-matched controls. The controls were to be volunteers undergoing laparotomy for diseases not related to the gall bladder and whose gall bladder might be examined at the time of operation to confirm its normalcy. In all participants, studies to be obtained included an oral cholecystogram. Calculation of the total bile acid pool entailed measurement of the total bile salt pool pre-operatively (or at the time of surgery for patients having their gall bladder removed surgically) and ten days post-operatively. Bile samples were to be obtained at time zero, one and three days. The total bile salt acid pool was determined using fifteen to twenty-five microcuries of orally administered carbon-14 labeled cholic acid plus twenty-five milligrams of carrier cholic acid as sodium salt. Results of this study are not available at this time.

Documents: Author: John R. Wesley, Lt. Comdr., MC, USNR. Title: Clinical Investigation Study Proposal: The Effect of Cholecystectomy on the Constituents and Size of the Bile Acid Pool. Document Type: Proposal. Date: 1974

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Great Lakes, IL (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NHGL-073	Strontium-85 photoscanning in Paget's disease
---------	----------	---

Abstract: From a presently undetermined date until 1964, researchers from the Naval Hospital in Great Lakes, IL, reassessed the use of strontium-85 (Sr-85) in imaging bone lesions by photoscanning. Of the five patients who participated, three had Paget's disease and two had eosinophilic granuloma of bone and Hodgkin's disease. Results of this study are unavailable at this time.

Documents: Authors: Edward W. Klein, Lt. Comdr., MC, USN; Ronald R. Lund, Lt. Comdr., MC, USN. Title: Strontium-85 Photoscanning in Paget's Disease. Journal: American Journal of Roentgenology, vol. 92, issue 1. Document Type: Journal Article. Date: July 1964

Naval Hospital, Jacksonville, FL

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1971	NHJAX-001	Prospective cooperative study into the etiology of Reye's syndrome, and effectiveness of current modes of therapy
------	-----------	---

Abstract: In 1971, researchers from the Naval Hospital in Jacksonville, FL, proposed to determine the incidence of Reye's syndrome and investigate causative agents, susceptibility, and the effectiveness of therapy available at the time. This was a prospective cooperative study, and data was to be collected by the Pediatrics Service of the Naval Hospital in Bethesda, MD, from all military graduate training hospitals. To date, no information is available on the number of participants. X-ray renograms and nuclear medicine scans were to be used to evaluate the disease. Radiation exposures and results of this study are not available at this time.

Documents: Author: Mark N. Goldschmidt, Lt. Comdr., MC, USN. Title: Clinical Investigation Study Proposal; (A) Project Title: A Prospective Cooperative Study into the Etiology of Reye's Syndrome, and the Effectiveness of Current Modes of Therapy. Document Type: Proposal. Date: 16 August 1971

Naval Hospital, Newport, RI

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NHN-01	Metabolic diseases and urinary calculi
---------	--------	--

Abstract: From a presently undetermined date until 1956, researchers from the Naval Hospital in Newport, RI, analyzed abdominal x-rays taken to diagnose groin pain in two patients. Case reports were presented from two patients where kidney stones were diagnosed.

Documents: Author: Richard P. Spencer. Title: Metabolic Diseases and Urinary Calculi. Journal: U. S. Armed Forces Medical Journal, vol. VII, no. 8. Document Type: Journal Article. Date: August 1956

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Oakland, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1947	NHOAK-044	The pathological physiology of the liver

Abstract: From 1947 until a presently undetermined date, researchers from the University of San Francisco, the University of California, Berkeley, and the Naval Hospital in Oakland, CA, studied the pathological physiology of the liver. Non-toxic tracer administrations of twenty-five to fifty microcuries of sulphur-35 labeled methionine were used to evaluate protein metabolism in general, and the anabolism and catabolism of protien in particular, and in various disease states including chronic liver disease, Cushing’s syndrome, and idiopathic hypoproteinemia. To date, no information is available on the number of participants or research results. However, in a supporting study entitled “Plasma L-Methionine Levels Following Intravenous Administration in Humans,” eleven normal, male individuals served as controls.

Documents: Author: Harold A. Harper; Laurance W. Kinsell; Harry C. Barton. Title: Plasma L-Methionine Levels Following Intravenous Administration in Humans. Journal: Science. Document Type: Journal Article. Date: 3 October 1947

Authors: L. W. Kinsell. Title: The Pathological Physiology of the Liver. Document Type: Proposal. Date: 2 August 1948

From: Laurance W. Kinsell, M.D. To: Chief of Naval Research, Attention: Biochemistry Branch, Medical Sciences Division—Code 442. Subject: Enclosed (in Quintuplicate) is a Bibliography of All Publications Issued Under the ONR Contract Concerned, from Date on Inception of this Task to 01 January 1950. Document Type: Letter/Bibliography. Date: 30 January 1959

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1951	NHOAK-045	Clinical studies with radioactive iron

Abstract: In 1951, researchers from the Naval Hospital in Oakland, CA, and the Naval Radiological Defense Laboratory in Hunters Point, CA, proposed clinical studies with radioactive iron. The purpose of the investigation was to study the use of radioactive iron, Fe-59, to examine erythropoiesis (the formation of red blood cells) and the effect of irradiation upon this process in humans. The proposal called for patients receiving x-ray therapy or total body irradiation for a particular disease; however, to date, no information is available on the number of participants or research results. Tracer doses of Fe-59 incubated with plasma were to be injected intravenously. The researchers hoped that the measurement of radioactive iron uptake would correlate well enough with radiation injury to allow the development of a practical test to determine the extent of radiation injury. In addition, it was planned to use the techniques to study erythropoiesis in certain disease states, such as aplastic anemia, and as a method of evaluating therapeutic agents in these disorders.

Documents: From: J. N. C. Gordon. To: Director, US Naval Radiological Defense Laboratory. Subject: Approval of Joint Research Projects with US Navy Research and Development Laboratory, Hunters Point, California [includes research proposals and related correspondence]. Document Type: Memorandum. Date: 12 October 1951

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Oakland, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1951	NHOAK-046	The effect of radiation on antibody production in the human

Abstract: In 1951, researchers from the Naval Hospital in Oakland, CA, and the Naval Radiological Defense Laboratory in Hunters Point, CA, proposed to study the effects of radiation on antibody production in humans. It had been established in animals that exposure to total-body irradiation increased susceptibility to infection and was frequently followed by bacteremia. It was believed that decreased antibody production may be a factor responsible for this increased susceptibility to infection on irradiated animals. Therefore, researchers for this study proposed to study the effect of irradiation on the ability of humans to produce antibodies to various antigens. The proposal called for patients receiving x-ray therapy or total body irradiation for a disease where such therapy was indicated, patients receiving large doses of abdominal irradiation, or patients being treated with nitrogen mustard or aminopterin. The technique of this study involved giving patients one or more of the following four antigens: typhoid, Heidelberger's pneumococcus polysaccharide, diphtheria toxoid, or tetanus toxoid. The serum antibody titers before and after irradiation were to be followed in the patients. A booster dose of the antigen was to be given following irradiation and the serum antibody titers followed again. Using various antigen, irradiation-time combinations, an attempt would be made to establish a relationship between length of exposure to irradiation and degree of antibody response. In addition, serum from patients receiving x-ray or similar therapy would be used to study the effects on already existing immunities in these patients. This would be done with serum protection tests on mice. Frequent blood cultures would be taken on the participants under observation. To date, no information is available on the number of participants or research results.

Documents: From: J. N. C. Gordon. To: Director, US Naval Radiological Defense Laboratory. Subject: Approval of Joint Research Projects with US Navy Research and Development Laboratory, Hunters Point, California [includes research proposals and related correspondence]. Document Type: Memorandum. Date: 12 October 1951

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1951	NHOAK-047	A study of the use and effects of I-131 in patients with thyroid carcinoma

Abstract: In 1951, researchers from the Naval Hospital in Oakland, CA, and the Naval Radiological Defense Laboratory in Hunters Point, CA, proposed to study the use and effects of iodine-131 (I-131) on patients with thyroid cancer. The purpose of the investigation was to provide a detailed study of I-131 excretion as well as I-131 distribution studies using localized counting in vivo and counting of serum inorganic and protein-bound iodine. The proposal also called for periodic studies of plasma phospholipids, of the ability of patients to produce antibodies, of red blood cell and white blood cell counts, in addition to liver and kidney function tests. An attempt was to be made to calculate radiation dosage delivered to various areas of the body and to correlate these dosages with functional changes. It was hoped that these studies would throw some light on the amount of radiation necessary to produce certain physiological changes in humans. To date, no information is available on the number of participants or research results.

Documents: From: J. N. C. Gordon. To: Director, US Naval Radiological Defense Laboratory. Subject: Approval of Joint Research Projects with US Navy Research and Development Laboratory, Hunters Point, California [includes research proposals and related correspondence]. Document Type: Memorandum. Date: 12 October 1951

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Oakland, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1951	NHOAK-048	The effect of radiation on plasma phospholipids in humans
------	-----------	---

Abstract: In 1951, researchers from the Naval Hospital in Oakland, CA, and the Naval Radiological Defense Laboratory in Hunters Point, CA, proposed to study the effect of radiation on plasma phospholipids in humans. It had been demonstrated in animals that total body irradiation produced marked changes of plasma phospholipids levels. The mechanism responsible for these changes was not known, but it was believed that the liver might be the primary organ involved. The researchers for this study therefore proposed to extend these observations to humans. The participants were to be patients receiving x-rays for therapeutic purposes. This was to include patients receiving total body irradiation or abdominal irradiation as therapeutic treatment. The researchers planned to determine fasting plasma phospholipid levels for several days prior to irradiation and for seven consecutive days after irradiation. It was hoped that the plasma phospholipid levels on patients who received x-ray therapy would show some correlation with the dosage of x-ray they had received. To date, no information is available on the number of participants or research results.

Documents: From: J. N. C. Gordon. To: Director, US Naval Radiological Defense Laboratory. Subject: Approval of Joint Research Projects with US Navy Research and Development Laboratory, Hunters Point, California [includes research proposals and related correspondence]. Document Type: Memorandum. Date: 12 October 1951

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	ONR-28	An evaluation of rapid weight reduction in obesity; body composition during therapy in diabetes mellitus
---------	--------	--

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NHOAK-003	Splenic artifact caused by barium in colon
---------	-----------	--

Abstract: The inclusive dates for this study conducted at the Naval Hospital in Oakland, CA, are presently undetermined. A case report was presented on one patient where residual barium in the colon created problems with another imaging study. A routine Tc-99m sulfur colloid liver scan showed conflicting results related to a defect of the spleen. An abdominal x-ray taken immediately after the scan revealed residual barium in the colon from an upper gastrointestinal tract series done the previous day.

Documents: Authors: B. Rama Rao, M.D.; James W. Winebright, M.D.; Thomas P. Dresser, Ph.D., M.D. Title: Splenic Artifact Caused by Barium in the Colon. Journal: Unknown. Document Type: Journal Article. Date: Unknown

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Pensacola, FL

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NHPTS-001	Postpartum chest x-ray studies of 1,000 patients to determine incidence of pneumopericardium and pneumomediastinum

Abstract: From 1971 to 1972, researchers from the Naval Hospital in Portsmouth, VA, and the Naval Hospital in Pensacola, FL, investigated the frequency of air or gas in the pericardial cavity or mediastinal space as a postpartum complication. Case reports were presented from two patients who developed postpartum pneumopericardium without associated pneumomediastinum following vaginal deliveries. Researchers were interested in the frequency of this unusual dissociation. One thousand women participated in a follow-up survey. Chest x-rays taken one to two days after giving birth were examined for pneumopericardium or pneumomediastinum. It was believed that one causative factor was the Valsalva maneuver during the “bearing down” phase of delivery. While 51 percent of the participants were first-time pregnancies, where second stage labor is relatively prolonged and increased, Valsalva activity is common, and no evidence of either condition was found. Researchers concluded that such postpartum complications are uncommon or benign when they occur.

Documents: Author: Robert L. Baker, Capt., MC, USN. Title: CICC 2-08-517, Postpartum Chest X-Ray Studies of 1,000 Patients to Determine Incidence of Pneumopericardium and Pneumomediastinum. Document Type: Report. Date: 11 August 1972

Authors: J. A. Sebastian; R. L. Baker. Title: Postpartum Chest X-Ray Studies of 1,000 Patients to Determine Incidence of Pneumopericardium and Pneumomediastinum. Document Type: Abstract. Date: 1972

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHPEN-001	Alterations in renal clearance of digoxin as modified by volume loading, alkalization and diuretics as measured by radioimmunoassay technique

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHPEN-002	Clinical study of intraocular lenses

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Philadelphia, PA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1967	NHPHIL-004	Chemotherapy of selected blood disease
------	------------	--

Abstract: From 1967 to 1973, researchers from the Naval Hospital in Philadelphia, PA, investigated methods for the early treatment of cancer. This study was part of a cooperative program to systematically place, initiate, execute, evaluate, analyze, and report on methods of diagnosis and treatment of neoplastic disease. Three hundred five patients participated in the cooperative study. Exposure to radiation was incidental to participation in this study. Progress was reported in the response rates and survival times in acute leukemias, Hodgkin's disease, early stages of malignant lymphomas, breast cancer, testicular cancer, sarcoma, certain childhood solid tumors, gestational tumors, and adenocarcinoma of the large bowel.

Documents: Authors: R. A. Burningham; C. Caldwell; A. Suvari. Title: Abstract of Progress: Chemotherapy of Selected Blood Disease. Document Type: Abstract. Date: 1972 est.

Title: Abstract of Progress on CIP Project 3-05-152. Document Type: Abstract. Date: 1972 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1967	NHPHIL-009	Treatment and retention of naval personnel evaluation of false Master's test
------	------------	--

Abstract: From 1967 until a presently undetermined date, researchers from the Naval Hospital in Philadelphia, PA, studied clinical, electrocardiography (ECG), hemodynamic, and coronary features of patients with angina pectoris (AP), normal coronary anatomy, and positive ECG stress tests. Forty-nine patients participated. Coronary artery blood flow pressure and resistance at rest and during activity were measured by coronary arteriography obtained during diagnostic cardiac catheterization. Comparisons with patients of similar age whose AP syndrome was based on coronary artery obstruction were made. Heart stress and oxygen use were compared as well. Exposure to radiation was incidental to participation in this study. Results of this study are not available at this time.

Documents: Authors: C. J. Pepine; C. R. Bemiller. Title: Treatment and Retention of Naval Personnel Evaluation of False Master's Test. Document Type: Summary. Date: 14 December 1973

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1971	NHPHIL-014	Ileal reflux after gastric alkalization coagulation system in patients with chronic hypoxia
------	------------	---

Abstract: From 1971 to 1972, researchers from the Naval Hospital in Philadelphia, PA, investigated the usefulness of barium enemas to relax the small intestine ileal sphincter. The relationship between stimulation of gastrin release by raising the pH of the stomach contents and the ability to reflux barium into the small intestine during barium enema examination was evaluated. To

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Philadelphia, PA (continued)

date, no information is available on the number of subjects. X-rays were taken of patients who did not show terminal ileal reflux during routine barium enema examinations. Results of this study are not available at this time.

Documents: Authors: G. M. Jervy. Title: Ilial Reflux After Gastric Alkalization Coagulation System in Patients with Chronic Hypoxia. Document Type: Report. Date: 1 February 1972

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NHPHIL-027	Study of coagulation system in patients with chronic hypoxia

Abstract: From 1971 to 1972, researchers from the Naval Hospital in Philadelphia, PA, examined the effects of reduced oxygen supply (hypoxia) on platelet function and blood clotting disorders. At least twenty patients with clinically diagnosed hypoxia participated. The results of this study are not available at this time. Radiation exposures were not specified in available documents.

Documents: Author: R. A. Burningham, Capt., MC, USN. Title: Study of Coagulation System in Patients with Chronic Hypoxia CICC 2-05-608. Document Type: Report. Date: 1 February 1972

Authors: Richard. A. Burningham, Capt., MC, USN. Title: Study of Coagulation System in Patients with Chronic Hypoxia. Document Type: Proposal. Date: 1972

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHPHIL-002	Preventive control of hyperlipemia in naval personnel

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHPHIL-006	Use of cephalothin peritoneal irrigation in appendicitis

Abstract: From 1972 to 1975, researchers from the Naval Hospital in Philadelphia, PA, compared complication rates for treatment of the peritoneal site following appendectomy. Incision sites were irrigated with saline or cephalothin, or not irrigated, and infection rate was measured. Approximately 150 appendectomy patients participated. The results of this study are not available at this time. Radiation exposures were incidental to participation.

Documents: Title: Use of Cephalothin Peritoneal Irrigation in Appendicitis. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHPHIL-010	Inflammatory dermatophytosis in military personnel: the role of delayed hypersensitivity in prevention of infection

Abstract: In 1972, researchers from the Naval Hospital in Philadelphia, PA, proposed to evaluate immunizations for prevention of superficial fungal infections, such as ringworm and athlete's

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Philadelphia, PA (continued)

foot. Many dermatophyte skin infections contributed to non-combat disability where men were stationed in tropical environments. The proposal called for twenty participants, and the study was scheduled to run through the middle of 1976. Five purified fungal compounds were to be tested for hypersensitivity reactions, delayed hypersensitivity, and reinfection. The results of this study are not available at this time. Radiation exposures were incidental to participation.

Documents: Author: W. L. Davis. Title: Inflammatory Dermatophytosis in Military Personnel. The Role of Delayed Hypersensitivity in Prevention of Infection. Document Type: Proposal. Date: 1973

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NHPHIL-003	Histochemical determination of enzymatic activity in blood disorders

Abstract: In 1973, researchers from the Naval Hospital in Philadelphia, PA, examined the patterns of phosphorylase activity in acute and chronic leukemia, myelofibrosis, polycythemia rubra vera, leukemoid reaction, and preleukemic states. Twelve patients participated. The results of this study are not available at this time. Radiation exposures were incidental to participation.

Documents: Authors: R. A. Burningham; J. E. Engeler, Jr. Title: Abstract of Progress: Histochemical Determination of Enzymatic Activity in Blood Disorders. Document Type: Abstract. Date: 1973 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NMCSD-153	Evaluation of upper gastrointestinal (UGI) bleeding in military personnel utilizing duodenoscopy

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	NHPHIL-008	Evaluation of small bowel microflora in cancer patients with and without therapy and their possible role in systemic infectious complications

Abstract: From 1974 until a presently undetermined date, researchers from the Naval Hospital in Philadelphia, PA, followed changes in the microflora of the small bowel of cancer patients before and during immunosuppressive therapy. The study determined the advisability of co-administering antimicrobial therapy and revealed whether organisms colonizing in the small bowel cause systemic complications. Forty patients with lymphoma, leukemia, and/or solid tumors participated. Hematological and immunological parameters were followed during treatment. Small bowel samples were obtained by oral intubation placed fluoroscopically at the ligament of Tritz. Radiation exposures are not available at this time.

Documents: Title: Evaluation of Small Bowel Microflora in Cancer Patients With and Without Therapy and Their Possible Role in Systemic Infectious Complications. Document Type: Event Profile. Date: 1994

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Philadelphia, PA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	NHPHIL-011	Assessment of platelet function in patients with coronary artery disease
Abstract:	From 1974 to 1976, researchers from the Naval Hospital in Philadelphia, PA, studied platelet aggregation in coronary artery disease. Platelet function was assessed by carbon-14 serotonic uptake and release. Twenty-five patients participated before and after undergoing contrast studies, including intravenous pyelograms, cholecystography, and angiography. Some platelets of patients with coronary artery disease showed a hypersensitive aggregation response.	
Documents:	Author: [J. Lazarchick]. Title: Abstract of Progress on CIP Project 5-05-560. Document Type: Abstract. Date: 1975 est.	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	NHPHIL-012	Cholinergic therapy of reflux esophagitis in post-gastrectomy patients: randomized double-blind crossover study
Abstract:	In 1974, researchers from the Naval Hospital in Philadelphia, PA, proposed to study the effects of bethanecol on heartburn symptoms, antacid consumption, and esophagitis. Bethanecol stimulates smooth muscle contractions and is used to treat gastrointestinal reflux. The proposal called for fifty patients who had been treated previously with vagotomies (surgical lesions of the vagus nerve) and antrectomies (surgical excision of part of the stomach). The drug effects were easier to follow in patients who met these criteria. Before inclusion in the study, all participants were to receive an upper gastrointestinal (UGI) series, UGI endoscopy, esophageal biopsies, esophageal manometry, and electrocardiogram. Results of this study are not available at this time.	
Documents:	Authors: Thomas. J. Humphries, Lt. Comdr., MC, USN; Donald. O. Castell; Richard Harold Higgs. Title: Cholinergic Therapy of Reflux Esophagitis in Post-Gastrectomy Patients: A Randomized Double-Blind Crossover Study. Document Type: Proposal. Date: 25 April 1974	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	NHPHIL-015	Urinary acidification and ammonia levels in cirrhotic and normal subjects
Abstract:	In 1974, researchers from the Naval Hospital in Philadelphia, PA, proposed to assess the effects of ascorbic acid (vitamin C) on blood and urine pH. The proposal called for twenty patients, ten cirrhotic and ten normal controls. Baseline serum and urine ammonia levels and urine pH were to be measured while fasting on three consecutive days. After an ammonia tolerance test, patients were to ingest a solution containing 5 grams of ammonia acetate. Serum and urine ammonia levels and urine pH were to be measured after zero, thirty, and sixty minutes. Participants were to take 1 gram of vitamin C four times a day for five days, and the above tests were to be repeated. The results of this study are not available at this time. Radiation exposures were incidental to participation.	
Documents:	Author: Frank Garcia. Title: Urinary Acidification and Ammonia Levels in Cirrhotic and Normal Subjects. Document Type: Proposal. Date: 1 October 1974	

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Philadelphia, PA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	NHPHIL-016	Clinical effect of topical 1% 8-methoxypsoralen followed by near ultraviolet light on proven dermatophytosis

Abstract: From 1974 to 1976, researchers from the Naval Hospital in Philadelphia, PA, conducted clinical trials for 8-methoxypsoralen (8-MOP) with or without ultraviolet (UV) exposure as a treatment for superficial fungal infections of the hands and feet. Twenty-four patients participated. Dermatophytosis lesions were painted with 1 percent 8-MOP. After thirty to sixty minutes, lesions were irradiated with a UVA source at a distance of one foot for ten to twenty minutes. Only non-ionizing radiation was applied. Therapy was considered ineffective.

Documents: Author: Harry. L. Parlette. Title: The Clinical Effect of Topical 1% 8-Methoxypsoralen Followed by Near Ultraviolet Light on Proven Dermatophytosis. Document Type: Proposal. Date: 1974 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHCHEL-022	Eosinophilia kinetics and function in hypereosinophilia syndromes

Abstract: The inclusive dates for this study at the Naval Hospital in Philadelphia, PA, are presently undetermined. Researchers measured the clearance of tagged eosinophils from circulation. Correlations between the slope of the clearance rate and symptoms related to histamine, 5-hydroxytryptamine, and bradykinin were calculated. Ten to fifteen patients participated. The results of this study are not available at this time. Radiation environments were not specified in available documents.

Documents: Authors: R. A. Burningham; D. N. Pasquale. Title: Eosinophilia Kinetics and Function in Hypereosinophilia Syndromes. Journal: U. S. Navy Medicine. Document Type: Abstract. Date: 1972

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHPHIL-001	Evaluation of the cardiovascular and anti-anginal effect of mixidine

Abstract: The inclusive dates for this study conducted at the Naval Hospital in Philadelphia, PA, are presently undetermined. Researchers evaluated drug therapy with vasodilators for treatment of angina pectoris. Mixidine was studied to learn if it would benefit patients with stress-induced angina by reducing the oxygen requirement of the heart. Twenty patients participated. Researchers improved the quality of patient care, provided experience to residents in treating tachycardia and administering exercise stress testing, and provided an understanding of the mechanisms and basic pathology of angina pectoris. Radiation exposures were incidental to participation.

Documents: Title: Evaluation of the Cardiovascular and Anti-Anginal Effect of Mixidine. Document Type: Event Profile. Date: 1994

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Philadelphia, PA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHPHIL-005	Study of incidence of deep vein thrombosis in post-op and bedridden patients using impedance phlebography techniques
Abstract:	<p>The inclusive dates for this study conducted at the Naval Hospital in Philadelphia, PA are presently undetermined. In an effort to prevent fatal pulmonary embolism originating in leg veins, researchers evaluated the effectiveness of impedance phlebography as a non-invasive screening technique. Twenty-seven patients admitted to the General Surgery Service were followed through their pre-, intra-, and post-operative courses using the impedance phlebograph to diagnose possible latent deep vein thromboses. The results of this study are not available at this time.</p>	
Documents:	<p>Title: Study of Incidence of Deep Vein Thrombosis in Post-Op and Bedridden Patients Using Impedance Phlebography Techniques. Document Type: Event Profile. Date: 1994</p>	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHPHIL-007	Vitamin E levels in patients with cirrhosis
Abstract:	<p>The inclusive dates for this study conducted at the Naval Hospital in Philadelphia, PA, are presently undetermined. Researchers investigated the incidence of vitamin E deficiency in patients with cirrhosis of diverse etiologies. Levels of vitamin E were correlated with the presence or absence of hemolysis and sensitivity of red blood cells to the peroxide hemolysis test. Twenty-five patients took part in the study, in addition to an unspecified number of normal subjects. The results of this study are not available at this time. Radiation exposures were incidental to participation.</p>	
Documents:	<p>Title: Vitamin E Levels in Patients with Cirrhosis. Document Type: Event Profile. Date: 1994</p>	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-030	Platelet function in patients with lymphoma and solid tumor prior to, during, and after therapy
Abstract:	<p>The inclusive dates for this study conducted at the Naval Hospital in Philadelphia, PA, are presently undetermined. Researchers examined whether specific platelet function abnormalities occur in patients with solid tumors and lymphomatous disease. Fifteen patients with metastatic carcinoma and seven with lymphoma participated. Ten patients without hematologic disease or tumors participated as controls. At the time of diagnosis and before therapy, patients underwent plasmapheresis. Platelets were tagged with chromium-51 and, after one hour, re-infused into the patients. Blood samples were drawn hourly for six hours. Platelet half-life was determined through the use of a gamma counter; platelet aggregation and adhesiveness were also studied. The studies were repeated during and following therapy. Results indicated no disturbance in platelet function as compared to the normal controls.</p>	
Documents:	<p>Author: Richard A. Burningham, Capt., MC, USN. Title: Study Proposal: Platelet Function in Patients with Lymphoma and Solid Tumors Prior To, During, and After Therapy. Document Type: Proposal. Date: 1972</p>	

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Philadelphia, PA (continued)

Authors: D. N. Pasquale; C. Caldwell; A. Suvari. Title: Abstract of Progress: Platelet Function in Patients with Lymphoma and Solid Tumors Prior To, During, and After Therapy. Document Type: Abstract. Date: 1972

Authors: D. N. Pasquale; C. Caldwell; A. Suvari. Title: Platelet Function in Patients with Lymphoma and Solid Tumor Prior To, During, and After Therapy. Document Type: Abstract. Date: 1972

Authors: R. A. Burningham; C. Caldwell; A. Suvari. Title: Abstract of Progress: Platelet Function in Solid Tumors and Lymphoma. Document Type: Abstract. Date: 1972 est.

Title: Abstract of Progress of CPI Project 3-05-125. Document Type: Abstract. Date: 1972 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-032	Clinical evaluation of a tin electron filter for cobalt-60 radiation therapy utilizing a thermoluminescent dosimetry system effect on skin sparing

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Naval Hospital, Portsmouth, VA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1961	NHPTS-94	Inhibition of thyroid I-131 uptake by parabromdylamine maleate

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1961	NHPTS-95	Analysis of time and concentration components and cardiac output determination obtained from precordial isotope-dilution curves

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1961	NHPTS-96	Simple isotope method for recording the Achilles' tendon reflex in myxedema

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Portsmouth, VA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1964	NNMC-134	Aortic insufficiency and pelvospondylitis in a seropositive female with rheumatoid nodules

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NHPTS-004	Management of cervical intraepithelial neoplasia with CO ₂ laser therapy

Abstract: From 1971 until 1975 researchers from the Naval Hospital, Portsmouth, VA studied the treatment of cervical intraepithelial neoplasias with cryosurgical techniques, obtaining a clearance rate of approximately 90%. Three-hundred-one patients participated. Preliminary studies using colposcopically directed carbon dioxide (CO₂) laser surgery were begun in 1973. Early results indicated excellent patient acceptance, complete vaporization/excision of the abnormal epithelium, rapid healing, and with the initial group of three months follow-up biopsies, as well as further follow-ups, only one patient showed evidence of residual or recurrent intraepithelial neoplasia in the laser therapy site. Researchers concluded that the ease of administering therapy, outstanding patient acceptance, and apparent high effectiveness warranted continued investigation of CO₂ laser surgery in gynecology. Radiation environments were not specified in available documents.

Documents: Author: Capt. R. T. Upton, MC, USN. Title: The Management of Cervical Intraepithelial Neoplasia with CO₂ Laser Therapy. Document Type: Report. Date: 31 July 1975

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NHPTS-001	Postpartum chest x-ray studies of 1,000 patients to determine incidence of pneumopericardium and pneumomediastinum

(For abstract and documentation, see Naval Hospital, Pensacola, FL.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NHPTS-005	Diagnosis and presurgical evaluation of biliary and pancreatic disorders utilizing a fiberjejunoscope

Abstract: From 1971 to 1974, researchers from the Naval Hospital in Portsmouth, VA, investigated using oral endoscopy to find obstructions in the pancreatic ducts. Routine preoperative evaluation of the biliary and pancreatic duct system via cannulation and visual identification was tested in thirteen patients. The procedure was successful in finding jaundice, pancreatitis, and cancer in seven patients. Radiation environments were not specified in available documents.

Documents: Author: Capt. E. L. Burke. Title: Diagnosis and Presurgical Evaluation of Biliary and Pancreatic Disorders Utilizing a Fiberjejunoscope. Document Type: Abstract. Date: 1972

Author: E. L. Burke, Capt., MC, USN. Title: Diagnosis and Presurgical Evaluation of Biliary and Pancreatic Disorders Utilizing a Fiberjejunoscope. Document Type: Report. Date: 23 May 1973

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Portsmouth, VA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHPTS-006	Evaluation of inferior esophageal sphincter competence by esophagoscopy
Abstract:	<p>In 1972, researchers from the Naval Hospital in Portsmouth, VA, proposed to study the inferior esophageal sphincter by fiber optic esophagoscope. The study was scheduled to last two years and called for six patients. This study was designed to relate the amount of “open time” of the sphincter to the degree of sphincter competence. In addition, the extent and severity of esophagitis and the presence or absence of hiatal hernia and reflux by x-ray was to be correlated to the amount of “open time.” Radiation exposures and results of this study are not available at this time.</p>	
Documents:	<p>Author: E. L. Burke, Capt., MC, USN. Title: Evaluation of Inferior Esophageal Sphincter Competence by Esophagoscopy. Document Type: Proposal. Date: 1972</p> <p>Authors: E. L. Burke. Title: Evaluation of Inferior Esophageal Sphincter Competence by Esophagoscopy. Document Type: Abstract. Date: 1972 est.</p>	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHPTS-008	Ambulatory treatment of Legg-Calve-Perthes' disease
Abstract:	<p>From 1972 to 1975, researchers from the Naval Hospital in Portsmouth, VA, evaluated treatment regimens of Legg-Calve-Perthes' disease. Abduction was maintained with the use of braces rather than immobilization, casts, and traction, and patients were allowed more mobility during treatment. Forty pediatric patients participated, with the treatment lasting eighteen to thirty-six months. Patients were given clinical and radiological examinations at two to three month intervals during the treatment period. Patients were reevaluated every six to twelve months following completion of treatment. Results of this study are not available at this time.</p>	
Documents:	<p>Author: C. S. Lambdin, Capt., MC, USN. Title: Ambulatory Treatment of Legg-Calve-Perthes' Disease. Document Type: Proposal. Date: 1972 est.</p> <p>Author: C. S. Lambdin, Capt., MC, USN. Title: Ambulatory Treatment of Legg-Calve-Perthes' Disease. Document Type: Abstract. Date: 1972 est.</p> <p>Title: Ambulatory Treatment of Legg-Calve-Perthes' Disease. Document Type: Report. Date: 1973 est.</p>	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NHPTS-003	Evaluation of post-due obstetric patients
Abstract:	<p>In 1973, researchers from the Naval Hospital in Portsmouth, VA, examined women past their forty- second week of pregnancy to detect patients at risk with postmature fetuses. The study provided standardized care of the post-term patient. Fifty-six obstetric patients participated. Pelvic x-rays taken to observe the position of the fetus (fetograms) would also reveal fetal wasting due to postmaturity. In addition to fetograms, maternal hormone levels and amniotic fluid tests helped in determining whether to induce birth. Within twenty-four hours after birth (naturally</p>	

NAVY 1944–1974 (CONTINUED)

Naval Hospital, Portsmouth, VA (continued)

or by induction), estimated fetal maturity was determined. The study showed more individualized management of the post-term patient was preferred.

Documents: Authors: R. T. Upton; J. Sebastian; J. O. Goodwin. Title: Evaluation of Post-Due Obstetric Patients. Document Type: Abstract. Date: 1970 est.

Author: Robert L. Baker, Capt., MC, USN. Title: Evaluation of Post-Due Obstetric Patients. Document Type: Proposal. Date: 1973 est.

From: R. W. Savage. To: Commanding Officer, Naval Health Sciences Education and Training Command. Subject: Identification and Review of Records Related to DoD Human Radiation Experiments. Document Type: Memorandum. Date: 23 February 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NHPTS-007	Evaluation of post-due obstetric patients

Abstract: In 1973, researchers from the Naval Hospital in Portsmouth, VA, examined women in their forty-second week of pregnancy to detect patients at risk with postmature fetuses. Pelvic x-rays taken to observe the position of the fetus (fetograms) would also reveal fetal wasting due to postmaturity. The study provided standardized care of the post-term patient. Fifty-six obstetric patients participated. Results of this study are not available at this time.

Documents: Title: Evaluation of Post-Due Obstetric Patients. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-010	Blood volume studies in thoracic surgical patients using radioactive iodinated human serum albumin

(For abstract and documentation, see Naval Hospital, Bethesda, MD.)

Naval Hospital, St. Albans, Long Island, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1950	NHSTALB-08	Radiation treatment: correlation of predisposition to radiation illness to other clinical findings in patients receiving radiation therapy

Abstract: From 1950 until a presently undetermined date, researchers from Naval Hospital, St. Albans, in Long Island NY, investigated the factors responsible for the natural resistance of man to general and local effects of ionizing radiation. Twenty radiation therapy patients participated. Researchers observed the occurrence of radiation sickness in patients undergoing radiation therapy. All patients received only those dosages indicated for their disease. Threshold x-ray dose levels for the production of the various symptoms and changes were determined with due consideration for field size of the irradiated area, overall exposure time, section of the body, and disease for which the patient was being irradiated. The radiation exposure and results of this study are not available at this time.

NAVY 1944–1974 (CONTINUED)

Naval Hospital, St. Albans, Long Island, NY (continued)

- Documents: From: W. T. Brown. To: Chief of Naval Medical Research Institute. Subject: Collaboration by U. S. Naval Hospital, St. Albans, New York, in BuMed Research Project NM006012 : Medical Defense Aspects of Atomic Warfare. Document Type: Memorandum. Date: 1 May 1950
- From: C. C. Shaw, Chief, Bureau of Medicine and Surgery. To: Commanding Officer, U. S. Naval Hospital, St. Albans, New York. Subject: Research Proposal: Radiation Treatments. Correlation of Predisposition to Radiation Illness to Other Clinical Findings in Patients Receiving Radiation Therapy. Document Type: Memorandum. Date: 26 June 1950
- Author: Comdr. S. F. Williams, MC, USN. Title: Bureau of Medicine and Surgery, Research Division NM007 086.08 Radiation Treatment: Correlation of Predisposition to Radiation Illness to Other Clinical Findings in Patients Receiving Radiation Therapy. Document Type: Proposal. Date: 26 June 1950
- Author: Comdr. S. F. Williams, MC, USN. Title: Bureau of Medicine and Surgery, Research Division NM006 012.5(2) Radiation Treatment: Correlation of Predisposition to Radiation Illness to Other Clinical Findings in Patients Receiving Radiation Therapy. Document Type: Proposal. Date: 1950
- From: S. F. Williams, Chief of X-Ray. To: Commanding Officer. Subject: Semi-Annual Research Progress Summary for Period Ending 31 December 1950. Document Type: Memorandum. Date: 22 January 1951

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1950	NHSTALB-09	Action of a flavinoid compound (vitamin C.V.P.) in conjunction with vitamin C on skin erythemas caused by radiation from radioactive substances

Abstract: From 1950 until 1951, researchers at the Naval Hospital, St. Albans, in Long Island, NY, investigated the effects of a vitamin-enriched salve on skin tolerance to radiation treatments for tumors. The objective was to determine if the salve could increase the skin's tolerance and recovery to radiation exposure, thereby enabling higher radiation doses to be used in treatment. Five radiation therapy patients that were being treated in the normal routine participated in this study. Radiation doses within the treatment series and results of this study are not available at this time.

- Documents: From: Harold A. Lyons, CDR, MC, USN, Chief of Research. To: Chief, Bureau of Medicine & Surgery, Research Division. Subject: Research Proposal: The Action of a Flavinoind Compound in Conjunction with Vitamin C on Skin Erythemas Caused by Radiations from Radioactive Subst. Document Type: Memorandum. Date: 31 July 1950
- From: Chief, Bureau of Medicine and Surgery. To: Chief of Research, U. S. Naval Hospital, St. Albans, New York. Subject: Research Proposal: The Action of Flavinoind Compound (Vitamin C.V.P.) in Conjunction with Vitamin C on Skin Erythemas Caused by Radiations from Radioactive Substances and X-Rays. Document Type: Memorandum. Date: 6 September 1950
- From: Chief, Bureau of Medicine and Surgery. To: Commanding Officer, U. S. Naval Hospital, St. Albans, New York. Subject: [research studies approval]. Document Type: Memorandum. Date: 2 October 1950
- Author: Paul R. Kline M.D. Title: Research Proposal; BuMed 98 (Rev. 10/49). Document Type: Proposal. Date: 2 October 1950
- From: L. K. MacClatchie, Capt., MC, USN, Chief, Dermatology Service. To: Chief of Research. Subject: Research Projects [Projects EM 007 086.04 and NM 007 086.10]. Document Type: Memorandum. Date: 12 December 1950
- From: Chief, Bureau of Medicine and Surgery. To: Commanding Officer, U. S. Naval Hospital, St. Albans, New York. Subject: Research Study NM 007 086.10: The Action of a Flavinoind Compound (Vitamin C.V.P.) in Conjunction with Vitamin C on Skin Erythemas Caused by Radiations from Radioactive Substances—Cancellation of. Document Type: Memorandum. Date: 28 August 1951

NAVY 1944–1974 (CONTINUED)

Naval Hospital, St. Albans, Long Island, NY (continued)

Title: Semi-Annual Progress Summary for Period Ending 31 Dec 1950. Document Type: Report. Date: 1951

Authors: Dr. Paul K. Kline; Lt. Wayne L. Wright, MC, USN. Subject: [summary of project results]. Document Type: Report. Date: 1951 est.

Start Date Number Title

1956 NHSTALB-07 Studies of localization of radioactive gallium in bone lesions

Abstract: In 1956, researchers from the Naval Hospital, St. Albans, in Long Island, NY, developed a method for localizing bone lesions through the administration of radioactive gallium (Ga-72). Two patients participated in this study. Forty-eight hours before surgery, Ga-72 was administered to facilitate the removal of cancer from bone tissue. Radiation exposures and results of this study are not available at this time.

Documents: Title: Studies of Localization of Radioactive Gallium in Bone Lesions. Document Type: Event Profile. Date: 1994

Start Date Number Title

1958 NHSTALB-14 Influence of chelates on the metabolism of radioyttrium

(For abstract and documentation, see Long Island Jewish Hospital, New Hyde Park, NY.)

Start Date Number Title

1959 NHSTALB-13 External recording method for estimating hepatic blood flow with use of radiogold

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Start Date Number Title

1960 NHSTALB-12 Use of femoral arteriography in assessment of bleeding in pregnancy

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Start Date Number Title

1961 NHSTALB-11 Findings of retrograde femoral arteriography in choriocarcinoma

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

NAVY 1944–1974 (CONTINUED)

Naval Hospital, St. Albans, Long Island, NY (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NHSTALB-05	Studies of the localization of radioactive gallium in bone lesions
---------	------------	--

Abstract: From a presently undetermined date until 1956, researchers from the Naval Hospital, St. Albans, in Long Island, NY, modified a method for localizing bone lesions through the administration of radioactive gallium (Ga-72) and using external scintillation counting. Previous studies showed that gallium and its radioisotopes had particular affinity for areas where bone was forming or healing. These assessments were limited in accuracy and reproducibility. By modifying the bone scanning technique, investigators intended to eliminate the previous limitations. One hundred forty-four patients participated. Malignant lesions imaged by Ga-72 scanning techniques suggested that this method was useful in studying specific cases but that it was of limited value in the routine diagnosis of bone metastases. Imaging of nonmalignant bone lesions showed that in the healing phase of osteomyelitis and during callus formation and resolution in fractures, significant selective localization of Ga-72 occurs at the site of the lesion. Fracture imaging with Ga-72 scanning through a cast was found to be useful in the study of the healing process.

Documents: Title: Studies of the Localization of Radioactive Gallium in Bone Lesions. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NNMC-010	Blood volume studies in thoracic surgical patients using radioactive iodinated human serum albumin
---------	----------	--

(For abstract and documentation, see Naval Hospital, Bethesda, MD.)

Naval Hospital/Medical Center, San Diego, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1953	NMCS-288	Further experience with parametrial radiogold as an adjunct to radium therapy in treatment of pelvic lymph nodes in cancer of the cervix
------	----------	--

Abstract: From 1953 until 1960, researchers from the Naval Hospital in San Diego, CA, investigated the use of parametrial radiogold as an adjunct to radium therapy in the treatment of cervical cancer. Fifty-five patients with cancer of the uterine cervix were treated with intracavitary radium and transvaginal radiogold into both parametria. Forty-six patients had clinical Stage I lesions and the remaining nine patients had clinical Stage II lesions. Of the total number of patients treated, fifteen required further surgical intervention for recurrence of tumor after irradiation. Residual invasive tumors found in postoperative cervixes were removed because of cancer in situ or some benign condition, complications of radiation therapy, and as an adjunct to facilitate radiation therapy. All of the surgical procedures carried out for the complications of irradiation and the recurrence of tumor and tumor residual were successful as of the date of publication of

NAVY 1944–1974 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

the final report. Although researchers determined that the use of the treatment was not totally without danger (as evidenced by the 9 percent incidence of complications), the overall survival incidence of 90.9 percent was thought to be evidence in favor of continuing the therapy as an adjunct to radium therapy for cancer of the uterine cervix. The study was published in 1961.

Documents: Title: Parametrial Radiogold in Cancer of the Cervix. Journal: American Journal of Obstetrics and Gynecology, vol. 81, issue 4. Document Type: Journal Article; Excerpt. Date: April 1961

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1957	NMCS-253	Surface moulage treatment techniques utilizing cobalt-60 teletherapy. A follow-up study.

Abstract: From 1957 to 1968, researchers from the Naval Medical Center in San Diego, CA, examined the effects of wax or resin applied to the skin (surface moulage) in the radiation treatment of carcinomas of the ear, nose, and penis. The purpose of the study was to find an alternative treatment to surgery that would provide no loss of function and good cosmetic results. Forty-seven patients participated. Results showed that surface moulage with cobalt-60 teletherapy was simple, convenient, increased the uniformity of dose on irregular surfaces, and provided good clinical control. Therapy provided rapid healing and excellent cosmetic results. A 94 percent one-year survival rate was maintained through the fifth year of this study. Radiation doses within the treatment series are not available at this time.

Documents: Title: Medline Express Printout: Surface Moulage Treatment Techniques Utilizing Cobalt-60 Teletherapy. A Follow-up Study. Document Type: Abstract; Search Printout. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NMCS-018	Fracture of the ankle in a military population

Abstract: In 1971, researchers at the Naval Medical Center in San Diego, CA (NMCS), proposed a retrospective study to evaluate the functional radiographic results of ankle fracture treatment at NMCS from 1966 to 1972. The evaluation involved review and analysis of hospital records and x-rays of ankle fractures treated at this facility. If possible, patients were to be contacted for follow-up, the results of which were to be studied in relation to the known biomechanical principles governing ankle joint fractures. The study was to culminate in the proposal of a method for the x-ray evaluation of adequate fracture reduction and the outlining of basic principles of operative treatment. Researchers estimated completing the study in 1975. Results of this study are not available at this time.

Documents: Author: J. S. Sarkisian, Lt., MC, USN. Title: Fracture of the Ankle in a Military Population. Document Type: Proposal. Date: 1975

NAVY 1944–1974 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1971	NMCSD-011	Treatment of tibial fractures with electric microcurrent
------	-----------	--

Abstract: In 1971, researchers from the Naval Medical Center in San Diego, CA, proposed to evaluate the application of electrical microcurrents in accelerated healing of stress fractures. The researchers planned to have four basic trainees with upper tibial fractures participate and estimated completing the study in 1972. Physical and x-ray examinations were to be repeated until clinical evidence of complete healing was achieved. Radiation exposures and results of this study are not available at this time.

Documents: Author: G. W. Cady, Capt., MC, USN. Title: Treatment of Tibial Fractures with Electric Microcurrent. Document Type: Proposal. Date: 12 January 1971

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	NMCSD-002	Significance of positive ipsilateral nodes in resections of the lung
------	-----------	--

Abstract From 1972 to 1974, researchers from the Naval Medical Center in San Diego, CA, evaluated the significance of positive lymph nodes on the same side as the involved lung when surgically treating bronchogenic carcinoma. Seventy-five patients participated. In addition to routine pulmonary function studies, patients underwent further testing, treatment, and surgery based on the results of lymph node biopsy and presence of metastases. Mediastinoscopy was used to evaluate all patients with bronchogenic carcinoma; abnormal findings contraindicated further surgical treatment. The attrition rate of seventy-five patients with bronchogenic carcinoma and positive mediastinal lymph node biopsies was greater than 90 percent at two years. Therapeutic irradiation to the mediastinum was given to three patients, but the exposures were not specified in available documents.

Documents: Authors: R. G. Fosburg, Capt.; M. J. O'Sullivan, Comdr.; P. Ah-Tye, Capt. et al. Title: Positive Mediastinoscopy: An Ominous Finding. Journal: The Annals of Thoracic Surgery. Document Type: Journal Article; Excerpt. Date: 1974 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

1972	NMCSD-003	Chemotherapeutic agents in the treatment of lung tumors
------	-----------	---

Abstract: From 1972 until a presently undetermined date, researchers from the Naval Medical Center in San Diego, CA, evaluated chemotherapeutic agents in the treatment of advanced lung cancer. CCNU (lomustine) was used to treat forty-one patients with unresectable carcinoma of the lung. CCNU was effective in relieving symptoms but not curing lung cancer. Radiation exposure was incidental to participation.

Documents: Title: Chemotherapeutic Agents in the Treatment of Lung Tumors. Document Type: Abstract. Date: 1972

NAVY 1944–1974 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NMCSD-004	Extracranial suspension versus inter- or intra-osseus support in treatment of facial fracture

Abstract: From 1972 until a presently undetermined date, researchers from the Naval Medical Center in San Diego, CA, compared treatment methods and management of facial fractures. Healing of facial fractures treated with extracranial suspension was compared with fractures stabilized by internal fixation methods. Radiographic studies were performed in the evaluation of fourteen orthopedic patients. Results of this study are not available at this time.

Documents: Title: Extracranial Suspension versus Inter- or Intra-osseus Support in Treatment of Facial Fracture. Document Type: Abstract. Date: 1972 est.

Title: [Patient Profile, Extracranial Suspension Versus Inter- or Intra-osseus Support in Treatment of Facial Fracture]. Document Type: Report; Excerpt. Date: 1975 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NMCSD-005	Pancreatico-cholangiography and manometry of sphincter of Oddi

Abstract: From 1973 until a presently undetermined date, researchers from the Naval Medical Center in San Diego, CA, measured the pressure generated by the sphincter of Oddi during imaging studies of pancreatic and bile ducts. Sixty patients undergoing evaluation of acute and recurrent pancreatitis and post-cholecystectomy syndrome participated. Radiation exposure and results of this study are not available at this time.

Documents: Title: Clinical Evaluation of Sphincter of Oddi Manometry. Document Type: Report. Date: 1973 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NMCSD-006	Results of clubfoot treatment

Abstract: From 1973 until a presently undetermined date, researchers from the Naval Medical Center in San Diego, CA, reviewed orthopedic methods of treating clubfoot. Factors leading to unsatisfactory functional results were identified, and treatment guidelines were provided. Although to date no information is available on the number of study participants, seventy-two feet were examined. Evaluations consisted of interviews, physical exams, x-rays, and photographs. Results of this study are not available at this time.

Documents: Title: [Proposal Excerpt for Study: Results of Clubfoot Treatment]. Document Type: Proposal; Excerpt. Date: 1973 est.

Title: Results of Clubfoot Treatment. Document Type: Abstract. Date: 1973 est.

NAVY 1944–1974 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NMCSD-007	Colonoscopy in differential diagnosis of inflammatory bowel disease
Abstract:	In 1973, researchers from the Naval Medical Center in San Diego, CA, assessed colonoscopy as a diagnostic tool in cases of rectal bleeding and passage of bloody stool. Twenty patients with hematochezia participated. Investigators concluded colonoscopy should be included as a routine diagnostic procedure in all cases of hematochezia.	
Documents:	From: Commanding Officer, Naval Health Sciences Education and Training Command. To: Commanding Officer, Naval Regional Medical Center, San Diego, CA 92134. Subject: Report Approval. Document Type: Memorandum. Date: 5 August 1975	
	Title: Colonoscopy in the Differential Diagnosis of Inflammatory Bowel Disease. Document Type: Abstract. Date: 1975 est.	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NMCSD-010	Immunocytoadherence testing in lymphoproliferative disorders
Abstract:	From 1973 to 1974, researchers from the Naval Medical Center in San Diego, CA, analyzed the association between lymphoma and changes in certain characteristics of lymphocytes. One hundred twelve patients participated, with seventy as controls. This study identified and characterized circulating lymphocytes in patients with lymphomas and assessed the effects of subsequent therapy on circulating lymphocytes, with emphasis on changes in types of lymphocytes. Researchers also investigated identifying occult or potential lymphomas. Radiation exposure and results of this study are not available at this time.	
Documents:	Title: Immunocytoadherence Testing in Lymphoproliferative Disorders. Document Type: Abstract. Date: 1974 est.	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NMCSD-012	Early diagnosis of aseptic necrosis of the femoral head following traumatic dislocation of hip
Abstract:	From 1973 until a presently undetermined date, researchers from the Naval Medical Center in San Diego, CA, tested radioisotopes for use in imaging studies to identify abnormal healing in upper femur fractures. Seventeen patients with traumatic hip dislocation and femoral neck fractures participated. Technetium-99m was found to be superior to fluoride-18 as a bone scanning agent. Radiation exposures are not available at this time. This study indicated bone scanning should be incorporated as a routine follow-up examination in a larger number of traumatic hip injuries.	
Documents:	Author: R. L. Nutt, Lt. Comdr., MC, USNR. Title: Early Diagnosis of Aseptic Necrosis of the Femoral Head Following Traumatic Dislocation of the Hip. Document Type: Report. Date: 1974 est.	
	From: Lt. Comdr. Richard L. Nutt, MC, USNR, Department of Orthopedics. To: Director, Clinical Investigation Center. Subject: Progress Report on CICC 4-16-257 for: Early Diagnosis of Aseptic Necrosis of the Femoral Head Following Traumatic Dislocation of the Hip: A Prospective Study Comparing Fluoride-18, Technetium Polyphosphate and Technetium Diphosphonate. Document Type: Memorandum. Date: 26 February 1975	

NAVY 1944–1974 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

Start Date Number Title

1973 NMCS-015 Endoscopic electrosurgical polypectomy

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Start Date Number Title

1973 NMCS-016 Recurrent lower urinary tract infection in woman: effect of urethral dilation

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Start Date Number Title

1973 NMCS-153 Evaluation of upper gastrointestinal (UGI) bleeding in military personnel utilizing duodenoscopy

(For abstract and documentation, see Naval Hospital, Philadelphia, PA.)

Start Date Number Title

1974 NMCS-013 Acromio-clavicular separations

Abstract: From 1974 until a presently undetermined date, researchers from the Naval Medical Center in San Diego, CA, surveyed differences between surgical and non-surgical treatments of complete shoulder dislocations. In this prospective study, twenty-three patients were clinically evaluated and shoulder x-ray studies were taken. Researchers concluded that minimal immobilization and early shoulder rehabilitation was the recommended treatment of choice for acute, complete, acromioclavicular separations.

Documents: Author: Lt. Comdr. Raymond J. Imatani, MC, USNR. Title: Acromio-Clavicular Separations: A Prospective Study. Document Type: Proposal. Date: 1974 est.

Title: [Acromio-Clavicular Separations; A Prospective Study]. Document Type: Abstract. Date: 1974 est.

Start Date Number Title

1974 NMCS-014 Use of non-invasive monitoring technique to evaluate pre- and post-operative arterial blood flow A-S-O

Abstract: From 1974 until a presently undetermined date, researchers from the Naval Medical Center in San Diego, CA, evaluated reconstruction of the deep femoral artery in the treatment of

NAVY 1944–1974 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

atherosclerotic occlusive disease in the leg. Methods of monitoring blood flow were tested. Radiation exposures were incidental to participation.

Documents: Title: [Use of Non-Invasive Monitoring Technique to Evaluate the Pre- and Post-operative Arterial Blood Flow A-S-O]. Document Type: Report. Date: 1974 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	NMCSO-252	Prostate carcinoma: radiation treatment of the primary and regional lymphatics

Abstract: In 1974, researchers from the Naval Medical Center in San Diego, CA, reviewed the records of 168 patients with localized or locally advanced carcinoma of the prostate who were treated with radiation between 1959 and 1970. This retrospective study provided evidence that inoperable prostate cancer is curable with radiation. However, there was not any improvement in five- or ten-year survival or disease-free rates with pelvic lymph node treatment.

Documents: Title: Medline Express Printout: Prostate Carcinoma. Radiation Treatment of the Primary and Regional Lymphatics. Document Type: Abstract; Search Printout. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHOAK-006	Soft-tissue uptake of Tc-99m MCP in secondary scrotal lymphodema

Abstract: The inclusive dates for this study conducted at the Naval Hospital in San Diego, CA, are presently undetermined. A case report was presented from one patient diagnosed with adenocarcinoma of the prostate (stage C). A Tc-99m MDP bone scan revealed an enlarged scrotum. The patient underwent surgery and subsequent radiation treatment. Radiation doses within the treatment series and results of this study are not available at this time.

Documents: Authors: B. Rama Rao; David W. Hodgens. Title: Soft-Tissue Uptake of Tc-99m MDP in Secondary Scrotal Lymphedema. Journal: Unknown. Document Type: Journal Article. Date: Unknown

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMCSO-009	Ketamine anesthesia in minor otologic procedures

Abstract: From a presently undetermined date until 1974, researchers from the Naval Medical Center in San Diego, CA, evaluated the general anesthetic, ketamine. Eighty-one pediatric patients undergoing minor ear surgeries participated. Preoperative examinations included urinalysis, leukocyte counts, hematocrit, hemoglobin measurements, and chest x-rays. Follow-up visits were scheduled ten to fourteen days after surgery. During follow-up exams, parents were questioned about gastrointestinal and cardiopulmonary symptoms and behavioral abnormalities. Results of this study are not available at this time.

Documents: Authors: Roper; Kramer. Title: Ketamine Effectiveness. Journal: Unknown. Document Type: Journal Article; Excerpt. Date: 1974 est.

NAVY 1944–1974 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMCSD-080	Phase II trial of three drug regimen consisting of Cytoxan, 5-FU, and cis-platinum in stage D adenocarcinoma of prostate

Abstract: The inclusive dates for this study conducted from the Naval Medical Center in San Diego, CA, are presently undetermined. Cytoxan, 5-fluorouracil, and cis-platinum were evaluated in the treatment of seventy-five patients with prostate cancer. Radiation therapy or P-32 was used to alleviate bone pain. Radiation doses within the treatment series and results of this study are not available at this time.

Documents: Title: Phase II Trial of Three Drug Regimen Consisting of Cytoxan, 5-FU, and Cis-Platinum in Stage D Adenocarcinoma of Prostate. Document Type: Event Profile. Date: 1994

Naval Medical Clinic, Annapolis, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NMCLANNAP-06	Fate of the acromioclavicular joint in athletic injuries

Abstract: From 1973 to 1978, researchers from the Naval Medical Clinic in Annapolis, MD, analyzed treatment methods for one hundred sixty-four acromioclavicular joint injuries. One hundred forty-eight midshipmen from the United States Naval Academy participated. After initial examinations and stress x-rays to confirm the extent of injury, follow-up exams were carried out from six months after injury for up to five years. Injuries were classified as Type 1, 2, or 3, indicating the severity of each type of injury. Evaluation suggested aggressive treatment and rehabilitation were suggested in acute acromioclavicular injuries.

Documents: Author: J. S. Cox. Title: The Fate of the Acromioclavicular Joint in Athletic Injuries. Document Type: Abstract. Date: circa 1978

Author: Capt. Jay S. Cox, MC, USN. Title: Fate of the Acromioclavicular Joint in Athletic Injuries. Journal: American Journal of Sports Medicine, vol. 9, issue 1. Document Type: Journal Article. Date: 1981

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	NMCLANNAP-01	Comparison of various means of evaluating the severity of inversion ankle sprains

Abstract: From 1974 until a presently undetermined date, researchers from the Naval Medical Clinic in Annapolis, MD, compared methods of evaluating the severity of ankle sprains. One hundred active duty military personnel participated. In all ankle sprains requiring surgery, operative findings were compared with preoperative clinical evaluations, radiography, and contrast arthrography. Results of this study are not available at this time.

Documents: Author: H. M. Black. Title: Comparison of Various Means of Evaluating the Severity of Inversion Ankle Sprains. Document Type: Proposal. Date: 1974 est.

NAVY 1944–1974 (CONTINUED)

Naval Medical Clinic, Annapolis, MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMCLANNAP-03	Study of second degree medial collateral ligament sprains of the knee
Abstract:	The inclusive dates for this study conducted at the Naval Medical Clinic in Annapolis, MD, are presently undetermined. Researchers conducted a retrospective study of twenty patients to learn if a second degree or moderate sprain of the medial collateral ligament of the knee ever tightened from its initial looseness. Researchers also determined the incidence of this injury eventually requiring surgery. Radiation exposure is not available at this time.	

Documents: Authors: W. G. Clancy; R. L. Brand; J. S. Cox. Title: Study of Second Degree Medial Collateral Ligament Sprains of the Knee. Document Type: Abstract. Date: 1975 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMCLANNAP-07	Evaluation of the modified Bristow procedure in treatment of recurrent subluxations and dislocations of shoulder
Abstract:	The inclusive dates for this study conducted at the Naval Medical Clinic in Annapolis, MD, are presently undetermined. Researchers evaluated the effectiveness of a new surgical procedure (the modified Bristow procedure) in the treatment of recurrent partial and complete dislocations of the shoulder. Study participants were 150 young, athletic, active duty military personnel. Radiation exposures were incidental to participation.	

Documents: Author: Jay S. Cox, Capt., MC, USN. Title: Evaluation of the Modified Bristow Procedure in the Treatment of Recurrent Subluxations and Dislocations of the Shoulder. Document Type: Proposal. Date: Unknown

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMCLANNAP-08	Evaluation of the Brostrom procedure for repair of chronic ruptures of the lateral ligaments of the ankle
Abstract:	The inclusive dates for this study conducted at the Naval Medical Clinic in Annapolis, MD are presently undetermined. Researchers evaluated the effectiveness of a new surgical procedure (the Brostrom procedure) for repairing chronic ruptures of ligaments in the ankle. Study participants were thirty-five active duty military personnel who underwent pre-operative stress x-rays.	

Documents: Author: Howard M. Black, Lt. Comdr., MC, USNR. Title: An Evaluation of the Brostrom Procedure for Repair of Chronic Ruptures of the Lateral Ligaments of the Ankle. Document Type: Proposal. Date: 1973 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMCLANNAP-09	Elmslie-Trillat procedures for management of dislocations and subluxations of patella
Abstract:	The inclusive dates for this study conducted at the Naval Medical Clinic in Annapolis, MD, are presently undetermined. Researchers evaluated the effectiveness of a new procedure (the	

NAVY 1944–1974 (CONTINUED)

Naval Medical Clinic, Annapolis, MD (continued)

Elmslie-Trillat procedure) for managing partial and complete dislocations of the patella. Study participants were nineteen active duty military personnel. The results are not available at this time. Radiation environments were not specified in available documents.

Documents: Author: J. S. Cox. Title: The Elmslie-Trillat Procedure for Management of Dislocations and Subluxations of the Patella. Document Type: Abstract. Date: Unknown

Naval Medical Research Institute, Bethesda, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRI-12	Measurements of gaseous exchange in connection with aviation and deep sea diving by techniques employing radioactive substances

Abstract: From a presently undetermined date until 1944, researchers from the Naval Medical Research Institute in Bethesda, MD, examined the mathematics involved with blood-tissue exchanges of inert gases. Investigators studied the relationship between regional and whole-body uptake of inert gases and the basic principles of cardiac output and functional lung surface measurements. The study is primarily a mathematical analysis, but does include a comparison of theory and experiment for the uptake of radiokrypton by the forearm tissues of a normal subject under normal conditions. Radiation exposures were not specified.

Documents: Title: Study #NMRI-12: Measurements of Gaseous Exchange in Connection with Aviation and Deep Sea Diving by Techniques Employing Radioactive Substances [Report No. 1]. Document Type: Report. Date: 8 May 1944

Authors: Lt. R. E. Smith; Ens. M. F. Morales. Title: On The Theory of Blood-Tissue Exchanges: II. Applications; and III. Circulation and Inert-Gas Exchanges in the Lung with Special References to Saturation. Journal: Bulletin of Mathematical Biophysics, vol. 6. Document Type: Journal Article. Date: 1944

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRI-15	Beta radiation lesion of the skin

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1946	NMRI-01	Biological basis of antimony compounds containing radioactive isotopes, the blood-tissue exchange and excretion of antimony in humans given a single dose of tartar emetic

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Institute, Bethesda, MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1946	NMRI-09	Use of radioactive hydrogen for measurement in vivo of total body water
Abstract:	From 1946 until a presently undetermined date, researchers from the Naval Medical Research Institute in Bethesda, MD, determined total body water content using water with hydrogen atoms replaced by tritium (a radioactive isotope of hydrogen). One individual participated, and animal studies were done as well. Tritiated water of known activity was injected, and plasma radioactivity was measured after a period of equilibrium (approximately one hour). A method was developed for measurement of radioactive water vapor, using a modified Geiger-Muller counter tube. Total-body water measurements using tritiated water agreed (to within 1 percent) with specific gravity measurements.	
Documents:	Authors: Nello Pace; Leo Kline; Howard Schachman; Morton Harfenist. Title: Use of Radioactive Hydrogen for Measurement in Vivo of Total Body Water. Document Type: Report. Date: 14 November 1946	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1946	NMRI-10	Biological studies of antimony compounds containing radioactive isotopes: evaluation of the rhodamine-B method for the assay of antimony in biological samples
Abstract:	From 1946 until a presently undetermined date, researchers from the Naval Medical Research Institute in Bethesda, MD, validated a modified rhodamine-B microchemical assay for antimony by comparison with measurements of radioactive antimony. One individual participated, and animal studies were done as well. The microchemical method proved satisfactory for urine, plasma, liver, and kidney samples having antimony concentrations greater than 0.5 microgram per gram. Further modifications were needed for analysis of red blood cells, whole blood, and spleen.	
Documents:	Authors: L. F. Hallman; J. C. Strane. Title: Radioactive Studies of Antimony Compounds Containing Radioactive Isotopes: Evaluation of the Rhodamine-B Method for the Assay of Antimony in Biological Samples. Document Type: Report. Date: 13 February 1946	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1946	NMRI-13	Treatment of radiation sickness with adrenal cortical hormone (deoxycorticosterone acetate)
Abstract:	From 1946 to 1947, researchers from the Naval Medical Research Institute in Bethesda, MD, and the Veterans Administration Hospital in the Bronx, NY, evaluated deoxycorticosterone acetate (DCA) treatments for the symptoms of radiation sickness. One female and forty-nine male patients participated in the study. After radiation treatments for a variety of benign and	

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Institute, Bethesda, MD (continued)

malignant conditions, all patients exhibited nausea and/or vomiting. Only three failed to show a reduction in symptoms after DCA therapy.

Documents: Title: The Treatment of Radiation Sickness with Adrenal Cortical Hormone (Deoxycorticosterone Acetate). Journal: [Unknown], vol. 61, issue 3. Document Type: Journal Article. Date: March 1949

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1950	NMRI-07	Study of radiogallium as a diagnostic agent in bone tumors

(For abstract and documentation, see Naval Hospital, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1952	NMRI-05	Absorption of x-rays by tissue of head and neck

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1960	NNMC-087	Use of total-body radiation in the treatment of far-advanced malignancies

(For further information, see Chapter 2—“Total-Body and Partial-Body Irradiation Studies.”)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1960	NNMC-088	Taurine excretion in humans treated by total-body radiation

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRI-08	Urinary excretion of gallium

(For abstract and documentation, see Naval Hospital, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRI-11	Body fluids in hypertension and mild heart failure

(For abstract and documentation, see Naval Hospital, Bethesda, MD.)

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Institute, Bethesda, MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRI-14	Clinical study of radiation sickness

Abstract: From 1952 until a presently undetermined date, researchers from the Veterans Administration Hospital in the Bronx, NY, and from the Naval Medical Research Institute in Bethesda, MD, studied radiation sickness resulting from irradiation therapy for a number of diseases, including cancer. During a seventeen-month period, 254 patients receiving deep roentgen therapy participated. Radiation exposures and results of this study are unavailable at this time.

Documents: Authors: Friedrich Ellinger, M.D.; Bernard Roswit, M.D.; Joseph Sorrentino, M.D. Title: A Clinical Study of Radiation Sickness; Evaluation of Etiological Factors Influencing Incidence and Severity. Journal: American Journal Roentgenology and Radiation Therapy, vol. 68, issue 2. Document Type: Journal Article. Date: August 1952

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-091	Therapeutic trials of radiogallium (Ga-72)

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

Naval Medical Research Unit 2, Taipei, Taiwan

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	NRDL-08	Changes in total body sodium and body water during acute cholera and during maintenance therapy

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NMRU2-04	Abnormalities of physiology of copper in Wilson's disease: the whole-body turnover of copper

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NMRU2-09	Cesium-137 turnover rates in human subjects of different ages

(For abstract and documentation, see National Tsing Hua University, Hsinchu, Taiwan.)

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Unit 2, Taipei, Taiwan (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	NMRU2-10	Body composition and starvation

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU2-01	Chromium-51 studies in Wilson's disease

Abstract: From a presently undetermined date until 1968, researchers from the Naval Medical Research Unit 2 stationed in Taipei, Taiwan, investigated clinical characteristics of Wilson's disease. Five patients (from two families) with Wilson's disease and one heterozygous sibling with normal laboratory studies participated. Chromium-51 labeled red blood cells (RBCs) were used for RBC mass estimations and survival studies, and external-probe counts were conducted over the spleen and liver. Among the patients, blood volume was directly correlated with splenic size; RBC survival time was found to be inversely related to splenic size. Radioactivity detected in the spleen and liver was directly related to spleen size. Definite RBC sequestration in the spleen was not proven.

Documents: Title: Chromium-51 Studies in Wilson's Disease. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU2-02	Copper absorption in Wilson's disease

Abstract: From a presently undetermined date until 1970, researchers from the Naval Medical Research Unit 2 stationed in Taipei, Taiwan, examined copper absorption through the simultaneous administration of copper-64 orally and copper-67 intravenously. Thirty-three individuals participated in the study, including seven patients with Wilson's disease, eighteen members of their families, and five normal and three cirrhotic controls. Methods included examination of copper excretion in stool, copper retention, ratio of copper isotopes in plasma, and whole-body count isotope ratios. Thirty to sixty percent of administered copper is normally absorbed, and neither homozygotes or heterozygotes for Wilson's disease had increased absorption. The increased body stores of copper in Wilson's disease was attributed to reduced biliary excretion and not increased absorption.

Documents: Title: Copper Absorption in Wilson's Disease. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU2-03	Muscle copper, zinc, and manganese levels in Wilson's disease: studies with use of neutron activation analysis

(For abstract and documentation, see National Tsing Hua University, Hsinchu, Taiwan.)

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Unit 2, Taipei, Taiwan (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NMRU2-05	Decreased calcium absorption (CaAb) on cholestyramine therapy
---------	----------	---

Abstract: The inclusive dates for this study conducted by Bethesda Naval Hospital researchers at the Naval Medical Research Unit 2 stationed in Taipei, Taiwan, are presently undetermined. Researchers evaluated the effect of cholestyramine on calcium absorption. Calcium absorption was determined from the ratio of oral to intravenous fractional calcium-47 retention, which was measured by whole-body counting. A case report was presented from one patient with excessive calcium in the urine and recurrent calcium oxalate stones. Intermittent therapy with cholestyramine was for severe itching complicating chronic active hepatitis. Cholestyramine therapy in conventional doses was found to possibly alter calcium absorption.

Documents: Authors: S. M. Fidler; W. M. Beckner; J. Sode. Title: Decreased Calcium Absorption (CaAb) on Cholestyramine Therapy. Document Type: Abstract. Date: 1972 est.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
-------------------	---------------	--------------

Unknown	NMRU2-06	Hypersplenism in Wilson's disease
---------	----------	-----------------------------------

Abstract: From a presently undetermined date until 1972, researchers from the U.S. Naval Medical Research Unit Number 2 stationed in Taipei, Taiwan, studied hematological abnormalities in Wilson's disease. Wilson's disease is a genetic defect of copper metabolism resulting in copper accumulations in the liver, brain, kidney, and other tissues. The disease is characterized by cirrhosis of the liver and brain degeneration. Thirteen patients with Wilson's disease were compared with seven patients with cirrhosis of the liver and thirteen normal controls. All of the participants were Chinese natives of Taiwan. Patients with Wilson's disease were eleven to forty-eight years old and included six males and seven females. The seven cirrhosis patients were all males ranging in age from forty to fifty-three years. In addition to routine hematological tests, iodine-125 labeled serum albumin dilution techniques were used to measure plasma volume. Red blood cells were labeled with chromium-51 (Cr-51), and external monitoring of the spleen disclosed any sequestration of labeled cells. Patients with Wilson's disease and patients with cirrhosis had lower hematocrits, white cell counts, and platelet counts than controls. These reductions were greatest in the patients with the largest spleens. Plasma volume and the body hematocrit/peripheral hematocrit ratios were significantly higher in patients with Wilson's disease and cirrhosis. Increased splenic sequestration of Cr-51 tagged red blood cells was not demonstrated in any participant. The hypersplenism in patients with Wilson's disease was similar to that found in patients with cirrhosis from other causes.

Documents: Authors: G. Thomas Strickland; N-K. Chang; William M. Beckner. Title: Hypersplenism in Wilson's Disease. Journal: Gut, vol. 13, issue 3. Document Type: Journal Article. Date: March 1972

Title: Hypersplenism in Wilson's Disease. Document Type: Search Printout. Date: 1994

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Unit 2, Taipei, Taiwan (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU2-07	Turnover studies of copper and homozygotes and heterozygotes for Wilson's disease and controls: isotope tracer studies using copper-67 and copper-64

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU2-08	Clinical studies of Capillariasis philippinensis

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU2-11	Isotope studies in intestinal capillariasis

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU2-12	Iodine-131 studies in schistosomiasis

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU2-13	Intestinal capillariasis: new disease in man

Abstract: From a presently undetermined date until 1969, researchers from the Naval Medical Research Unit 2, stationed in Taipei, Taiwan, and the San Lazaro Hospital in Manila, Philippines, characterized the clinical and pathophysiological features of intestinal capillariasis. Twenty-six people participated: eleven Filipino patients and fifteen asymptomatic relatives. Of the patients, nine were males between the ages of ten and fifty, and two were females aged thirty-three and seventy years. Asymptomatic relatives, selected as a control group, included fourteen males ranging in age from seventeen to sixty-two years. The only female control was twenty-three years old. Participants were studied at the hospital for six weeks and followed monthly as outpatients. This study was initiated following an epidemic of severe diarrhea and malabsorption resulting in the deaths of more than 100 people in

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Unit 2, Taipei, Taiwan (continued)

the northern Philippines in 1967. From surveys associated with the epidemic and conducted before the study, the disease was documented as affecting males more frequently than females. For this study, mildly to severely affected patients with *Capillaria philippinensis* eggs in their stool were studied. *Capillaria philippinensis* was a newly discovered species of roundworm, the first *Capillaria* species to infect human intestine—and in epidemic proportions. Symptoms of infection included abdominal pain, diarrhea, muscle wasting, and edema, which often led to debility and death in two to four months. Clinical studies had shown the presence of a severe protein-losing intestinal disease (enteropathy) and malabsorption of fats and sugars. Testing during the diagnostic phase of this study was to determine whether protein loss was present. Intravenous injections of chromium-51 labeled albumin and testing of stool for radioactivity confirmed enteropathy. An effective treatment, consisting of fluid and electrolyte replacement and prolonged anthelmintic therapy with thiabendazole was identified as a result of the study.

Documents: Authors: G. E. Whalen et al. Title: Intestinal Capillariasis: A New Disease in Man. Journal: The Lancet. Document Type: Journal Article. Date: 4 January 1969

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU2-14	Preliminary observations on a new disease in man—intestinal capillariasis

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU2-18	Tissue copper, zinc, and manganese levels in Wilson's disease: studies with the use of neutron activation analysis

Abstract: From a presently undetermined date until June 1970, researchers at the Naval Medical Research Unit No. 2 in Taipei, Taiwan, studied tissue copper, zinc, and manganese levels in tissues obtained at autopsy from three patients with Wilson's disease. Copper, zinc, and manganese levels were determined by neutron activation analysis. Investigators compared the mean copper concentration in tissues of individuals who had Wilson's disease to those who had died from other causes. Tissues from the latter two served as controls. The mean copper concentration in the brain and liver of the three patients with Wilson's disease was nine to thirty times greater than that of the two controls. The copper concentration in tissue studied from two patients who had received penicillamine therapy for twelve to fourteen months was only slightly higher than the values from the controls. The one patient who did not receive penicillamine therapy had marked elevations in copper concentration in all tissues studied. Zinc and manganese tissue concentrations did not differ appreciably between patients and controls. These data suggested that penicillamine therapy results in a reduction of the tissue copper as follows: 1) most rapidly from the kidney, 2) more slowly from the liver and other selected tissues in this study, and 3) slowest from the central nervous system. The very high concentration of splenic and muscle copper in the untreated patient suggested that the patient was supersaturated with copper.

Documents: Authors: M. L. Leu; G. T. Strickland; S. J. Yeh. Title: Tissue Copper, Zinc, and Manganese Levels in Wilson's Disease: Studies with the Use of Neutron Activation Analysis. Document Type: Report. Date: March 1971

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Unit 3, Cairo, Egypt

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1954	NMRU3-27	Needle biopsy of the lung

Abstract: From 1954 to 1956, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, assessed the use of a specific type of needle when removing tumor tissue for biopsy. The Vin Silverman needle was compared with standard aspiration techniques for tissue biopsy. Thirteen male patients with cancer of various kinds participated in this study. X-rays were used to identify the position of the lesion before biopsy. Results of the study are not available at this time.

Documents: Title: Needle Biopsy of the Lung. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1960	NMRU3-33	Studies on the mechanism of anemia in parasitic diseases

Abstract: From 1960 until 1965 researchers from the Naval Medical Research Unit 3 Cairo, Egypt and Vanderbilt University School of Medicine in Nashville, TN, examined the mechanism of anemia in parasitic diseases. This study had four objectives: 1) to evaluate iron absorption, loss, and metabolism in various parasitic diseases; 2) to evaluate red cell and plasma volumes, red cell life span, blood proteins and blood loss in the same patients; 3) to evaluate changes in these parameters subsequent to specific anti-parasite or iron therapy; and 4) to provided a basis for planning effective methods for prevention and therapy of anemia associated with parasitic disease. To date no information is available on the number of participants. Adult male patients ranging in age from fifteen to thirty-five years with hookworm and hypochromic microcytic anemia were included in the study. Another group of controls was selected who had no evidence of disease, no anemia and no evidence of iron depletion. Initially, a sample of each patient's blood was tagged with chromium-51 (Cr-51) and a red cell volume and plasma volume measured. Following the Cr-51 study, each patient received tracer doses of iron-59 orally to measure iron absorption. Simultaneously, samples of blood were taken at appropriate intervals to measure plasma iron disappearance time, plasma iron turnover, iron utilization, and iron turnover in red blood cells. This study showed a relationship between the severity of anemia and magnitude of the hookworm infestation as quantified by the number of parasites expelled after administration of an effective vermifuge.

Documents: From: C. B. Galloway, Rear Admiral, Medical Corps, US Navy, Director, Research Division To: William J. Darby. Subject: Comments and proposed changes regarding study on the mechanism of anemia in parasitic diseases. Document Type: Letter. Document Date: 04 December 1959

Authors: William J. Darby, Professor of Biochemistry. Title: Studies on the mechanism of anemia in parasitic diseases. Document Type: Proposal. Document Date: 1960 est

Authors: William J. Darby; William N. Pearson. Title: Final report to Office of Naval Research: A program of research on problems of malnutrition in the Middle East and Africa. Document Type: Report. Document Date: 10 January 1965

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	NMRU3-20	Chromium red cell half-life in severe iron deficiency anemia

Abstract: In 1965, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, along with investigators at Vanderbilt University School of Medicine in Nashville, TN, studied anemia in

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Unit 3, Cairo, Egypt (continued)

Ancylostoma duodenale parasitic infections. Twenty-seven Egyptian patients participated. Chromium-51 labeled red blood cells were used to measure red cell survival. Radiation exposures and results of this study are unavailable at this time.

Documents: Title: Chromium Red Cell Half-Life in Severe Iron Deficiency Anemia. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	NMRU3-23	Blood loss in pure <i>Ancylostoma duodenale</i> infection in Egyptian farmers

Abstract: In 1965, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, with investigators from Vanderbilt University School of Medicine in Nashville, TN, studied blood and iron losses accompanying *Ancylostoma duodenale* parasitic infections. Twelve Egyptian patients participated. The objectives were to correlate egg count, worm load, blood and iron loss, and degree of anemia. Chromium-51 labeled red blood cells were used to measure blood loss. Results of this study are unavailable at this time

Documents: Title: Blood Loss in Pure *Ancylostoma Duodenale* Infection in Egyptian Farmers. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1966	NMRU3-30	Blood loss in Egyptian farmers infected with <i>Ancylostoma duodenale</i>

Abstract: In 1966, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, studied blood loss accompanying *Ancylostoma duodenale* parasitic infections. Twelve Egyptian patients participated. Red blood cells were collected from the patients, radiolabeled with chromium-51 according to standard clinical methods, and reinjected. Blood and stool samples were collected over a four day period and measured for radioactivity. Results of this study are unavailable at this time.

Documents: Title: Blood Loss in Egyptian Farmers Infected with *Ancylostoma Duodenale*. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	NMRU3-12	Urinary schistosomiasis: a 5-year clinical, radiological, and functional evaluation

Abstract: From 1967 to 1971, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, studied urinary schistosomiasis. The study involved ten male Egyptian patients between the ages of nine and twenty-nine infected with *Schistosoma haematobium*. Urograms were conducted during treatment. Patients were followed for a five-year period before and after antischistosomal treatments. Results of this study are unavailable at this time.

Documents: Title: Urinary Schistosomiasis: A 5-Year Clinical, Radiological, and Functional Evaluation. Document Type: Event Profile. Date: 1994

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Unit 3, Cairo, Egypt (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	NMRU3-19	Blood loss in chronic <i>Schistosoma mansoni</i> infection in Egyptian farmers

Abstract: In 1968, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, along with investigators at Kasr-el-Aini Hospital assessed blood loss accompanying schistosomal infections. Seven Egyptian patients infected with *Schistosoma haematobium* participated in this study. Chromium-51 labeled red blood cells were used to measure gastrointestinal blood loss in patients with colonic and rectal polyps due to schistosomiasis.

Documents: Title: Blood Loss in Chronic *Schistosoma Mansoni* Infection in Egyptian Farmers. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1967	NMRU3-22	Symptomatic, radiological, and functional improvement following treatment of urinary schistosomiasis in Egypt

(For abstract and documentation, see Ain Shams University, Cairo, Egypt.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1968	NMRU3-18	Urinary blood loss in <i>Schistosoma haematobium</i> infection in Egyptian farmers

(For abstract and documentation, see Kasr-el-Aini Hospital, Cairo, Egypt.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	NMRU3-10	Some effects of louse-borne relapsing fever on the function of the heart

(For abstract and documentation, see Ahmadu Bello University, Zaria, Nigeria.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	NMRU3-17	Histological and lymphangiographic studies in patients with clinical lepromatous leprosy

(For abstract and documentation, see Ministry of Health, United Arab Republic.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NMRU3-02	Urinary schistosomiasis in Egypt: further radiological correlations

Abstract: From 1971 to 1973, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, investigated the causes and frequency of urinary schistosomiasis. A radiological survey of visible lesions with obstructed urinary bladders due to parasitic infection was conducted. One

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Unit 3, Cairo, Egypt (continued)

hundred fifty-three male Egyptian patient urograms were reviewed. Radiation exposures and results of this study are not available at this time.

Documents: Authors: S. W. Young; Z. Ferid; B. Bassily; N. A. El Masry. Title: Urinary Schistosomiasis in Egypt: Further Radiological Correlations. Document Type: Report. Date: 28 February 1973

Title: Medline Express Printout: Urinary Schistosomiasis in Egypt: Further Radiological Correlations. Document Type: Search Printout. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NMRU3-11	Colonic calcification and polyposis in schistosomiasis

Abstract: In 1971, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, examined gastrointestinal disorders caused by parasitic infections. A single male Egyptian patient participated. This study describes clinical and radiological features of a case of mixed infection with *Schistosoma mansoni* and *Schistosoma haematobium*. Exposure to radiation was incidental to participation in this study. Results of this study are not available at this time.

Documents: Title: Colonic Calcification and Polyposis in Schistosomiasis. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1971	NMRU3-21	Hydroenphosis, bacteriuria, and maximal urine concentration in urinary schistosomiasis

Abstract: From 1971 until a presently undetermined date, researchers at the Naval Medical Research Unit 3 stationed in Cairo, Egypt, studied kidney function in *Schistosoma haematobium* infections. Eighty-four male Egyptian patients participated. Conventional intravenous urography was done on all patients. Radiation exposures and results of this study are not available at this time.

Documents: Title: Hydroenphosis, Bacteriuria, and Maximal Urine Concentration in Urinary Schistosomiasis. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NMRU3-07	Acute haemolysis with ambilhar treatment in glucose-6-phosphate dehydrogenase deficiency

Abstract: In 1972, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, investigated the loss of red blood cells during drug therapy for schistosomal infections. Two male Egyptian patients with schistosomiasis participated. This was a clinical study of the survival of chromium-51 labeled red blood cells. Radiation exposures and results of this study are not available at this time.

Documents: Title: Acute Haemolysis with Ambilhar Treatment in Glucose-6-Phosphate Dehydrogenase Deficiency. Document Type: Event Profile. Date: 1994

310 Appendix 1—Records Search

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Unit 3, Cairo, Egypt (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NMRU3-08	Changes in hepatic blood flow and blood volume after splenectomy for bilharzial hepatosplenic fibrosis dehydrogenase deficiency

(For abstract and documentation, see Ain Shams University, Cairo, Egypt.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NMRU3-04	Radioactive renography in schistosomal obstructive uropathy

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1973	NMRU3-32	Urinary schistosomiasis in Egypt: clinical, radiological, bacteriological, and parasitological correlations

Abstract: In 1973, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, characterized urinary schistosomal infections. Two hundred male Egyptian patients with parasitic schistosomiasis affecting the urinary tract participated. Excretory urography using 50 percent diatrizoate sodium was done to assess the extent of urinary tract involvement. Results of this study are not available at this time.

Documents: Title: Urinary Schistosomiasis in Egypt: Clinical, Radiological, Bacteriological, and Parasitological Correlations.
Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU3-06	Schistosomiasis of the liver: clinical, pathological and laboratory studies in Egyptian cases

(For abstract and documentation, see Cairo University Hospital, Cairo, Egypt.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU3-13	Treatment of chronic urinary Salmonella carriers

(For abstract and documentation, see Abbassia Fever Hospital, Cairo, Egypt.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU3-14	Intestinal protein loss in schistosomal polyposis of colon

(For abstract and documentation, see Kasr-el-Aini Hospital, Cairo, Egypt.)

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Unit 3, Cairo, Egypt (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU3-15	Chronic urinary Salmonella carriers with intermittent bacteraemia

(For abstract and documentation, see Abbassia Fever Hospital, Cairo, Egypt.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU3-16	Urinary schistosomiasis treated with niridazole (Ambilhar): quantitative evaluation

(For abstract and documentation, see Abbassia Fever Hospital, Cairo, Egypt.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU3-28	Diagnosis and management of hepatic abscess of amebic origin

Abstract: From a presently undetermined date until 1955, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, used fluoroscopy with diagnostically difficult cases of amebic abscesses in the liver. Three male patients participated. Results of the study are unavailable at this time.

Documents: Title: Diagnosis and Management of Hepatic Abscess of Amebic Origin. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU3-29	Observations of the natural history of amebiasis: preliminary report

Abstract: From a presently undetermined date until 1955, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, investigated accurate methods for diagnosing amebiasis. Thirteen asymptomatic male patients and thirteen matched controls participated in this study for twenty-three weeks. Routine chest x-rays were taken at the beginning and end of the study, and fluoroscopy was done on all participants at the end of the study. Results of the study are unavailable at this time.

Documents: Title: Observations of the Natural History of Amebiasis: Preliminary Report. Document Type: Event Profile. Date: 1994

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU3-31	Iron loss and reabsorption in Ancylostoma duodenale infection and bilharzial colonic polyposis

Abstract: From a presently undetermined date until 1970, researchers from the Naval Medical Research Unit 3 stationed in Cairo, Egypt, investigated iron loss and reabsorption in the gastrointestinal tract during parasitic infection and treatment. Seven male Egyptian patients with Ancylostoma duodenale infections and schistosomal colon polyps participated. Sodium chromate-chromium-51 (containing the radioisotope chromium-51) was used to label red blood cells according to

312 Appendix 1—Records Search

NAVY 1944–1974 (CONTINUED)

Naval Medical Research Unit 3, Cairo, Egypt (continued)

standard clinical methods. Blood and stool samples were collected over a four day period and measured for radioactivity. Results of this study are not available at this time.

Documents: Title: Iron Loss and Reabsorption in Ancylostoma Duodenale Infection and Bilharzial Colonic Polyposis. Document Type: Event Profile. Date: 1994

Naval Radiological Defense Laboratory, Hunters Point, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1951	NHOAK-045	Clinical studies with radioactive iron

(For abstract and documentation, see Naval Hospital, Oakland, CA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1951	NHOAK-046	The effect of radiation on antibody production in the human

(For abstract and documentation, see Naval Hospital, Oakland, CA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1951	NHOAK-047	A study of the use and effects of I-131 in patients with thyroid carcinoma

(For abstract and documentation, see Naval Hospital, Oakland, CA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1951	NHOAK-048	The effect of radiation on plasma phospholipids in humans

(For abstract and documentation, see Naval Hospital, Oakland, CA.)

Naval Radiological Defense Laboratory, San Francisco, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1948	NRDL-01	Observations on the thermal fragility of erythrocytes

Abstract: From 1948 to 1950, researchers from the Naval Radiological Defense Laboratory in San Francisco, CA, examined the effects of temperature on red blood cells (RBCs) and the correlation between RBC fragility and red cell count. Nineteen research participants provided RBCs for study. Guinea-pig, rabbit, and rat RBCs were also studied. Human RBCs were the least heat sensitive. Results suggested that a relationship existed between heat sensitivity of

NAVY 1944–1974 (CONTINUED)

Naval Radiological Defense Laboratory, San Francisco, CA (continued)

RBCs and their susceptibility to in vivo destruction. Radiation environments were not specified in the available documents.

Documents: Authors: Leontine Goldschmidt; Robert L. Rosenthal. Title: Study #NRDL-01: Observations on the Thermal Fragility of Erythrocytes. Document Type: Report. Date: 24 November 1950

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	NRDL-04	Some aspects of recent findings pertaining to the body composition of athletes, obese individuals and patients

Abstract: From 1955 to 1958, researchers from the Naval Radiological Defense Laboratory in San Francisco, CA, analyzed the body composition of thirty-two participants. Participants included patients, weight lifters, and healthy individuals with an average physique. Groups were composed of both men and women. Procedures included determination of whole-body density and the use of radionuclide dilution techniques. Results of the study compared each type of participant on body fat content, body density, total body water, exchangeable sodium, chloride, and potassium in the body.

Documents: Authors: A. R. Behnke; W. L. Taylor. Title: Some Aspects of Recent Findings Pertaining to the Body Composition of Athletes, Obese Individuals and Patients. Document Type: Report. Date: 30 June 1959

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	NRDL-03	Protecting and cleaning hands contaminated by synthetic fallout under field conditions

(For abstract and documentation, see Camp Stoneman, CA.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1958	NRDL-07	Some factors influencing beta-dosage of troops

Abstract: From 1958 to 1959, researchers from the Naval Radiological Defense Laboratory in San Francisco, CA, examined contamination from synthetic fallout under simulated combat conditions. Researchers were interested in studying the conditions under which combat troop exposure to fallout might result in beta radiation-induced skin lesions. Ninety-three active duty military combat personnel crawled across a test area covered with synthetic fallout containing lanthanum-140 (La-140) as a tracer. Contamination was measured at sixteen body locations. Soil loading from fallout and exposure to La-140 were considered in determining contact beta dose. Sources contributing to total beta exposure were soil (from fallout), clothing, and skin contamination. Results showed that clothing contained five times the contaminant found on skin.

Documents: Author: W. J. Friedman. Title: Radiological Safety Report; Operation Stoneman II [Study #NRDL-07: Some Factors Influencing the Beta-Dosage of Troops]. Document Type: Report. Date: 1 May 1959

NAVY 1944–1974 (CONTINUED)

Naval Radiological Defense Laboratory, San Francisco, CA (continued)

Author: R. H. Black. Title: Stoneman II Test of Reclamation Performance; Volume V; Some Contaminability Characteristics of Personnel Exposed to Contact Beta Radiation. Document Type: Report. Date: 1959 est.

Author: R. H. Black. Title: Some Factors Influencing the Beta-Dosage to Troops. Journal: Health Physics, vol. 8. Document Type: Journal Article. Date: 1962

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1958	NRDL-09	Improved plastic well scintillators for beta counting
Abstract:	From 1958 to 1959, researchers from the Naval Radiobiological Defense Laboratory in San Francisco, CA, analyzed plastic well scintillators as detectors for beta counting, described their use and characteristics, and determined their application in measuring radioactive potassium (K-42) in urine samples. Before this study, exchangeable potassium was assessed by measuring K-42 in urine or serum samples taken during the twenty-four-hour period after tracer administration (fifty microcuries of K-42). Shortly before the study was conducted, it was found that, to ensure optimum accuracy, samples should be collected for a forty-hour period to measure exchangeable potassium in sick patients. One individual participated in this study. Urine samples were collected for more than forty hours after the injection of K-42. Results showed that plastic well scintillators achieved a tenfold increase in counter sensitivity.	
Documents:	Author: E. A. Boling. Title: Improved Plastic Well Scintillators for Beta Counting. Journal: International Journal of Applied Radiation and Isotopes, vol. 5. Document Type: Journal Article. Date: 1959	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NRDL-02	Decontamination of synthetic radioactive fallout from intact human skin
Abstract:	From a presently undetermined date until 1956, researchers from the Naval Radiological Defense Laboratory, Health Physics Division, in San Francisco, CA, researched methods of personnel decontamination. Forty-five research participants evaluated various items, including a multi-head shower for field decontamination. Radiation exposures and results of this study are unavailable at this time.	
Documents:	From: A. L. Baietti. To: J. J. Fitzgerald. Subject: [summary of early findings for: decontamination of synthetic radioactive fallout from intact human skin]. Document Type: Letter. Date: 6 November 1956	
<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NRDL-05	Total exchangeable potassium and chloride and total body water in healthy men of varying water and fat content
Abstract:	From a presently undetermined date until 1959, researchers from the Naval Radiological Defense Laboratory in San Francisco, CA, developed techniques for analyzing body composition. Techniques were developed to measure total body fat, water, and sodium, potassium, and chloride electrolytes. Knowledge of proportions of potassium and chloride in	

NAVY 1944–1974 (CONTINUED)

Naval Radiological Defense Laboratory, San Francisco, CA (continued)

relation to total body water and fat were to serve as baseline indicators for comparison with accepted standards of the day. Deviations from standard values could be related to disease or developmental abnormalities. Total red cell mass, basal oxygen consumption, cardiac output, and other parameters were thought to be related to the active red cell mass as determined by body water and electrolyte content. Thirty-seven healthy males, of varying fat and water content from lean to obese, participated. Intravenous injections were made of the following tracers: fifty microcuries of potassium-42 (K-42), 5 microcuries of bromine-82 (Br-82), and 1 millicurie of hydrogen-3 (H-3 as tritiated water). The total dose per individual was less than 0.2 rad. Urine was collected from each participant during the entire forty-hour experiment. Results showed a marked correlation between amounts of exchangeable potassium or chloride and body water. Exchangeable chloride decreased in proportion to the relative amount of body fat.

Documents: Authors: E. A. Boling; W. L. Taylor; C. Entenman; A. R. Behnke. Title: Total Exchangeable Potassium and Chloride and Total Body Water in Healthy Men of Varying Water and Fat Content. Document Type: Report; Memorandum. Date: 4 May 1959

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NRDL-06	Rapid assay procedures for tritium labeled water in body fluids

Abstract: From a presently undetermined date until 1959, researchers from the Naval Radiological Defense Laboratory in San Francisco, CA, developed an analytical technique for tritium as a tracer for exchangeable body water. There was considerable interest at the time in replacing deuterium oxide as the standard tracer. This study was part of a larger project developing methods of determining body composition. Two methods were tested: rapid vacuum sublimation and simplified internal standardization. Research participants were twelve healthy individuals. Calculation of body water was partly based on the ratio of total radioactivity injected minus an amount of radioactivity excreted. Rapid vacuum sublimation was preferred for accuracy, simplicity, and time. Simplified internal standardization gave results of similar accuracy, provided the water content of the original sample was known.

Documents: Authors: B. A. Vaughn; E. A. Boling. Title: Rapid Assay Procedures for Tritium Labeled Water in Body Fluids. Document Type: Report. Date: 28 December 1959

Naval Regional Medical Center, Oakland, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1974	NHOAK-007	Early determination of the incidence and healing of aseptic necrosis of femoral head following trauma utilizing radioisotope scan

At the time of publication, there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

316 Appendix 1—Records Search

NAVY 1944–1974 (CONTINUED)

Naval Regional Medical Center, Oakland, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHOAK-013	NCOF 3L91 Liver

Abstract: The inclusive dates for this study conducted at the Naval Regional Medical Center in Oakland, CA, are presently undetermined. Researchers proposed to compare intra-arterial chemotherapy plus hepatic radiation to intravenous chemotherapy plus hepatic radiation to hepatic radiation alone. Response rates, survival data, response duration, and toxicity of each therapy were to be examined. The protocol called for patients between the ages of sixteen and seventy five with inoperable liver cancer alone or confirmed cancer of any origin with liver disease. Radiation doses within the treatment series, results of this study, and the number of participants are not available at this time.

Documents: Title: Excerpt Relating to Study NHOAK-13: NCOF 3L91 Liver. Document Type: Protocol. Date: Unknown

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHOAK-021	Scintigraphic arthrography using 99m-technetium sulfur colloid

Abstract: The inclusive dates for this study conducted at the Naval Regional Medical Center in Oakland, CA, are presently undetermined. Researchers investigated the usefulness of technetium-99m (Tc-99m) sulfur colloid injections into joints for diagnostic procedures after arthroplasty. Following the traditional workup with plain x-rays and nuclear scans, Tc-99m was injected into the joint after the standard aspiration and contrast arthrogram. Eighteen female and six male patients participated in the study, and twenty-six arthrograms were taken. Results of this study are not available at this time.

Documents: Title: Progress Summary Relating to Study NHOAK-21: Scintigraphic Arthrography Using 99m-Technetium Sulfur Colloid. Document Type: Report. Date: Unknown

Naval Regional Medical Center, Philadelphia, PA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	NHPHIL-006	Use of cephalothin peritoneal irrigation in appendicitis

(For abstract and documentation, see Naval Hospital, Philadelphia, PA.)

Naval Submarine Medical Research Laboratory, Groton, CT

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHCHEL-023	Effects of hyperbaric exposure on human platelets

(For abstract and documentation, see Naval Blood Research Laboratory, Chelsea, MA.)

NAVY 1944–1974 (CONTINUED)

New York Hospital-Cornell Medical Center, New York, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	ONR-22	The physiologic effects of hypometabolism upon cardiovascular dynamics in patients with cardiac insufficiency

Abstract: In 1955, researchers at the New York Hospital and Cornell Medical Center in New York, NY, proposed to study the physiologic effects of hypometabolism upon cardiovascular dynamics. The purpose of the study was to explore the physiological, hemodynamic, metabolic, and clinical effects of radioiodine-induced hypometabolism in patients with intractable congestive heart failure. The proposal called for at least twenty patients in order to complete the series. Complete hemodynamic evaluation, using the methods of cardiac catheterization and its accessory techniques, was to be performed before therapy and again following the induction of hypometabolism. The clinical studies and the clinical response of the patient to treatment with iodine-131 were to be correlated with the physiologic data resulting from the comprehensive studies. Results for this study are currently unavailable.

Documents: Author: Daniel S. Lukas, M.D. Title: The Physiologic Effects of Hypometabolism upon Cardiovascular Dynamics in Patients with Cardiac Insufficiency. Document Type: Proposal. Date: 1955 est.

Northwestern University, Evanston, IL

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-34	The study of hemorrhagic tendencies of irradiated subjects

At the time of publication there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Ohio State University, Columbus, OH

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1948	ONR-36	Radio-autographs

At the time of publication there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

318 Appendix 1—Records Search

NAVY 1944–1974 (CONTINUED)

Ohio State University Research Foundation, Columbus, OH

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-19	Research on the production of clinical roentgenograms by means of compact radioactive x-ray and gamma-ray sources

At the time of publication there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-46	Research on the production of clinical roentgenograms by means of compact radioactive x-ray and gamma-ray sources

At the time of publication there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Peter Bent Brigham Hospital, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1949	ONR-03	Persistence and utilization of maternal iron for blood formation during infancy

(For abstract and documentation, see Boston Lying-In Hospital, Boston, MA.)

Presbyterian Medical Center, San Francisco, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1963	ONR-29	Clinical studies on the use of PVP preserved blood

At the time of publication there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Radioactivity Center, Massachusetts Institute of Technology, Cambridge, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1949	ONR-03	Persistence and utilization of maternal iron for blood formation during infancy

(For abstract and documentation, see Boston Lying-In Hospital, Cambridge, MA.)

NAVY 1944–1974 (CONTINUED)

Research Laboratory, Linde Company, Division of Union Carbide

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-15	Research on procedures for the low-temperature preservation of blood

Abstract: The dates for this research program conducted by investigators from the Linde Company of Union Carbide, the VA Hospital in Buffalo, NY, and the Roswell Park Memorial Institute in Buffalo, NY, are presently undetermined. Researchers sought to develop a red blood cell preparation that could be infused without post-thaw processing and a simple post-thaw separation procedure for use in whole blood and red cell suspension preservation and transfusion. The program combined a variety of both rabbit and human in vitro and in vivo studies to evaluate a process that involved the removal of a portion of plasma from whole blood and replacement of the plasma with the same volume of protective additive. Protective additives included polyvinylpyrrolidone (PVP) and Haemaccel. The total number of study participants is not available at this time. One study involved chromium-51 tagging for the measurement of circulating red cell volumes of three human donors. Two donors were known to be polycythemic. Donors were also tagged with iron-59 (twenty to forty microcuries as ferrous citrate) by intravenous injection. Blood samples were drawn daily for eight to ten days following injection, and from the radioactivities of the blood specimens, the percentage of the injected radioactivity that had been incorporated into the red cells was calculated. Final results of the program are not available at this time.

- Documents:
- Author: A. P. Rinfret. Title: Bimonthly Report No. 2 Research on Procedures for the Low-Temperature Preservation of Blood. Document Type: Report. Date: 1 May 1963
 - Author: A. P. Rinfret. Title: Bimonthly Report No. 3 Research on Procedures for the Low-Temperature Preservation of Blood. Document Type: Report. Date: 1 July 1963
 - Author: A. P. Rinfret. Title: Bimonthly Report No. 4 Research on Procedures for the Low-Temperature Preservation of Blood. Document Type: Report. Date: 1 August 1963
 - Author: A. P. Rinfret. Title: Bimonthly Report No. 5 Development of Procedures for the Low-Temperature Preservation of Blood. Document Type: Report. Date: 1 November 1963

Roswell Park Memorial Institute, Buffalo, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-15	Research on procedures for the low-temperature preservation of blood

(For abstract and documentation, see Research Laboratory, Linde Company, Division of Union Carbide.)

St. Clare's Hospital, New York, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	NMRU3-17	Histological and lymphangiographic studies in patients with clinical lepromatous leprosy

(For abstract and documentation, see Ministry of Health, United Arab Republic.)

320 Appendix 1—Records Search

NAVY 1944–1974 (CONTINUED)

St. Paul's Hospital, Addis Ababa, Ethiopia

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1969	NMRU3-10	Some effects of louse-borne relapsing fever on the function of the heart

(For abstract and documentation, see Ahmadu Bello University, Zaria, Nigeria.)

San Francisco Children's Hospital, San Francisco, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1963	ONR-29	Clinical studies on the use of PVP preserved blood

(For abstract and documentation, see Presbyterian Medical Center, San Francisco, CA.)

San Lazaro Hospital, Manila, Philippines

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRU2-13	Intestinal capillariasis: new disease in man

(For abstract and documentation, see Naval Medical Research Unit 2, Taipei, Taiwan.)

Strong Memorial Hospital, University of Rochester, Rochester, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1946	ONR-14	Immunologic studies on red blood cells

At the time of publication there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Submarine Development Group ONE, San Diego, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	SMRL-04	Longitudinal health study: a multiphasic medical surveillance program for U.S. Navy submarine and diving personnel

Abstract: From 1972 until a presently undetermined date, researchers at the Naval Submarine Medical Research Laboratory in New London, CT, began a long-term surveillance program designed to

NAVY 1944–1974 (CONTINUED)

Submarine Development Group ONE, San Diego, CA

analyze health parameters among submarine and diving personnel occupationally exposed to unique environmental stresses. More than 600 Navy personnel volunteered for the project. Participants came from one of three groups: submarine personnel attached to the Fleet Ballistic Missile ships of Submarine Group TWO, New London, CT; diving personnel attached to the Escape Training Tank in Groton, CT; and diving students commencing saturation training at Submarine Development Group ONE, San Diego, CA. Traditional as well as specialized health data was collected. Anticipated and unanticipated biological effects of unique environmental stresses were to be identified with the goal of controlling them. The results of the study are unavailable at this time.

Documents: Author: Lt. Comdr. William A. Tansey, MC, USNR. Title: Longitudinal Health Study: A Multiphasic Medical Surveillance Program for US Navy Submarine and Diving Personnel. Document Type: Report. Date: 31 May 1974

Title: Document Control Data—R & D. Document Type: Abstract. Date: 31 May 1974

Submarine Medical Research Laboratory, New London, CT

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1961	SMRL-05	Method for improving accuracy of air particulate activity measurements

Abstract: From 1961 to 1962, researchers from the Naval Submarine Medical Research Laboratory in New London, CT, measured the air particulate radioactivity in nuclear-powered submarines to confirm adequacy of engineering and radiation controls. Four members of the Blue Crew of a nuclear-powered submarine, the USS Robert E. Lee (SSBN-601), received whole-body counts to establish their background levels of radiation before exposure to radioactivity or nuclear reactors. They were similarly tested after participating in a sixty-day patrol on board a nuclear submarine. Air particulate activity under normal operating conditions was well within the prescribed conservative limits for protection against beta radiation. This study also provided tentative evidence that long-lived gamma activity retained within the body does not result from association with naval nuclear power plants but rather from general slight increases in background from nuclear fallout.

Documents: Author: Lt. Clement H. Darby, MC, USN. Title: Method for Improving Accuracy of Air Particulate Activity Measurements. Document Type: Report. Date: 4 October 1962

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1972	SMRL-04	Longitudinal health study: a multiphasic medical surveillance program for U.S. Navy submarine and diving personnel

(For abstract and documentation, see Submarine Development Group ONE, San Diego, CA.)

322 Appendix 1—Records Search

NAVY 1944–1974 (CONTINUED)

Submarine Medical Research Laboratory, New London, CT (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	SMRL-01	Aerotitis media in submariners

(For further information, see Chapter 3—“Nasopharyngeal Irradiation Therapy.”)

Documents: Authors: Lt. Henry L. Haines, MCS, USNR; Lt. J. Donald Harris, H(S), USNR. Title: Aerotitis Media in Submariners, Interval Report No. 1 on Bureau of Medicine and Surgery Research Division Project X-434 (Sub No. 90); Aerotitis Media Among Submariners—Prevention and Treatment, Section A. Document Type: Report. Date: 18 February 1946

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	SMRL-02	Radium therapy in aerotitis media

(For further information see Chapter 3—“Nasopharyngeal Irradiation Therapy.”)

Thyroid Clinic of Massachusetts Hospital, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1948	ONR-04	Effect of total thyroidectomy on function of metastatic thyroid cancer

(For abstract and documentation, see Massachusetts Institute of Technology, Cambridge, MA.)

Tulane University, New Orleans, LA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1947	ONR-40	Mass spectrometer development and application

At the time of publication there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Tulane University School of Medicine, New Orleans, LA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1963	ONR-27	Urology and renal physiology

Abstract: From 1963 to 1965, researchers from the Tulane University School of Medicine in New Orleans, LA, studied alterations in renograms and renal photoscans of patients who had undergone renal transplantation. The study reported the course of treatment for two male patients and two female

NAVY 1944–1974 (CONTINUED)

Tulane University School of Medicine, New Orleans, LA (continued)

patients who had each received chimpanzee kidneys after having been in terminal renal failure. Three patients died by the sixty-second day after transplant, and one by nine months. Serial renograms and renal photoscans using sodium iodohippurate iodine-131 (radiohippuran) were performed during the postoperative period in each patient. For the renograms, radiohippuran was given as a single intravenous dose of one microcurie per each five kilograms of body weight. For the renal photoscans, a priming dose of 100 microcuries was given, followed at times by a constant intravenous infusion of 300 microcuries over a forty-five minute period. Alterations in the radiohippuran renograms and renal photoscans were thought to have been related to intrarenal edema, denoting rejection. Researchers felt that identification of alterations by these methods was of significant diagnostic and prognostic value.

Documents: Author: J. U. Schlegel, M.D. Title: Therapeutic Application of Renal Physiology. Journal: The Journal of the Arkansas Medical Society, vol. 59, no. 9. Document Type: Journal Article. Date: February 1963

Author: J. U. Schlegel, M.D. Title: Urology and Renal Physiology. Journal: The Journal of the Louisiana State Medical Society, vol. 115, no. 12. Document Type: Journal Article. Date: December 1963

Authors: Jack E. Mobley, M.D.; J. U. Schlegel, M.D. Title: Radiohippuran Accumulation in the Transplanted Kidney as a Signal of Rejection. Journal: Surgery, vol. 58, no. 5. Document Type: Journal Article. Date: November 1965

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-32	Investigation of protein synthesis by use of the isotope N-15

At the time of publication there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

University Hospitals of Cleveland, Cleveland, OH

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1953	ONR-43	The use of the artificial kidney in human patients

Abstract: From January 1953 until December 1953, researchers from the University Hospitals of Cleveland proposed to study further application and evaluation of the Skeggs-Leonard artificial kidney. This unit was the only one that permitted the withdrawal of fairly large quantities of water from patients, while at the same time removing nitrogenous waste products and restoring to normal the electrolyte pattern. Techniques using radioactive iodinated albumin, sodium-24, bromide-82, and antipyrine were to be used to measure body fluid compartments in anuric patients. By these techniques plus direct tissue analysis, as well as analysis of the dialyzate, the researchers intended to determine the alterations resulting from anuria and the effect of the artificial kidney in correcting these abnormalities. Anuric animals were also to be studied and treated by different techniques to help evaluate the results observed in the patients. To date, no information is available on the number of participants.

Documents: Title: The Use of Artificial Kidney in Human Patients. Document Type: Abstract. Date: 1953 est.

324 Appendix 1—Records Search

NAVY 1944–1974 (CONTINUED)

University of California, Berkeley, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1947	NHOAK-044	The pathological physiology of the liver

(For abstract and documentation, see Naval Hospital, Oakland, CA.)

University of California, San Diego, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMCSD-270	Intracranial arterial occlusion in children: diagnosis and follow-up by brain scanning

Abstract: The inclusive dates for this study conducted at the Naval Medical Center and University of California in San Diego, CA, are presently undetermined. The case histories of two children with complete left side paralysis are discussed. Sodium pertechnate technitium-99m was used for brain imaging to find areas of brain infarction. Exposure to radiation was incidental to participation in this study. Results of this study are not available at this time.

Documents: Authors: Sheldon Hurwitz, M.D. et al. Title: Intracranial Arterial Occlusion in Children: Diagnosis and Follow Up by Brain Scanning. Journal: American Journal of Diseases of Children, vol. 126, issue 3. Document Type: Journal Article. Date: September 1973

Title: Medline Express Printout: Intracranial Arterial Occlusion in Children: Diagnosis and Follow Up by Brain Scanning. Document Type: Abstract; Search Printout. Date: 1994

University of California, San Francisco Medical Center, San Francisco, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-28	An evaluation of rapid weight reduction in obesity; body composition during therapy in diabetes mellitus

(For abstract and documentation, see Naval Hospital, Oakland, CA.)

University of Copenhagen, Denmark

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-139	Autoradiographic and histopathological studies of thorium dioxide patients

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

NAVY 1944–1974 (CONTINUED)

University of Copenhagen, Denmark (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-143	Investigation of late clinical findings following Thorotrast (thorium dioxide) administration

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

University of North Carolina, Chapel Hill, NC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1948	ONR-37	Blood flow volume in kidney and liver

Abstract: From June 1948 until November 1950, researchers at the University of North Carolina, Chapel Hill, NC, studied measured the flow of blood in the kidney and liver using radioisotopic procedures in unanesthetized humans. The work included animal experiments to determine the optimum concentration of radioactive materials for counting and experiments involving unanesthetized dogs to compare the findings of the first group of studies and outline the conditions and procedures that should be used on humans. To date, no information is available on the number of participants.

Documents: Title: Blood Flow Volume in Kidney and Liver. Document Type: Abstract. Date: 1950 est.

University of San Francisco, San Francisco, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1947	NHOAK-044	The pathological physiology of the liver

(For abstract and documentation, see Naval Hospital, Oakland, CA.)

University of Southern California, Los Angeles, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1955	ONR-21	A study of the prevalence and severity of thyroid deficiency on young and mature adult males

Abstract: In February 1955, researchers at the University of Southern California, Los Angeles, CA, proposed to study thyroid deficiency. The purpose of the study was to investigate the prevalence of thyroid deficiency and the general incidence of hypothyroidism in young and mature adult males. Participants were to include college students, medical school students, hospital employees, and young veterans. Former determinations were made with the basal metabolic rate test, which had been found to conceal hypothyroidism. Hypothyroidism was recognized as a

NAVY 1944–1974 (CONTINUED)

University of Southern California, Los Angeles, CA (continued)

prime cause of mental sluggishness, poor memory, fatigability, feeble response to stress, and prolonged production of vascular and parenchymatous degeneration. Hypothyroidism had not been recognized in routine physical examinations but was completely correctable with treatment. The pathogenic mechanism of the hypothyroid state was to be analyzed when possible by radioactive iodine and thyrotropic hormone tests. The associated systemic pathology was also to be determined and studies carried out to determine the possible causal relationship between the hypothyroid state and the pathology found. Results for this study are currently unavailable.

Documents: Author: Paul Starr, M.D. Title: Application for Research Grant for a Study of the Prevalence and Severity of Thyroid Deficiency in Young and Mature Adult Males. Document Type: Proposal. Date: 10 February 1955

University of Utah, Salt Lake City, UT

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-139	Autoradiographic and histopathological studies of thorium dioxide patients

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NNMC-143	Investigation of late clinical findings following Thorotrast (thorium dioxide) administration

(For abstract and documentation, see National Naval Medical Center, Bethesda, MD.)

Unknown

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1951	ONR-30	The study of the plasma substitute, Dextran

At the time of publication there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

USS Robert E. Lee (SSBN-601)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1961	SMRL-05	Method for improving accuracy of air particulate activity measurements

(For abstract and documentation, see Submarine Medical Research Laboratory, New London, CT.)

NAVY 1944–1974 (CONTINUED)

Veterans Administration Hospital, Buffalo, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	ONR-15	Research on procedures for the low-temperature preservation of blood

(For abstract and documentation, see Research Laboratory, Linde Company, Division of Union Carbide.)

Vanderbilt University School of Medicine, Nashville, TN

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1960	NMRU3-33	Studies on the mechanism of anemia in parasitic diseases

(For abstract and documentation see Naval Medical Research Unit 3, Cairo, Egypt.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	NMRU3-20	Chromium red cell half-life in severe iron deficiency anemia

(For abstract and documentation, see Naval Medical Research Unit 3, Cairo, Egypt.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1965	NMRU3-23	Blood loss in pure <i>Ancylostoma duodenale</i> infection in Egyptian farmers

(For abstract and documentation, see Naval Medical Research Unit 3, Cairo, Egypt.)

Veterans Administration Hospital, Bronx, NY

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1946	NMRI-13	Treatment of radiation sickness with adrenal cortical hormone (deoxycorticosterone acetate)

(For abstract and documentation, see Naval Medical Research Institute, Bethesda, MD.)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRI-14	Clinical study of radiation sickness

(For abstract and documentation, see Naval Medical Research Institute, Bethesda, MD.)

NAVY 1944–1974 (CONTINUED)

Wake Forrest University, Winston-Salem, NC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1948	ONR-31	Distribution and turnover of sodium and potassium in acute infections

At the time of publication there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

Yale University School of Medicine, New Haven, CT

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1956	ONR-20	Endocrine interrelations in man's metabolic response to trauma

At the time of publication there was insufficient information available to construct an abstract on this event. Additional information is being sought. If information is obtained, this event, complete with abstract, will be published in Volume 2 of this report.

1975-1994 HUMAN RADIATION EXPERIMENTS, PROJECTS, STUDIES AS REPORTED BY THE SERVICES AND DoD ORGANIZATIONS

AIR FORCE 1975-1994

Air Force Institute of Technology, Wright-Patterson AFB, Dayton, OH

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1976	AF0039	Radiation dose to humans from 99m technetium labeled dihydrothiotic acid

Brooke Army Medical Center, Fort Sam Houston, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1993	CID0062	Randomized phase III study of CODE plus thoracic irradiation versus alternating CAV and EP for extensive stage small cell lung cancer

David Grant Medical Center, Travis AFB, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	AF0004	Indium-111 DTPA for cisternography
1977	60MG043	Phase III study comparing Adriamycin against Adriamycin + Cytosin as initial therapy of unresectable non-oat-cell lung cancer to be followed by radiotherapy and additional chemotherapy in responding patients (n cal og 2n63 - SG 760)
1977	60MG131	Phase III study of radiotherapy plus BCNU; radiotherapy plus metronidazole and BCNU; and radiotherapy plus procarbazine, CCNU & vincristine (NCOG 6G61 - SG 815)
1977	60MG154	Treatment of adult acute non-lymphocytic leukemia (ANLL): A randomized phase II-III study of cytarabine and daunorubicin vs. CCNU and cyclophosphamide for remission maintenance of ANLL (NCOG 9L61 - SG 824)
1977	60MG050	Combined modality phase III study for patients with first recurrence of breast cancer (NCOG 1B62 - SG 816)
1977	60MG051	Phase III study evaluating the role of postoperative radiotherapy after curative resection surgery in lung cancer (excluding small cell undifferentiated lesions) (NCOG 2N62 - SG# 766)
1977	60MG052	Phase III trial of two combination chemotherapy regimens (VAM vs POCC) in combination with radiotherapy for undifferentiated small cell anaplastic lung cancer (NCOG 2O61 - SG 765)

330 Appendix 1—Records Search

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1977	60MG053	Randomized cross over study of total body irradiation (TBI) and combination chemotherapy in non-Hodgkin's lymphoma (excluding chronic lymphocytic leukemia and histiocytic lymphoma) (SG 828)
1977	60MG074	Comprehensive therapy for all stages of ovarian cancer (NCOG 5601-5 - SG 829)
1977	60MG130	Phase III study comparing Adriamycin plus 5-FU vs BCNU plus Adriamycin plus Ftorafur for patients with disseminated pancreatic cancer - and - A phase III study comparing Adriamycin + 5-FU vs BCNU + Adriamycin + Ftorafur vs mitomycin C + Adriamycin +...
1977	60MG136	Randomized two step study for treatment of metastatic carcinoma of the breast with combination chemotherapy (SG 821)
1978	60MG153	Treatment of advanced or recurrent adenocarcinoma, anaplastic (large cell), and anaplastic (non-oat cell) carcinoma of the lung with Corynebacterium parvum and Cytosin vs procarbazine plus 5-FU or Ftorafur plus Baker's antifol (WCG-175 - SG 846)
1978	60MG138	Radiation therapy vs radiation therapy and chemotherapy (vincristine, chloroethylnitrosourea, prednisone, and procarbazine) for the treatment of medulloblastoma and ependymoma (CCG-942 - SG 964)
1978	60MG152	Treatment of resected lung cancer with immunotherapy using Corynebacterium parvum (WCG-200 - SG 845)
1978	60MG155	Treatment of newly diagnosed acute lymphoblastic leukemia for patients with "average risk" prognostic characteristics (CCG-162 - SG 79-61)
1979	60MG073	Conventional radiotherapy and heavy charged particle radiotherapy in the treatment of local and regional adenocarcinoma of the pancreas (NCOG 3p81 - SG 79-112)
1979	60MG099	Intergroup Hodgkin's disease study - comparison of involved field radiotherapy with involved field radiotherapy plus adjuvant chemotherapy (MOPP) and extended field radiotherapy in the treatment of stage I and II Hodgkin's disease in children
1979	60MG156	Treatment of newly diagnosed acute lymphoblastic leukemia for patients with "high risk" prognostic characteristics (CCG-163 - SG 79-2)
1979	60MG109	Ovarian tumors, primary and metastatic (CCG-861 - SG 79-5)

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1979	60MG054	Randomized phase III study of radiation therapy with or without chemotherapy for remission induction and multi-drug chemotherapy program for remission consolidation and maintenance in inoperable advanced squamous cell carcinoma of the head and neck
1980	60MG105	Nation Wilms' tumor study III (ccg-491 - SG# 80-72)
1980	60MG107	Non-randomized study using high-dose methotrexate with citrovorum and hexamethylmelamine for recurrent ovarian cancer (SGO# 82-075)
1981	60MG016	Phase I-II study to determine the activity of the combination of m-AMSA, prednisone, and chlorambucil (APC) in patients with metastatic breast carcinoma who have failed prior Adriamycin-containing chemotherapy regimens (NCOG 1b92x - SG 81-006)
1981	60MG023	Phase II study of platinum, Adriamycin, and cyclophosphamide (PAC) chemotherapy in the treatment of ovarian and endometrial carcinoma (NCOG 5o81- SG 81-010)
1981	60MG024	Phase II study of m-AMSA in metastatic or recurrent carcinoma of the lung (NCOG 2n83 - SG 81-021)
1981	60MG033	Phase III study of combined external hepatic irradiation and chemotherapy examining routes of administration for metastatic and primary liver carcinoma (NCOG 3i91 - SG 81-004)
1981	60MG020	Phase II study of 5-FU + CCNU before radiotherapy - hu-misonidazole followed by alternating courses of procarbazine-vincristine, BCNU-5-FU for the treatment of primary malignant brain tumors (NGOG 6g91x - SG 81-005)
1981	60MG128	Phase III trial on 99m-Tc EHIDA biliary examination (SG 81-061)
1981	60MG071	Comparative gastroplasty study and long-term effect of serum cholesterol, triglycerides and lipoproteins (SG 81-064)
1981	60MG037	Phase III study of the role of misonidazole or cis-platinum with preoperative radiotherapy for local control of bladder carcinoma and the role of cis-platinum for the control of distant metastases (NCOG 4b82 - SGO 81-020)
1981	60MG139	Testicular cancer intergroup study (NCOG 4t83jx - SG 81-014)
1981	60MG064	Chemotherapy of advanced ovarian cancer: Adriamycin-cyclophosphamide versus platinum-Adriamycin-cyclophosphamide (NCOG 5o91x - SG 81-017)

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1981	60MG061	Analog intravenous angiography (SG 81-110)
1981	60MG047	Randomized phase III study of platinum with bleomycin or methotrexate for advanced squamous cell carcinoma of the head and neck with radiation therapy and salvage surgery (NCOG p7h01 - SG 81-059)
1981	60MG046	Randomized phase II study of irradiation, irradiation plus misonidazole, and irradiation plus BCNU for the treatment of metastasis to the brain (NCOG 6g81 - SG 81-019)
1981	60MG039	Phase III trial of seven-drug versus nine-drug chemotherapy regimens, in extensive disease, & late consolidation radiotherapy in limited disease, for undifferentiated small cell anaplastic lung cancer (oat cell), (NCOG 2o91 - G 81-013)
1981	60MG038	Phase III study to compare misonidazole combined with irradiation or radiation therapy alone in the treatment of locally advanced (stage III) non-oat cell lung cancer. (NCOG 2n01j - SG 81-018)
1982	60MG025	Phase II study to determine the effectiveness of medroxyprogesterone acetate (Provera) in refractory breast cancer in postmenopausal women (NCOG 1b-81-1 - SG 82-077)
1982	60MG019	Phase II study of 4'-epi-doxorubicin in the treatment of advanced lung cancer & evaluation of cardiotoxicity (NOCG 2n-81-1 - SG 82-119)
1982	60MG015	Phase I-II study of combination chemotherapy and sequential hemibody radiation therapy in the treatment of high tumor burden multiple myeloma (NCOG 9m91 - SG# 81-143)
1982	60MG030	Phase III study comparing Adriamycin + Ftorafur vs. radiation + Adriamycin + Ftorafur vs. mitomycin C + Ftorafur for patients with disseminated gastric cancer (NCOG 3s801j - SG 81-144)
1982	60MG032	Phase III study of combination chemotherapy with cis-platinum, bleomycin and vinblastine in advanced lung cancer (NCOG 2n-81-1 p [DGMC pilot study] - SG 82-081)
1982	60MG027	Phase III randomized study comparing effective, non-cross-resistant, alternating combinations (CMF, FOAM) with sequential use of the same combinations for metastatic breast cancer (NCOG 1b-80-1x - SG 82-003)
1983	60MG005	Clinical trial to assess tamoxifen in patients with primary breast cancer and negative axillary nodes whose tumors are positive for estrogen receptors (NSABP b-14 - SGO 83-091)

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1983	60MG008	Clinical trial to compare PF with and without Adriamycin in the management of patients with primary breast cancer and positive axillary nodes whose tumors are negative for estrogen receptors and/or progesterone receptor (NSABP b-11-SGO 83-092)
1983	60MG007	Clinical trial to compare Alkeran + 5-fluorouracil + tamoxifen (PFT) with and without Adriamycin in management of patients with primary breast cancer and positive axillary nodes with tumors positive for estrogen receptors (NSABP b-12-SGO 83-093)
1983	60MG004	Clinical trial to assess sequential methotrexate - 5-fluorouracil in patients with primary breast cancer and negative axillary nodes whose tumors are negative for estrogen receptors (NSABP b-13 - SGO 83-090)
1983	60MG034	Phase III study of pelvic and abdominal radiotherapy vs cisplatin, Adriamycin, and cyclophosphamide chemotherapy in stage I, II, and optimal stage III epithelial carcinoma of the ovary (NCOG 5o-82-1 - SGO 83-076)
1983	60MG022	Phase II study of parenteral L-PAM (arm b) vs misonidazole plus parenteral L-PAM (arm c) in the treatment of advanced lung cancer (NCOG 2n-81-1 arms b&c - SGO 83-148)
1983	60MG029	Phase III randomized trial of single agent 5-FU vs high-dose folinic acid + 5-FU vs methotrexate + 5-FU + folinic acid in patients with disseminated measurable large bowel cancer (NCOG 3c-83-1 - SGO 83-153)
1983	60MG143	Treatment of acute lymphoblastic leukemia with lymphomatous characteristics (lymphoma-leukemia) (CCG-123 - SGO 83-174)
1983	60MG111	Phase I-II study of radiotherapy plus BUDR and procarbazine, CCNU, vincristine (PCV) for the treatment of primary malignant brain tumors (NCOG 6g-2-1 - SG 83-075)
1983	60MG114	Phase II trial of Adriamycin and methotrexate in patients with endocrine unresponsive prostatic cancer (NCOG 4p-82-2 - SGO 83-155)
1983	60MG123	Phase III study of continuous infusion FUDR: Intravenous versus intra-arterial in patients with colon cancer metastatic to liver only (NCOG 3l-82-1 - SGO 83-125)
1984	60MG124	Phase III study to determine the effect of combining chemotherapy with surgery and radiotherapy for resectable squamous cell carcinoma of the head and neck (RTOG 83-22 - SGO 84-094)
1984	60MG150	Treatment of newly diagnosed acute lymphoblastic leukemia in children with an intermediate prognosis (CCG-105 - SGO 83-176)

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1984	60MG148	Treatment of newly diagnosed acute lymphoblastic leukemia in children with a poor prognosis excluding infants and patients with lymphoma-leukemia or Fab I3 blasts (CCG-106 - SGO 84-001)
1984	60MG127	Phase III trial of adjuvant whole abdomen irradiation for locally advanced adenocarcinoma of the proximal colon with lymph node metastases (RTOG 83-18 - SGO 84-029)
1984	60MG126	Phase III trial of adjuvant interferon following CVP chemotherapy in the management of adults with favorable non-Hodgkin's lymphomas (NCOG 8I-82-4 - SGO 84-083)
1984	60MG158	Phase III protocol to study whether addition of single dose hemi-body irradiation to standard fractionated local field irradiation is more effective than LCL field irradiation alone in treatment of symptomatic osseous metastases (RTOG 82-06/SG84094)
1984	60MG125	Phase III trial of 7-drug vs 3-drug chemotherapy regimens with or without prophylactic cranial irradiation (PCI) for undifferentiated small cell anaplastic lung cancer (oat cell): Extensive disease (NCOG 2o-83-1 - SGO 84-068)
1984	60MG101	Metastatic melanoma determination of optimal fraction size (RTOG 83-05 - SGO# 84-097)
1984	60MG070	Combined preoperative and postoperative radiation therapy of operable colorectal carcinoma (RTOG 81-15 - SGO 84-028)
1984	60MG045	Randomized phase I/II study to evaluate twice daily fractionation for locally advanced squamous, adenocarcinoma, and large cell carcinoma of lung (RTOG 83-11 - SGO 84-067)
1985	60MG017	Phase I/II pilot study to evaluate accelerated fractionation via concomitant boost for squamous, adeno, and large cell carcinoma of the lung (RTOG 84-07 - SGO 85-07)
1985	60MG113	Phase II study to evaluate the treatment of squamous cell & basaloid carcinoma of the anal canal by radiation therapy and chemotherapy for radiosensitization followed by biopsy +/- a-p resection (RTOG 83-14 - SGO 85-099)
1985	60MG100	Lymphoblastic lymphoma, disseminated, mediastinal, or bone with less than 25% lymphoblasts in the bone marrow (CCG-502 - SGO 85-010)

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1985	60MG122	Phase III simultaneous cis-platinum and radiation therapy combined with standard radiation therapy in the treatment of unresectable squamous or undifferentiated carcinoma of the head and neck (RTOG 84-06- SGO 85-090)
1986	60MG001	3 arm clinical trial comparing short intensive Adriamycin-cyclophosphamide chemotherapy w/wo interval reinduction chemotherapy (CMF) to "conventional" CMF in positive-node patients having specific node and age criteria (NSABP B-15 - SWOG 86-022)
1986	60MG092	High-dose cisplatin in hypertonic saline in the treatment of advanced non-small cell lung cancer (NCOG 2n-84-2 - SGO 86-027)
1986	60MG134	Randomized phase II protocol: Hyperfractionated radiotherapy and BCNU for supratentorial malignant glioma (RTOG 83-02 - SG 84-096)
1986	60MG097	Intergroup rhabdomyosarcoma study - III (CCG-631 - SGO 85-144)
1987	60MG018	Phase I/II study of Fluosol-Da 20% in combination with doxorubicin in the treatment of metastatic carcinoma of the breast (ATC 87-11 - SGO 87-114)
1987	60MG133	Radiolabeled leukocytes in pyelonephritis: A clinical study (SGO 88-012)
1988	60MG026	Phase III comparison of CHOP versus m-BACOD versus ProMACE-CytaBOM versus MACOP-B in patients with intermediate high-grade non-Hodgkin's lymphoma (SWOG 8416- SGO 88-086)
1988	60MG010	Clinical trial to determine the worth of chemotherapy and tamoxifen over tamoxifen alone in the management of patients with primary invasive breast cancer, neg axillary nodes, and estrogen receptor pos tumors (NSABP b-20 - SGO 89-077)
1988	60MG036	Phase III study of subtotal lymphoid irradiation or total lymphoid irradiation versus involved field irradiation plus vinblastine, bleomycin, and methotrexate chemotherapy in favorable stage Hodgkin's disease (NCOG 8h-85-1 - SGO 88-100)
1988	60MG145	Treatment of extensive non-small cell lung cancer: Standard dose cisplatin vs high-dose cisplatin in hypertonic saline alone vs high-dose cisplatin/mitomycin C (SWOG 8738 - SG 89-029)
1988	60MG147	Treatment of localized non-Hodgkin's lymphoma: Comparison of chemotherapy (CHOP) to chemotherapy plus radiation therapy

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	60MG121	Phase III randomized trial of combination therapy for multiple myeloma: (1) comparison of VMPC/VVBAP to VAD or VMCPP/VMBAPP for induction; (2) interferon or no therapy for maintenance; (3) interferon + dexamethasone for improvement (SWOG8624 - SG88-138)
1988	60MG095	Ifosfamide and mesna in malignant mesothelioma-phase II (SWOG 831 - SGO 88-159)
1988	60MG093	High-grade intracranial astrocytoma, previously untreated, located outside the brain stem or the spinal cord (CCG-945 - SGO 89-030)
1988	60MG086	Evaluation of amonafide in refractory multiple myeloma (SWOG 8726 - SG 89-028)
1989	60MG009	Clinical trial to compare sequential methotrexate 5-fluorouracil (M-F) with conventional CMF in primary breast cancer patients with negative nodes and estrogen receptor negative tumors (NSABP b-19 - SGO 90-076)
1989	60MG011	Clinical trial to determine the worth of tamoxifen and the worth of breast radiation in the management of patients with node-negative, clinically occult, invasive breast cancer treated with lumpectomy (NSABP b-21 - SGO89-248/7)
1989	60MG031	Phase III study of alpha interferon consolidation following intensive chemotherapy with ProMACE-MOPP (day 1-8) in patients with low grade malignant lymphomas (SWOG 8809 - SGO 89-127)
1989	60MG151	Treatment of newly diagnosed advanced Hodgkin's disease (CCG-521 - SGO 90-275)
1989	60MG096	Immobilization versus early mobilization in the treatment of ankle sprains: A randomized prospective trial (SGO 89-146)
1989	60MG088	Fine-needle aspiration of mammographically detected non-palpable breast lesions (SG 89-150)
1989	60MG085	Evaluation of ADR-529 as a cardioprotective agent in a randomized double-blind phase III trial of CAV + placebo vs CAV + ADR-529 in the treatment of extensive disease small cell lung cancer (Adria 088002-999 - SGO # 89-148)
1989	60MG082	Enalapril alone vs enalapril plus furosemide vs furosemide alone as first line therapy for congestive heart failure (SGO 90-030)
1989	60MG055	ADR-529 as a cardioprotective agent in a phase III randomized trial of FAC versus FAC + ADR-529 in the treatment of disseminated carcinoma of the breast (Adria 30,617 - SGO 89-147)

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1989	60MG049	Unified trial to compare short intensive preoperative systemic Adriamycin cyclophosphamide therapy with similar therapy administered in conventional postoperative fashion (NSABP b-18 - SGO 89-075)
1989	60MG068	Clinical investigation of Tc-99m SQ 30217 in patients suspected of having coronary artery disease (Squibb 26,742-3 - SGO 88-066)
1989	60MG067	Clinical investigation of 99m-Tc-teboroxime (Squibb Diagnostics 26,742-6 - SGO 89-207)
1989	60MG066	Clinical trial to evaluate the effect of dose intensification and increased cumulative dose of postop Adriamycin-cyclophosphamide therapy on the disease free survival of patients with primary breast cancer and post axillary nodes (NSABP B-22-SGO-89-249)
1989	60MG146	Treatment of limited small cell lung cancer with concurrent chemotherapy, radiotherapy, with or without GM-CSF and subsequent randomization to maintenance interferon or no maintenance (SWOG 8812 - SGO 89-250)
1989	60MG042	Prospectively randomized trial of low-dose leucovorin plus 5-FU, high-dose leucovorin plus 5-FU, or observation following curative resection in selected patients with Duke's B or C colon cancer (SWOG 8899 - SGO 89-097)
1990	60MG012	Double-blind, randomized, parallel, placebo-controlled, multicenter study of the hemodynamic effects of felodipine ER in patients with heart failure (mk-218 - SGO 90-208)
1990	60MG048	Randomized prospective study of lumbar spinal fusions with and without transpedicular screw-plate fixation (SGO 90-291)
1990	60MG149	Treatment of newly diagnosed acute lymphoblastic leukemia in children with an intermediate prognosis (CCG 1891 - SGO 90-234 - 90-297)
1990	60MG058	Intergroup protocol for the treatment of childhood hepatoblastoma and hepatocellular carcinoma: A phase III groupwise study (CCG - 8881 - SGO 90-031)
1990	60MG157	Use of indium-111 labeled Myoscint (R) in ischemic heart disease (Centocor c00041-08 - SGO 90-0166)
1990	60MG098	Intergroup rhabdomyosarcoma study - IV. Pilot study for clinical group III disease (CCG-671 - SGO 90-163)

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1990	60MG044	Randomized investigation of high-dose versus standard dose cytosine arabinoside with daunorubicin in patients with acute non-lymphocytic leukemia (SWOG 8600 - SGO 90-217)
1990	60MG060	Open-label, multicenter study to evaluate the 24-hour hemodynamic effects and plasma drug levels following a single dose of felodipine ER in patients with heart failure (Merck MK-218 - SGO 90-207)
1990	60MG115	Phase II/III study of fluorouracil (5-FU) and its modulation in advanced colorectal cancer (SWOG 89-05 - SGO 91-036)
1990	60MG077	Efficacy and safety of once daily nisoldipine coat-core 20mg, 30mg, and 60mg (2x30mg) tablets vs placebo in patients with stable exertional angina pectoris (Miles d90-015 - SGO 91-010a)
1990	60MG087	Evaluation of Cardiolite as an adjunct in conjunction with stress testing for the diagnosis of ischemic heart disease using a short time interval between rest and stress injections (Dupont 843-033 - SGO 90-237)
1990	60MG072	Compassionate use of ciproflaxcin intravenous in the treatment of a patient with an infection refractory to currently marketed antibiotics (Miles U88-003 - SGO 90-273)
1990	60MG117	Phase III clinical investigation of Prohance (TM) in patients suspected of having neurological pathology (Squibb 32,521-3 - SGO 90-130)
1991	60MG021	Phase II study of hyperfractionated radiotherapy for the treatment of primary brainstem tumors (78 Gy protocol) (BTRC 8725 - SGO 91-154)
1991	60MG028	Phase III randomized trial of combination therapy for multiple myeloma comparison of (1) VAD to VAD/verapamil/quinine for induction, with crossover for failures (2) interferon alpha-2b w/wo periodic DMCP for maintenance (SWOG 9028-SGO91-187/193)
1991	60MG062	Aredia (pamidronate disodium) comparative trial of Aredia versus placebo for the prevention of skeletal-related complications in patients with breast cancer and lytic bone lesions treated with chemotherapy (Ciba-Geigy 19 - SGO 91-140)
1991	60MG142	Effects of thionamides on the efficacy of radioiodine treatment in patients with Graves' disease
1991	60MG140	Effect of hyperbaric oxygen on reperfusion edema following revascularization of the critically ischemic lower extremity (SGO 91-098)

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1991	60MG144	Treatment of children less than 21 years of age with newly diagnosed acute non-lymphocytic leukemia (ANLL) and myelodysplastic syndrome (MDS) (CCG 2891 - SGO 91-243/92-048)
1991	60MG063	Aredia (pamidronate disodium) comparative trial of Aredia versus placebo for the prevention of skeletal-related complications in patients with breast cancer and lytic bone lesions treated with hormonal therapy (Ciba-Geigy 18 - SGO 91-139)
1991	60MG103	Multicenter, double-blind, randomized, parallel, multiple-dose, placebo-controlled study of the hemodynamic and clinical effects of losartan (MK-954, DUP 753) in patients with heart failure (MK-954 047-11 - SGO 92-042)
1991	60MG078	Efficacy of fosinopril sodium in patients with chronic heart failure not receiving digoxin therapy (Bristol Myers Squibb 31,138-06 - SGO 91-105)
1991	60MG079	Emergency request for use of itraconazole for treatment of disseminated <i>Parosporium schenckii</i> infection for patient (name redacted) (SGO 91-215)
1991	60MG116	Phase III chemotherapy of disseminated advanced stage testicular cancer with cisplatin plus etoposide with either bleomycin or ifosfamide (SWOG 8997 - SGO 91-005)
1991	60MG089	Fludarabine emergency use request (SGO 92-043)
1991	60MG091	Gastrointestinal function following upper gastrointestinal surgery (SGO 91-216)
1991	60MG090	Fludarabine phosphate in patients with refractory chronic lymphocytic leukemia (NCI 189-0018 - SGO 91-194)
1991	60MG083	Enalaprilat enhanced renal scintigraphy in the diagnosis of renovascular hypertension (SGO 92-005)
1991	60MG059	Open label, multi-center clinical investigation to determine the safety and efficacy of Prohance (TM) in children suspected of having neurological pathology (Squibb Diagnostics 32,421-6 - SGO 91-134)
1991	60MG104	Multicenter, randomized double-blind, placebo-controlled, parallel, outpatient evaluation to determine the dose-response relationship of diltiazem mods 12-hour formulation when given in monotherapy for mild to moderate hyperten (mk-793 028-00 - SGO 92-009)
1991	60MG106	National Wilms' tumor study - 4: Therapeutic trial (CCSG 461 - SGO 91-173/92-037)

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1991	60MG108	One year open label coat-core nisoldipine therapy (Miles d90-015 extension - SGO 91-010b)
1992	60MG014	Multicenter study to evaluate the efficacy and safety of the ESA (arbutamine) system when used in conjunction with radionuclide imaging to diagnose coronary artery disease (Gensia 0127 - SGO 92-212)
1992	60MG006	Clinical trial to assess the relative efficacy of 5-FU + leucovorin with or without interferon alpha-2a in patients with Duke's B and C carcinoma of the colon
1992	60MG002	Clinical evaluation of temporomandibular joint arthrocentesis and arthroscopy for TMJ internal derangements (SGO 92-243)
1992	60MG003	Clinical trial to evaluate the worth of tamoxifen in conjunction with lumpectomy and breast irradiation for the treatment of noninvasive intraductal carcinoma (DCIS) of the breast (NSABP b-24 - SGO 92-064)
1992	60MG119	Phase III comparison of adjuvant chemotherapy with or without endocrine therapy in high-risk, node negative breast cancer patients, and a natural history follow-up study in low-risk node negative patients (SWOG 8897 - SGO 90-180)
1992	60MG094	Hyperbaric oxygen therapy in the treatment of better prognosis non-healing diabetic lower extremity lesions (SGO 91-007)
1992	60MG120	Phase III comparison of combination chemotherapy (CAF) and chemohormonal therapy (CAF + Zoladex or CAF + Zoladex and tamoxifen) in premenopausal women with axillary node-positive, receptor-positive breast cancer (SWOG 8851 - SGO 90-226)
1992	60MG118	Phase III comparison of adjuvant chemoendocrine therapy with CAF and concurrent or delayed tamoxifen to tamoxifen alone in postmenopausal patient with involved axillary lymph nodes and positive receptors (SWOG 8814 - SGO 90-095)
1992	60MG057	Intergroup protocol for the treatment of childhood hepatoblastoma and hepatocellular carcinoma: A phase III groupwise study (CCG 8881 - SGO 93-034)
1992	60MG132	Quantitative computed tomographic acquisition of a David Grant USAF Medical Center vertebral body bone density database (SGO 93-013)
1992	60MG135	Randomized study of standard chemotherapy vs STAMP V with ABMT in stage IV poor prognosis breast carcinoma, phase III (SWOG 9115 - SGO 93-042)

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	60MG041	Prospective, randomized study of the utility of hyperbaric oxygen therapy in management of non-healing wounds (SGO 92-123)
1992	60MG065	Clinical trial to evaluate the effect of dose intensification & increased cumulative dose of postop Adriamycin-cyclophosphamide therapy with G-CSF on disease-free survival and survival of patients with prim breast CA & pos ax nodes (NSABP B25-SOG92-209)
1993	60MG035	Phase III study of postoperative radiotherapy for single brain metastases (rtog 90-21 - SGO 93-146)
1993	60MG080	Emergency treatment request for use of cisapride suspension in the treatment of pediatric motility disorders for patient (name redacted) (SGO 93-175)
1993	60MG102	Multi-center investigator blinded study of the efficacy and safety of azithromycin vs ciprofloxacin in the treatment of acute bacterial exacerbations of chronic obstructive pulmonary disease (Premier Research I-0234 - SGO 93-217)
1993	60MG084	Evaluation of dexamethasone, etoposide, cisplatin, high-dose ara-C and L-asparaginase (DECAL) induct followed by inten maint chemotx with ifosfamide/mesna and etoposide alt with DECAL for recur Hodgkin's and non-Hodgkin's lymphoma (CCG 5912 - SGO 93-236)
1993	60MG081	Emergency treatment request of glycogen storage disease type IB with RHUG-CSF (SGO 94-021)
1993	60MG129	Phase III trial to preserve the larynx: Induction chemotherapy and radiation therapy versus concomitant chemotherapy and radiation therapy versus radiation therapy (RTOG 91-11 - SGO 93-159)
1993	60MG076	Double-blind, placebo-controlled study of the efficacy and safety of three doses of CP-0127 and placebo in patients with presumed sepsis and the systemic inflammatory response syndrome (SIRS) (Cortech CP-0127-92-002 - SGO 93-080)
1993	60MG075	Dose intensification of methotrexate and 6-mercaptopurine for ALL in childhood (POG 9005 - SGO 94-059)
1993	60MG141	Effect of oral D-sotalol on mortality in patients with atherosclerotic coronary heart disease and left ventricular dysfunction (Bristol-Myers Squibb Pharmaceutical Research Institute cv102-023a - SGO 93-264)
1993	60MG069	Clinical study on scapho-lunate ligament reconstruction (SGO 94-016)

342 Appendix 1—Records Search

AIR FORCE 1975-1994 (CONTINUED)

David Grant Medical Center, Travis AFB, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1993	60MG056	Amlodipine study of the angina population (ASAP): A double-blind randomized, placebo controlled study (Pfizer I-0232 - SGO 92-280)
1993	60MG137	Recombinant urokinase (rUK, Abbott-76120) versus operative intervention as initial therapy for acute lower-limb arterial occlusion (Abbott m92-859 - SGO 93-106)
1993	60MG040	Phase III trial of the use of long term total androgen suppression following neoadjuvant hormonal cyto-reduction and radiotherapy in locally advanced carcinoma of the prostate (RTOG 92-02 - SGO 93-167)
1994	60MG013	Multicenter study to assess the Genesa system device market prototype (Gensia 0138 - SGO 94-091)

Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1993	CID0062	Randomized phase III study of CODE plus thoracic irradiation versus alternating CAV and EP for extensive stage small cell lung cancer

Keesler Medical Center, Keesler AFB, MS

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1976	81MG036	Peripheral resistance to thyroid hormone
1976	81MG006	Antacid vs placebo in duodenal ulcer disease
1978	81MG020	Acute leukemia in childhood 11, POG 7420/21
1978	81MG021	Follow up study on long-term remission in acute leukemia in children, phase III, POG 7422
1978	81MG019	Medulloblastoma and ependymoma, phase III, POG 7409
1978	81MG022	MOPP vs OPP in treatment of children with recurrent brain tumors, a phase III study, POG 7621
1979	81MG023	Comparison of involved field radiotherapy with adjuvant MOPP chemotherapy & extended field radiotherapy in the treatment of stage I & II Hodgkin's disease in children, phase III, POG 7660

AIR FORCE 1975-1994 (CONTINUED)

Keesler Medical Center, Keesler AFB, MS (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1979	81MG024	Evaluation of Adriamycin, vincristine sulfate, cyclophosphamide, prednisone, methotrexate, 6-mercaptopurine, hydrocortisone, and leucovorin in treatment of non-Hodgkin's lymphoma in children, phase III, POG 7905
1979	81MG003	Comparative study of the efficacy and tolerance of rosamicin and erythromycin in treatment of pneumonia due to Mycoplasma pneumonia
1980	81MG018	National Wilm's tumor study
1981	81MG025	Evaluation of treatment regimens in acute lymphoid leukemia (ALL) of childhood (ALinC 13), phase III, POG 8035/36
1982	81MG042	Study of thyroid carcinoma
1982	81MG044	Effects of two different lung positions in development of pneumothorax following fine needle lung aspiration
1983	81MG037	Treatment of limited small cell lung cancer with VP-6/cis-platinum, alternating with vincristine/Adriamycin/Cytosan and radiation therapy vs concurrent VP-16/vincristine/Adriamycin/Cytosan and radiation, SWOG 8232
1983	81MG026	Multi-institutional controlled trial of adjuvant chemotherapy in the treatment of osteosarcoma, phase III, POG 8107
1984	81MG002	Prospective study of 'super predictors' in pulmonary function measures
1984	81MG009	Combined modality therapy for multiple myeloma: VMCP-VBAP for remission induction therapy: VMCP + levamisole vs sequential half-body radiotherapy + vincristine - prednisone for patients who fail to achieve remission status with chemotherapy alone
1985	81MG027	Emergency treatment of patient (minor's name) in a phase I study of hyperfractionation in brain stem gliomas in children, POG 8495
1985	81MG043	Terbutalline: Its role in the prevention of tubo-spasm during hysterosalpingography (HSG)
1987	81MG010	Emergency treatment request for an open labeled study of Asacol in the induction and/or maintenance of remission of inflammatory bowel disease to treat patient (name redacted)
1987	81MG034	Evaluation of systematic therapy for children with T-cell acute lymphatic leukemia, phase III, POG-7837

AIR FORCE 1975-1994 (CONTINUED)

Keesler Medical Center, Keesler AFB, MS (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	CID0058	Treatment of localized non-hodgkin's lymphoma: Comparison of chemotherapy (CHOP) to chemotherapy plus radiation therapy
1989	81MG041	Phase III protocol for surgical adjuvant therapy for rectal carcinoma: A controlled evaluation of a) protracted infusion 5-fluorouracil as a radiation enhancer and b) 5-FU plus methyl-CCNU chemotherapy, SWOG protocol 8896
1990	81MG035	Intergroup rhabdomyosarcoma study - IV. Pilot study for clinical group IV disease, POG-8889
1990	81MG038	Cisplatin and novobiocin in the treatment of stage 4, stage 3b or locally recurrent tumor after radiation therapy of non-small cell lung cancer. A phase II pilot, SWOG 8850
1990	81MG046	Up front intensive 6-MP/methotrexate vs up front alternating chemotherapy for acute lymphocytic leukemia in childhood
1990	81MG045	Treatment of children with localized malignant germ cell tumors. A phase II study
1990	81MG017	Fludarabine phosphate in patients with refractory chronic lymphocytic leukemia, NCI 89-0018 - group C, protocol
1990	81MG014	Incidence of undiagnosed pathology in the anterior region of the oral cavity in recall patients screened with panoramic and bitewing radiographs
1990	81MG005	Activated vitamin D metabolites and osteopenic bone disease in anticonvulsant treated patients
1990	81MG029	ALinC 15 dose intensive of methotrexate and 6-mercaptopurine for acute lymphocytic leukemia (ALL) in children, POG 9005
1990	CID0035	Treatment of children with high stage medulloblastoma: Cisplatin/VP-16 pre- vs post-irradiation; a phase III study, POG 9031
1991	81MG039	Intergroup rectal adjuvant protocol, phase III study, SWOG 9040
1991	81MG011	Emergency use request for clinical investigation proposal, "Single patient protocol for the clinical evaluation of itraconazole (R51,211/CC) in the compassionate clearance treatment of systemic mycoses"
1991	81MG028	Study of biological behavior of optic pathway tumors, a phase II study, POG 8935

AIR FORCE 1975-1994 (CONTINUED)

Keesler Medical Center, Keesler AFB, MS (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	81MG001	Pilot study evaluation of multimodality treatment of local regional esophageal carcinoma, phase II
1992	81MG031	OPEC/OJEC chemotherapy for children older than 1 year of age with INSS stages 2B and 3 neuroblastoma, POG 9244
1992	81MG013	Phase III randomized study of surgery vs surgery plus adjunctive radiation therapy in intermediate risk endometrial adenocarcinoma, GOG 99
1992	81MG033	T-cell #4 "A" pilot (with PEG L-asparaginase), POG 9295
1993	81MG016	Clinical trial to assess the relative efficiency of 5-FU + leucovorin with or without interferon alpha-2a in patients with Dukes' B and C carcinoma, NASBP C-05
1993	81MG015	Interferon alpha-2a therapy for angiomatous disease
1993	81MG007	Clinical trial comparing short, intensive Adriamycin/Cytosan +/- tamoxifen in node-negative breast cancer patients with ER-negative tumors: NSABP B-23
1993	81MG032	Phase II study of Taxol in children with recurrent/refractory soft tissue sarcoma, rhabdomyosarcoma, osteosarcoma, Ewing's sarcoma, neuroblastoma, germ cell tumors, Wilm's tumors, hepatoblastoma, and hepatocellular carcinoma, POG 9262
1994	81MG004	Prospective randomized comparison of combined modality therapy for carcinoma of the esophagus: Chemotherapy plus surgery vs surgery alone for patient with local regional disease, phase III - intergroup
1994	81MG040	Evaluation of topotecan in patients with recurrent or metastatic squamous cell carcinoma of head and neck, phase II, SWOG 9305

Lawrence Berkeley Laboratory, Berkeley, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1979	60MG112	Phase II protocol of heavy charged particle radiotherapy for localized esophageal squamous cell carcinoma (NCOG 3e81 - SG 79-109)
1979	60MG110	Phase I-II protocol of heavy charged particle radiotherapy for locally advanced and/or recurrent cancers of multiple sites and types (NCOG 0r81 - SG 79-111)

AIR FORCE 1975-1994 (CONTINUED)

School of Aerospace Medicine, Brooks AFB, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	AF0010	Thallium-201 myocardial imaging
1976	AF0068	Body fat: Its relationship to coronary artery disease, blood pressure, lipids, and other risk factors measured in a large male population
1977	AF0102	Small airways closure due to increased FIO ₂ 's and acceleration stress
1977	AF0101	Validation testing of decompression procedures for flying after diving at altitudes above sea level
1977	AF0053	Estimations of body composition by various methods: Tritium
1977	AF0100	Project Ranch Hand II: Health effects of herbicide exposure in Vietnam Air Force personnel
1978	AF0069	Treatment of hypertension in aviators: A clinical trial with Aldactazide
1978	AF0054	A nomogram to predict lean body mass in men
1980	AF0070	Computer-enhanced thallium scintigrams in asymptomatic men with abnormal exercise tests
1980	AF0030	Fluoroscopic coronary artery calcification and associated coronary artery disease in asymptomatic young men
1981	AF0055	Multigated thallium scans and radionuclide angiograms: Comparison in asymptomatic men
1982	AF0075	Cardiac fluoroscopy work unit 7755-27-12
1983	AF0056	Evaluation of asymptomatic male patients using the multi-gated acquisition method and first harmonic phase analysis
1986	AF0072	Accuracy of exercise thallium-201 myocardial imaging in asymptomatic young men

Walter Reed Army Hospital/Medical Center, Washington, DC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1990	CID90-324	Double-blind evaluation of intermittent therapy with Transderm-Nitro versus placebo in the treatment of chronic stable angina

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	CID0657	Myocardial infarction in young adults: Risk factors, clinical course, and functional impairment
1975	CID0651	Effectiveness of fibrinogen I-25 (human) in the detection of deep vein thrombosis
1975	CID0636	Grenz ray - its role in recalcitrant hand eczema
1975	CID0630	Natural history of euthyroid goiter
1975	CID0635	Immunological studies of human acute leukemia
1975	CIDI-82-75	Effect of lithium carbonate incubation on the candidacidal activity of human granulocytes
1975	CIDI-77-75	Effect of lithium carbonate (Li ₂ CO ₃ ,LC) on in vitro phagocytic index (PI) of granulocytes (PMNS)
1975	AF0003	Effectiveness of fibrinogen I-125 (human) in detection of deep vein thrombosis
1976	CID0704	MMPI correlates of localized brain damage
1976	CID0711	Radiographic appearance of normal seminal vesiculograms
1976	CID0728	Comparative trial of three Adriamycin combinations in non-oat cell lung cancer and other neoplasms
1976	CID0727	Sequential L-asparaginase and methotrexate, with or without Adriamycin in patients with neoplasms refractory to primary chemotherapy
1976	CID0687	Evaluation of continual catheter administration of elemental diet in patients with malignant disease
1976	CID0718	Cooperative project to evaluate the efficacy of pi mesons in the management of patients with inoperable cancer
1976	CID0669	Evaluation of chronic oral propranolol therapy on LV segmental wall motion and LV ejection fraction
1976	CID0668	Effects of coronary angiography on resting left ejection fraction
1976	CIDS-7624	Adriamycin vs adriamycin + cis-platinum in transitional cell bladder carcinoma
1977	CIDC27-77	Nonsuppressible plasma immunoreactive ACTH levels in cancer patients

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1977	CIDC25-76	Cardiac reaction to mediastinal radiation in patients with lymphoma
1978	CID0860	CIA vs ifosfamide alone in intensive squamous lung cancer
1978	CID0861	Combination OT for stages III & IV ovarian carcinoma resistant to Adria-CTX or single alkylating agent
1978	CID0896	Combined modality for resectable lung cancer
1978	CID0906	Diglycoaldehyde in adult leukemia phase II study
1978	CID0908	Rubidazone in relapsing lymphoma patients previously untreated with anthracycline derivatives, phase II
1978	CID0859	Chemotherapy of previously treated patients using VBAP, phase I
1978	CID0856	Chemotherapy of advanced carcinoma of the breast with rubidazone, phase II
1978	CID0855	Addition of DDP and bleomycin to VBAP in relapsing and resistant myeloma patients
1978	CID0916	Management of obligoblastic leukemia
1978	CID0883	Cis-diamine-dichloro-platinum in refractory disseminated malignant melanoma
1978	CID0955	Diglycoaldehyde in metastatic malignant melanoma, phase II study
1978	CID0980	Comparison of methotrexate and cis-platinum for patients with advanced squamous cell carcinoma of the head and neck region
1978	CID0921	Maytasine therapy of advanced breast cancer, phase II study
1978	CIDF-25-72	Radioimmunoassay of diphenylhydantoin
1978	CIDS-7736	Evaluation of anguidine in the treatment of urological malignancies, phase II
1979	CID79-052	Evaluation of maytansine in the treatment of relapsing Hodgkin's and non-Hodgkin's lymphoma
1979	CID79-087	Clinical evaluation of Tc-99m
1979	CID79-077	Post-myocardial infarction trial
1979	CID79-060	Evaluation of estrogen-antagonist in management of refractory large bowel tumors

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1979	CID79-059	VP-16-213 in acute monocytic and myelomonocytic leukemias, phase II
1979	CID79-054	Vinblastine sulfate in the management of resistant chronic myelogenous leukemia, phase II
1979	CID79-050	Hexamethylmelamine vs FAC in advanced transitional-cell bladder carcinoma in patients with impaired renal function, phase II-III
1979	CID79-047	BCG immunotherapy of recurrent superficial bladder cancer
1979	CID79-027	Evaluation of chlorozotocin in gastrointestinal cancer, phase II
1979	CID79-026	Evaluation of chlorozotocin in lung cancer, phase II
1979	CID79-014	Maytansine in advanced sarcoma, phase II
1979	CID79-119	Phase II evaluation of gallium nitrate in soft tissue and bone sarcoma
1979	CID79-118	Gallium nitrate in patients with malignant lymphoma - Hodgkin's and non-Hodgkin's, phase II
1979	CID79-117	Gallium nitrate in previously treated patients with metastatic breast cancer, phase II
1979	CID79-116	Treatment of early squamous cell carcinoma of the head and neck with initial surgery and/or radiotherapy followed by chemotherapy vs no further treatment, phase III
1979	CID78-008	Study of nifedipine in the treatment and prevention of variant angina pectoris
1979	CID79-024	Short-term use of anti-thyroid drugs in treatment of diffuse toxic goiter
1979	CID79-056	Carcinoembryonic antigen as an indicator for second look surgery in colorectal cancer: A randomized, prospective clinical trial, phase II
1979	CID0207	Protection against myocardial anoxia by metabolic inhibitors
1979	CID0979	Anguidine in central nervous system tumors
1980	CID80-108	Benzydamine HCL for the treatment of oropharyngeal mucositis caused by radiotherapy or chemotherapy
1980	CID80-056	Evaluation of acridinylaminomethanesulfon-m-anisidide (AMSA) in metastatic or recurrent epithelial carcinoma of the female genital tract

350 Appendix 1—Records Search

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1980	CID80-057	Evaluation of m-AMSA in metastatic carcinoma of GU tract except renal carcinoma, phase II
1980	CID80-058	Chemotherapy of functioning and non-functioning islet cell carcinoma with chlorozotocin, phase II
1980	CID80-059	Chemotherapy for multiple myeloma, phase III
1980	CID80-070	Study of cis-diamine-dichloro-platinum (DDP) for recurrent gliomas, phase II
1980	CID80-071	Radiation therapy in combination with CCNU in patients with incompletely resected gliomas of the brain grade I and II, phase III
1980	CID80-092	Evaluation of 5-FU vs phase II drug in metastatic adenocarcinoma of large bowel, phase II - III
1980	CID80-055	Evaluation of mitomycin-C + vincristine + bleomycin + cis-platinum in treatment of disseminated carcinoma of uterine cervix, phase II
1980	CID80-007	Evaluation of acridinylamino-methanesulfon-m-anisidide (AMSA) in metastatic squamous carcinoma of the head & neck, phase II
1980	CID80-114	Prospective study of effect of chemotherapy on cell surface markers in malignant disorders of the lymphocyte
1980	CID80-110	Evaluation of two maintenance regimens in treatment of acute lymphoblastic leukemia in adults, phase II
1980	CID80-091	Evaluation of gallium nitrate in metastatic adenocarcinoma of large bowel, phase II portion
1980	CID80-006	Evaluation of m-AMSA in metastatic or advanced adenocarcinoma of stomach & pancreas, phase II
1980	CID79-126	Development of a radioimmunologic assay for the detection of polyamines as markers for tumor growth and response to chemotherapy
1980	CID80-009	Phase II evaluation of MGBG in metastatic carcinoma of the breast
1980	CID79-136	Lithium carbonate attenuation of granulocytopenia during intensive chemotherapy
1980	CID80-054	Evaluation of methylglyoxylbisguanylhydrazone (MGBG) in metastatic renal carcinoma, phase II

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1980	CID80-008	Gallium nitrate in metastatic squamous cell carcinoma and/or local recurrent squamous cell carcinoma of the head & neck, phase II
1980	CID80-010	M-AMSA in hepatocellular carcinoma, gallbladder carcinoma and bile duct carcinoma, phase II
1980	CID80-011	Phase II evaluation of m-AMSA in lymphoma - Hodgkin's and non-Hodgkin's
1980	CID80-012	Phase II evaluation of gallium nitrate in metastatic urological malignancies: Testicular, bladder, prostate & kidney
1980	CID80-013	Ifosfamide in treatment of resistant disseminated malignant melanoma
1980	CID80-050	Adriamycin and single dose DTIC in soft tissue and bone sarcomas, phase II
1980	CID80-052	Combination chemotherapy with cyclophosphamide, Adriamycin and cis-platinum vs, m-AMSA in patients with advanced transitional cell cancer of the urinary bladder with good renal function, phase II
1980	CID0055	Combined modality therapy for breast carcinoma, phase III, SWOG 7827
1981	CID81-023	Antemetic trials in patients receiving cancer chemotherapy - a comparison of two dose schedules of oral delta-9-tetrahydrocannabinol (THC)
1981	CID81-060	Performance of percutaneous transluminal coronary angioplasty (PTCA)
1981	CID81-076	Evaluation of combined chemotherapy and hyperbaric oxygen in patients with (a) locally advanced solid tumor primaries or metastases for which no effective conventional treatment exists and (b) locally...
1981	CID81-133	Large bowel cancer and colonic microbial metabolism
1981	CID81-036	Musculoskeletal pain treatment in chronic low back: TENS vs dynamic interferential TENS
1982	CID82-169	Phase II trial of ara-C plus cis-platinum for treatment of adenocarcinoma
1982	CID82-057	Electron microscopic comparison of gingival and muscle capillary basement membrane thickness in diabetic and non-diabetic patients
1982	CID82-008	Evaluation of bovine pericardium for use in repair of congenital intracardiac defects
1982	CID82-040	Combined chemotherapy and radiation therapy (ABCX) for squamous cell carcinoma of cervical esophagus

352 Appendix 1—Records Search

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1982	CID82-163	Effect of long-term treatment with cromolyn sodium on non-specific bronchial hyperreactivity
1982	CID82-161	One-time investigational protocol for relapse oat cell carcinoma of lung in patient (name redacted)
1982	CID82-159	One-time use of investigational drug VP-16 in oat cell carcinoma of lung in patient (name redacted)
1982	CID82-154	One time use of experimental interferon therapy for disseminated renal cell carcinoma for patient (name redacted)
1982	CID82-150	Phase II trial of human lymphoblastoid interferon (Welleferon) in metastatic renal adenocarcinoma - phase II pilot
1982	CID82-148	Single dose pharmacokinetics of copreomycin in patients with impaired renal function
1982	CID82-144	One time use of mexiletine in (name redacted)
1982	CID82-135	Patch aortoplasty in correction of infantile coarctation of the aorta
1982	CID82-011	Prospective randomized study of effect of laser photocoagulation on preservation of vision of uremic diabetics
1982	CID82-115	Adjuvant hyperbaric oxygen therapy in surgical management of intestinal complications of radiotherapy
1982	CID82-103	Effect of hyperbaric oxygen on premalignant mucosal changes (pilot study)
1982	CID82-095	82-095
1982	CID82-094	One-time use of experimental chemotherapeutic protocol for (name redacted)
1982	CID82-078	One-time use of mexiletine, (name redacted)
1982	CID82-058	Adjuvant postoperative intrahepatic infusional chemotherapy for patients with adenocarcinoma of the colon or rectum following surgical resection
1982	CID82-010	Effect of passive mobilization on improvement of active range of motion in post-forearm fracture patients
1982	CID82-036	Phase II evaluation of 5-fluorouracil, Adriamycin, mitomycin-C, and bleomycin (FAM-Bleo), combination chemotherapy for advanced squamous cell carcinoma of esophagus and anus and cloacogenic carcino

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1982	CID82-041	5-Fluorouracil, Adriamycin, mitomycin-C, cis-platinum (FAMP) combination chemotherapy for advanced adenocarcinoma of esophagus, stomach, and pancreas: Phase I-II study
1982	CID82-037	Adjuvant chemotherapy (FAM) after curative resection for adenocarcinoma of stomach or esophagus
1982	CID82-130	Use of experimental systemic adjuvant therapy for stage II malignant melanoma utilizing bisantrene on one time basis
1983	CID83-094	Use of Teletronics Pasar model no. 4151 anti-tachycardia pacemaker in (name redacted)
1983	CID83-086	Effect of hyperbaric oxygen on tumoricidal activity of cross-linked oxidase-peroxidase
1983	CID83-083	Combination chemotherapy of unfavorable histology non-Hodgkin's lymphoma with CHOP and CVB (alternating), phase II
1983	CID83-082	Treatment for advanced non-small cell lung cancer: PVP versus PVPM versus PVE versus PVEMI versus FOMI/CAP, phase III
1983	CID83-079	Clinical evaluation of indium-111 labeled autologous leukocyte in autologous plasma
1983	CID83-152	One time use of plasma perfusion with protein-A in therapy of refractory breast carcinoma in (name redacted)
1983	CID83-070	Intensive consolidation therapy with autologous bone marrow transplantation in treatment of adult acute leukemia
1983	CID83-069	Clinical evaluation of Tc-99m antimony sulfide colloid in radionuclide lymphoscintigraphy
1983	CID83-081	Evaluation of subcutaneous alpha interferon in patients with multiple myeloma resistant to conventional therapy or previously untreated
1983	CID83-108	One-time use of alpha-2 interferon - multiple myeloma
1983	CID83-113	Evaluation of adjuvant therapy and biological parameters in node negative operable female breast cancer (ECOG EST-1180), intergroup study
1983	CID83-140	One time use of plasma perfusion with protein-A in the therapy of refractory breast carcinoma in (name redacted)

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1983	CID83-158	Effect of autotransfusion on myocardial function during balloon angioplasty
1983	CID83-163	One-time request for the enrollment of patient (name redacted) into the CCSG 681 intergroup rhabdomyosarcoma study II
1983	CID83-188	Combination chemotherapy with m-AMSA, cis-platinum and MGBG for refractory lymphoma, phase II
1983	CID83-063	Effect of sodium hypochloride and citric acid solutions on connective tissue new attachment
1983	CID83-110	Effect of ultraviolet radiation on aerobic cutaneous microorganisms in patients with atopic dermatitis
1983	CID83-189	Phase II study of doxorubicin, mitomycin-C, and 5-fluorouracil in the treatment of metastatic adenocarcinoma of the prostate
1983	CID83-134	One-time use of plasma perfusion with protein-A in therapy of refractory breast carcinoma in (name redacted)
1983	CID83-018	Evaluation of bisantrene hydrochloride in refractory multiple myeloma, phase II
1983	CID83-061	One-time use of investigational bone marrow transplant protocol for (name redacted)
1983	CID83-009	Chemoprevention of actinic keratosis with topical vitamin A acid
1983	CID83-014	Evaluation of combined or sequential chemo-endocrine therapy in treatment of advanced adenocarcinoma of prostate, phase III
1983	CID83-124	Phase I trial of plasma perfusion in therapy of malignant disease
1983	CID83-017	Randomized comparison of Adriamycin, mitoxantrone, and bisantrene in patients with metastatic breast cancer not previously exposed to intercalating chemotherapy, phase III
1983	CID83-019	Evaluation of aclacinomycin A in colorectal carcinoma, phase II
1983	CID83-021	Correlation between progesterone receptor and response to tamoxifen in patients with newly diagnosed metastatic breast disease, phase II
1983	CID83-022	One-time use of experimental drug amiodarone for patient (name redacted)
1983	CID83-026	Alpha-2 interferon protocol for advanced stage refractory Hodgkin's disease

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1983	CID83-036	Study of human tumor stem cell assay system
1983	CID83-039	Evaluation of aclacinomycin A in adult acute leukemia, phase II-pilot
1983	CID83-016	Treatment for advanced adenocarcinoma and large cell carcinoma of lung: FOMI vs CAP vs FOMI/ CAP, phase III
1983	CID83-031	Evaluation of bisantrene hydrochloride in adult acute leukemia, phase II
1983	CID83-038	Evaluation of bisantrene hydrochloride in hepatoma, phase II
1983	CID83-037	Evaluation of bisantrene hydrochloride in refractory malignant melanoma, phase II
1983	CID83-035	Evaluation of DHAD in refractory multiple myeloma, phase II
1983	CID83-034	Evaluation of DHAD in advanced squamous cell carcinoma of the head and neck, phase II
1983	CID83-033	Evaluation of two combination chemotherapy programs, Adriamycin and cis-platinum (AP) versus Adriamycin, cis-platinum plus VP 16-213 (VAP), in treatment of extensive squamous cell ...
1983	CID83-032	Evaluation of bisantrene hydrochloride in refractory ovarian cancer, phase II
1983	CID0016	ETR - for phase II trial of high dose VP-16 etoposide an autologous bone marrow transplantation as therapy for recurrent or refractory malignant brain tumors for patient (name redacted)
1983	CID0039	Phase II trial of high dose Melphalan and autologous bone marrow transplantation as therapy for resistant malignancies
1984	CID84-148	Treatment of newly diagnosed acute non-lymphocytic leukemia for children greater than one month but less than twenty-one years
1984	CID84-104	Trial of low dose continuous infusion of ara-C for treatment of preleukemia
1984	CID84-098	One time use of investigational device, Cybertach-60 anti-tachycardia pulse generator in (name redacted)
1984	CID84-100	Effect of intravenous nitroglycerin and nitroprusside on ventricular function in acute ischemic coronary syndromes

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1984	CID84-089	One time use of high dose BCNU and autologous bone marrow transplantation in (name redacted)
1984	CID84-101	Evaluation of diastolic left ventricular function in acute ischemia
1984	CID84-187	One time use request for bone marrow transplant followed by BCNU therapy for malignant glioma of the spinal cord for patient (name redacted)
1984	CID84-081	Multi-site study of effects of Didronel IV infusion on hypercalcemia due to malignant disease or primary hyperparathyroidism
1984	CID84-099	Phase III trial comparing epirubicin to 5-fluorouracil in advanced sigmoid and rectal carcinoma
1984	CID84-105	Comparative effectiveness of and preference for guided imagery and progressive muscle relaxation in relieving the pain and distress of oncologic patients
1984	CID84-115	Emergency treatment request for allogeneic bone marrow transplant
1984	CID84-145	Treatment of newly diagnosed acute lymphoblastic leukemia in children with a good prognosis
1984	CID84-153	National Wilms' tumor study-3 (NWTS-3)
1984	CID84-046	Phase II trial of high dose BCNU and autologous bone marrow transplantation as therapy for malignant brain tumors
1984	CID84-155	Treatment of second remissions or initial induction failures in children with acute lymphocytic or acute undifferentiated leukemia
1984	CID84-156	Emergency treatment of breast cancer in patient (name redacted)
1984	CID84-167	Intergroup rhabdomyosarcoma study II
1984	CID84-186	Phase II trial of cis-platinum plus 5-fluorouracil for treatment of refractory metastatic breast adenocarcinoma
1984	CID84-144	Treatment of newly diagnosed acute lymphoblastic leukemia in children with an intermediate prognosis
1984	CID83-178	Computerized tomography directed mediastinal bronchoscopic needle aspiration in bronchogenic carcinoma

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1984	CID84-070	One-time use of phase II trial of high dose BCNU and autologous bone marrow transplantation as therapy for malignant brain tumors for (name redacted)
1984	CID84-077	Sucralfate inhibition of tumor cell implanation in urinary bladder
1984	CID83-177	Comparison of combination chemotherapy with VP-16 and cis-platinum vs BCNU thiotepa, vincristine and cyclophosphamide in patients with small cell carcinoma of the lung who have failed or...
1984	CID83-060	Investigation of the Telectronics model 4151 programmable scanning arrhythmia reversion pulse generator
1984	CID83-179	Investigation of the use of amiodarone for ventricular arrhythmias
1984	CID83-180	Investigation for use of mexiletine for ventricular arrhythmias
1984	CID84-031	Transcutaneous oxygen/carbon dioxide (tCO ₂ , CO ₂) measurement in neurosurgical patients: A multivariant analysis of cardiovascular effects upon tCO ₂ /CO ₂
1984	CID84-007	One-time use of experimental drug amiodarone for patient (name redacted)
1984	CID84-022	One-time use of experimental drug amiodarone for patient (name redacted)
1984	CID84-025	One-time use of experimental drug amiodarone for patient (name redacted)
1984	CID84-060	Evaluation of patients undergoing transurethral resection of prostate (TURP) for malignancy with transrectal biopsy
1984	CID83-184	Study of the use of non-invasive pulsed Doppler determination of cardiac output in neonate
1984	CID83-166	Use of phase II trial of high dose BCNU and autologous bone marrow transplantation as therapy for malignant brain tumors for patient (name redacted)
1984	CID0068	Use of radioimmunoassay (RIA) for therapeutic drug level monitoring of cyclosporine
1984	CID0070	Evaluation of bisantrene hydrochloride (NSC-337766) for the treatment of leukemia and solid tumors in childhood, CCSG 086
1985	CID85-051	Case control study of acute non-lymphocytic leukemia

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1985	CID85-052	Epidemiology of osteosarcoma in childhood
1985	CID85-054	Case control study of Ewing's sarcoma
1985	CID85-103	Trial of Norfolk Medical peritoneal-access-port for repeated removal of recurrent pleural effusions related to malignancies
1985	CID85-110	Double-blind evaluation of intermittent therapy with Transderm-Nitro versus placebo in treatment of chronic stable angina
1985	CID85-050	Case control study of risk factors for Wilms' tumor
1985	CID85-125	One-time use of MSK protocol T-10 for (name redacted) with malignant fibrous histiocytoma of bone
1985	CID85-121	Evaluation of degree of effectiveness of EBI bone healing system pulsing electromagnetic fields in treatment of avascular necrosis of femoral head
1985	CID85-095	Emergency treatment request, replacement of Pasar 4151 with updated model Pasar 4172 anti-tachycardia pacemaker in (name redacted)
1985	CID85-049	Epidemiologic and cytogenic study of retinoblastoma
1985	CID85-035	Emergency treatment request to place a peritoneal-access-catheter in patient (name redacted)
1985	CID85-028	Emergency treatment request to perform catheter ablation of accessory by-pass for patient (name redacted)
1985	CID85-019	Combination chemotherapy of intermediate and high-grade non-Hodgkin's lymphoma with m-BACOD, phase II
1985	CID85-018	Multiple drug adjuvant chemotherapy for patients with estrogen receptor negative stage II carcinoma of breast, phase III, SWOG 8313
1985	CID85-163	One time use of BCNU and autologous bone marrow transplantation for (name redacted)
1985	CID85-160	One time use of SWOG protocol 8309 for treatment of acute myelogenous leukemia in patient (name redacted)
1985	CID85-150	One time use of autologous bone marrow transplantation, Cytosan and total body irradiation for (name redacted)

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1985	CID0015	ETR - for phase II trial of high dose BCNU and autologous bone marrow transplantation as therapy for malignant brain tumors for patient (name redacted)
1985	CID0025	ETR - to use high dose VP-16 and autologous bone marrow transplantation for patient (name redacted)
1985	CID0013	ETR - catheter ablation of accessory bypass tract in patient (name redacted)
1985	CIDQ-405	Efficacy of cefotetam disodium (Cefotan) on anaerobic bacteria, p.i.
1985	CIDM-456	Prediction of left main and severe three-vessel coronary artery disease by a non-invasive scoring index, p.i.
1985	CID0024	ETR - the use of high dose Cytoxan and total body irradiation followed by autologous BMT as therapy for refractory diffused histiocytic lymphoma to treat patient (name redacted)
1986	CID85-146	Hemodynamic effects of intravenous metoprolol on left ventricular function in acute and threatened myocardial infarction
1986	CID86-133	Emergency treatment request for preoperative and postoperative adjuvant chemotherapy for osteosarcoma of extremity for patient (name redacted)
1986	CID86-119	Emergency treatment request for treatment of cancer associated hemolytic uremic syndrome with staphylococcal protein A immunoperfusion in patient (name redacted)
1986	CID87-001	Emergency treatment request for trial of high dose Cytoxan, BCNU, and VP-16 followed by autologous bone marrow transplantation to treat patient (name redacted)
1986	CID86-170	Emergency treatment request for phase II trial of high dose VP-16 and autologous BMT to treat (name redacted) for recurrent testicular cancer
1986	CID86-153	Left ventricular pressure-volume relationship in patients with coronary artery disease
1986	CID86-152	Efficacy of the vest in measuring left ventricular function and detecting silent myocardial ischemia in post-myocardial infarction patients
1986	CID86-143	Emergency treatment request to use NCI protocol 85-c-154a phase II study of combination of ifosfamide, mesna, and etoposide (VP-16-213) in children and young adults with recurrent or refractory sarcomas and primitive ...

360 Appendix 1—Records Search

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1986	CID87-002	Emergency treatment request for use of cromolyn sodium as oral agent
1986	CID86-016	Emergency treatment request for phase II trial of high dose VP-16 and autologous bone marrow transplantation for patient (name redacted)
1986	CID85-154	Esophageal motility in hypothyroid patients pre- and post-treatment with replacement thyroid hormones
1986	CID85-158	Request for use of BCNU and autologous bone marrow transplantation
1986	CID85-159	One time use of BCNU and autologous bone marrow transplantation to treat (name redacted)
1986	CID86-150	Preoperative and postoperative adjuvant chemotherapy for osteosarcoma of extremity
1986	CID86-005	Emergency treatment request for phase II trial of high dose VP-16 followed by autologous bone marrow transplantation as therapy for recurrent or refractory malignant brain tumors for patient (name redacted)
1986	CID86-118	Emergency treatment request for therapy of refractory adult acute myelogenous leukemia with amsacrine given as a single agent in patient (name redacted)
1986	CID86-035	Intensive therapy with allogenic or autologous bone marrow transplantation following induction and consolidation in treatment of acute myelogenous leukemia (AML)
1986	CID86-036	Clinical program for implantation and use of Mediport II
1986	CID86-042	Emergency treatment request for phase II trial of high dose BCNU and autologous bone marrow transplantation for patient (name redacted)
1986	CID86-067	Comparison of isosorbide-5-mononitrate and isosorbide dinitrate in patients with angina pectoris
1986	CID86-090	Determination of normal standards for renal size in premature infants by ultrasound imaging
1986	CID86-095	Emergency treatment request to use pentostatin in hairy cell leukemia for patient (name redacted)
1986	CID86-100	Phase III comparison of CHOP versus m-BACOD versus PRO MACE-CYTA BOM versus MACOP-B in patients with intermediate or high-grade non-Hodgkin's lymphoma, SWOG 8516

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1986	CID86-101	Clinical trial in patients with stage II and III completely resected non-small cell cancer of lung comparing chemotherapy (CAP) vs no therapy following surgery - comparative study of immediate combination chemo.... LCSG 853
1986	CID86-041	Emergency treatment for phase II trial of high dose VP-16 and autologous bone marrow transplantation for patient (name redacted)
1986	CID86-003	Trial of cis-platinum plus 5-fluorouracil with concomitant radiotherapy for unresectable localized non-small cell carcinoma of lung
1986	CID0022	ETR - for the use of high dose cyclophosphamide, BCNU, and etoposide with autologous bone marrow transplantation for treatment of patient (name redacted) whose diagnosis is recurrent lymphoma
1986	CID0023	ETR - of high dose cyclophosphamide, BCNU, and etoposide with autologous BMT as therapy for recurrent lymphoma for patient (name redacted)
1986	CID0031	Treatment of selected intermediate risk patients with stage Ib carcinoma of the cervix after radical hysterectomy and pelvic lymphadenectomy: Pelvic radiation therapy versus no further therapy, GOG 92
1986	CID0018	ETR - for total lymphoid irradiation in intractable systemic lupus erythematosus vasculitis for patient (name redacted)
1986	CID0017	ETR - for phase II trial of high dose VP-16 and autologous bone marrow transplantation as therapy for recurrent or refractory malignant brain tumors R.V.E.
1986	CID0008	Clinical evaluation of technetium-99m hexamibi (RP-30A) as an adjunct in conjunction with stress testing for the diagnosis of ischemic heart disease
1986	CID0007	Barium enema x-ray preparation comparing Braintree Labs F-38 PEG-ELS vs standard cleansing methods
1986	CID0006	Autologous bone marrow transplantation for poor prognosis lymphomas - a pilot dose escalation study
1986	CID0002	Phase II pilot program of concurrent chemotherapy and radiation therapy before surgery in patients with stage III (T1-2 and selected T3, N2, MO) non-small cell lung carcinoma
1986	CID0005	Allogeneic bone marrow transplantation for life threatening bone marrow disease

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1986	CID0014	ETR - for intensive consolidation therapy with autologous bone marrow transplantation in the treatment of acute myelogenous leukemia (AML) for patient (name redacted)
1986	CID0067	Treatment of aplastic anemia with allogeneic bone marrow transplantation from HLA-identical donors
1986	CID0040	Phase II trial of high dose VP-16 autologous bone marrow transplantation as therapy for recurrent refractory malignant brain tumors
1986	CID0041	Phase II trial of high dose VP-16 and autologous BMT as therapy for advanced non-small cell lung cancer
1987	CID88-034	National Wilms' tumor study 4, POG 8650
1987	CID87-097	Phase II study of the combination of ifosafamide, mesna, and etoposide (VP-16-213) in children and young adults with recurrent sarcomas, primitive neuroectodermal tumors, and other tumors
1987	CID87-112	Emergency treatment request for high dose busulfan and cyclophosphamide with autologous bone marrow transplantation for patient (name redacted)
1987	CID88-019	Growth of human basal cell carcinoma cells in defined medium and study of their growth and immunological characteristics
1987	CID88-016	Preclinical abnormalities of left ventricular function in diabetics
1987	CID88-031	Emergency treatment request to use DTIC to treat patient (name redacted) for malignant melanoma and sarcoma
1987	CID87-084	Emergency treatment request for use of phase II study of the combination of ifosfamide, mesna, and etoposide (VP-16-213) in children and young adults with recurrent sarcomas and primitive neuroectodermal tumors and other...
1987	CID88-027	Unfavorable medulloblastoma and intracranial primitive neuroectodermal tumors (PNET), malignant ependymoma, ependymoblastoma, pineoblastoma, and central neuroblastoma
1987	CID87-017	Pilot study to evaluate efficacy of intrapleural chemotherapy in management of malignant pleural effusions
1987	CID87-004	Prospective randomized trial to determine benefit of surgical resection of residual disease following response of small cell lung cancer to combination chemotherapy, LCSG 832

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1987	CID87-078	Emergency use of high dose busulfan and cyclophosphamide with autologous bone marrow transplantation to treat patient (name redacted) for recurrent acute myeloblastic-leukemia
1987	CID87-005	Randomized comparative trial of lobectomy versus limited resection for patients with cancer of lung
1987	CID87-009	Phase II study of piritrexim (BW 301U) injection in soft tissue sarcoma
1987	CID87-031	Phase II study of carbetimer in advanced non-small cell carcinoma of lung
1987	CID87-048	Effect of isoproterenol stress on ventricular dynamics as assessed by nuclear probe in patients referred for cardiac catheterization
1987	CID87-051	Efficacy and safety of nisoldipine (BAY K 5552) in treatment of exercise induced angina pectoris
1987	CID87-074	Phase I-II evaluation of DTIC (dimethyltriazenoimidazole carboxamide) in the treatment of malignant melanoma and sarcoma on a single dose schedule
1987	CID87-067	Bopindolol open safety trial (BOST); protocol 03, AHR-4795
1987	CID87-050	Percutaneous balloon valvuloplasty in adult aortic stenosis and mitral stenosis
1987	CID87-066	Open-label study to evaluate the safety, tolerability, and hemodynamic response of CGS-16617 in congestive heart failure
1987	CID87-055	Efficacy of flosequinan (BTS 49465) on exercise tolerance and quality of life in patients with congestive heart failure
1987	CID0001	Treatment of recurrent brain tumor at sites other than the brain stem with an eight-drug-in-one-day regimen, CCSG 091
1987	CID0063	Thallium esophageal, paced stress testing: Value in detection of coronary artery disease
1987	CIDEE-EEE	LCSG 85q, assesment of quality of life in LCSG patients
1987	CID0019	ETR - for use of cranial radiation in intractable systemic lupus erythematosus CNS vasculitis for patient (name redacted)
1987	CID0020	ETR - for use of high dose busulfan and cyclophosphamide with autologous bone marrow transplantation as therapy for recurrent acute myeloblastic leukemia for patient (name redacted)

364 Appendix 1—Records Search

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	CID89-058	Phase III trial of cisplatin alone or in combination with doxorubicin, vinblastine and methotrexate in advanced bladder cancer, SWOG 8594
1988	CID88-021	Dose response evaluation of bopindolol in the treatment of stable angina pectoris, protocol 13, study 7, ahr-4795
1988	CID89-054	Randomized phase II study of preoperative therapy for patients with technically unresectable non-small cell lung cancer, LCSG 881
1988	CID89-061	Phase III evaluation of high dose vs standard dose cisplatin combined with bleomycin and VP-16 for advanced metastatic testicular cancer
1988	CID88-054	Emergency treatment request for high dose busulfan and cyclophosphamide with autologous bone marrow transplantation to treat patient (name redacted)
1988	CID88-045	Evaluation of BW TPA in the initial analysis and maintenance of patency of coronary arteries in patients with acute myocardial infarction; p52 protocol 10
1988	CID88-102	Comparison of percutaneous transluminal balloon angioplasty and laser thermal angioplasty in atherosclerotic occlusive disease of the femoropopliteal artery
1988	CID88-098	Comparison of flecainide vs procainamide in patients with Wolff-Parkinson-White syndrome using esophageal pacing
1988	CID88-087	Double-blind evaluation of Transderm-Nitro vs placebo in the treatment of transient myocardial ischemia in male patients with coronary artery disease and asymptomatic ischemic events
1988	CID88-060	Phase II trial of carboplatin (NSC-241240, CBDCA) in children with recurrent or metastatic solid tumors following therapy of higher priority
1988	CID88-058	Centralized non-small cell lung cancer specimen repository and DNA/MA bank, LCSG 871
1988	CID88-131	Low-dose Mexitil (mexiletine hydrochloride) for the initial therapy for potentially malignant ventricular arrhythmias
1988	CID0011	Comparison of the Wang 22 gauge cytology needle and 18 gauge histology needle in the staging of bronchogenic carcinoma
1988	CID0065	Evaluation of indium and gallium scanning of hemodialysis access fistulas for abnormalities in the absence of infections

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	CID0066	Intercondylar notch: A computed tomography study of size and its relation to tears of the anterior cruciate ligament
1988	60MG147	Treatment of localized non-Hodgkin's lymphoma: Comparison of chemotherapy (CHOP) to chemotherapy plus radiation therapy
1989	CID90-006	Thromboelastography (TEG) during cardiopulmonary bypass (CBP) as a predictor of post-bypass coagulation status
1989	CID90-007	Efficacy and safety of core-coat nisoldipine (BAY K 5552) ten, twenty, and thirty milligram every day versus placebo in patients with stable exertional angina pectoris
1989	CID90-013	Therapy for B-cell acute lymphoblastic leukemia and advanced diffuse undifferentiated lymphomas, phase II, POG 8617/8618
1989	CID90-014	Recombinant alpha-interferon in childhood chronic myelogenous leukemia, phase II, POG 8823/8824
1989	CID90-027	T-cell 3, POG 8704
1989	CID90-037	Randomized prospective study of lumbar spinal fusions with and without transpedicular screw-plate fixation
1989	CID90-071	Osteosarcoma study 2: A randomized trial pre-surgical chemotherapy vs immediate surgery and adjuvant chemotherapy in the treatment of non-metastatic osteosarcoma, phase III, POG 8651
1989	CID90-065	Clinical trial to evaluate natural history and treatment of patients with non-invasive intraductal adenocarcinoma and lobular in-situ registry, NSABP b-17
1989	CID90-067	Emergency treatment request for use of fludarabine to treat patient (name redacted) for refractory chronic lymphocytic leukemia
1989	CID89-246	Evaluation of vincristine, Adriamycin, cyclophosphamide, and dactinomycin with or without the addition of ifosfamide and etoposide in the treatment of patients with newly diagnosed Ewing's sarcoma of... POG 8850, CCSG 7781
1989	CID89-112	Effect of two dosage schedules of Dilatrate-SR therapy vs Isordil Tembids (3 weeks) on efficacy and development of tolerance in patients with stable angina pectoris
1989	CID90-068	Treatment of stage D neuroblastoma in children >365 days at diagnosis - a phase II/III study, POG 8741/8742

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1989	CID90-044	Intensive multiple therapy vs autologous bone marrow transplant early in 1st cr for children with acute myelocytic leukemia, phase III, POG 8821
1989	CID89-245	Study of high-risk malignant germ cell tumors in children, POG 9049, CCSG 8822
1989	CID89-234	Double-blind, placebo-controlled, parallel, multicenter study to assess the effects of digoxin withdrawal on exercise tolerance and other measures of clinical efficacy in patients with chronic congestive heart failure...
1989	CID89-233	Double-blind, placebo-controlled, parallel, multicenter study to assess the effects of digoxin withdrawal on exercise tolerance and other measures on clinical efficacy in patients with chronic congestive heart failure in norm...
1989	CID89-232	High dose monthly intravenous pulse vs daily oral cyclophosphamide in lupus nephritis: Clinical and immunologic response
1989	CID89-202	Phase III study of alfa-nl (Welleferon TM) as adjuvant treatment for resectable renal cell carcinoma, SWOG 8792
1989	CID89-201	Trial of cystectomy alone vs neoadjuvant M-VAC + cystectomy in patients with locally advanced bladder cancer, SWOG 8710
1989	CID89-161	Randomized study of etoposide + cisplatin and etoposide + cisplatin (CBDCA) in the management of good risk patients with advanced germ cell tumors, SWOG 8789
1989	CID89-135	Multicenter crossover comparison of intravenous adenosine (Adenoscan trademark) versus exercise in the noninvasive assesment for coronary artery disease by single photon emission computed tomography (SPECT)
1989	CID89-120	Open evaluation of the safety and efficacy of maintenance therapy with oral recainam in the prevention of life-threatening ventricular arrhythmias
1989	CID89-116	Comparison of percutaneous transluminal balloon angioplasty and atherectomy in atherosclerotic stenoses of the femoropopliteal artery
1989	CID89-109	Automatic implantable cardioverter defibrillator electrode function testing with Ventritex HVS-02 electrophysiologic device
1989	CID89-038	Efficacy and safety trial of toremifene vs tamoxifen in postmenopausal patients with metastatic breast cancer - F.A.C.T.

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1989	CID89-118	Comparative inpatient study of the safety and efficacy of three oral recainam doses in the suppression of life-threatening ventricular tachyarrhythmias
1989	CID0009	Comparison of impedance plethysmography to duplex sonography in the diagnosis of deep venous thrombosis
1989	CID0010	Comparison of L-hyoscyamine, glucagon, and placebo for air contrast upper gastrointestinal x-rays
1989	60MG011	Clinical trial to determine the worth of tamoxifen and the worth of breast radiation in the management of patients with node-negative, clinically occult, invasive breast cancer treated with lumpectomy (NSABP b-21 - SGO89-248/7)
1989	CID0059	Treatment of pathologic stage C carcinoma of the prostate with adjuvant radiotherapy, SWOG 8794
1989	CID0003	Phase II study of simultaneous radiation therapy and cisplatin chemotherapy followed by 5-FU and cisplatin chemotherapy in patients with locally advanced, inoperable squamous cell carcinoma of the head and neck
1989	CID0021	ETR - for use of non-standard preparative chemotherapy regimen for allogeneic bone marrow transplant to treat patient (name redacted) for Burkitt's lymphoma
1989	CID0026	Evaluation of technetium Tc-99m sestamibi (Cardiolite) as an adjunct to stress testing for the diagnosis of ischemic heart disease using a short time interval between rest and stress injections
1989	60MG042	Prospectively randomized trial of low-dose leucovorin plus 5-FU, high-dose leucovorin plus 5-FU, or observation following curative resection in selected patients with Duke's B or C colon cancer (SWOG 8899 - SGO 89-097)
1989	60MG146	Treatment of limited small cell lung cancer with concurrent chemotherapy, radiotherapy, with or without GM-CSF and subsequent randomization to maintenance interferon or no maintenance (SWOG 8812 - SGO 89-250)
1990	CID90-069	Study of reproductive function in patients with testicular cancer, SWOG #8711
1990	CID90-109	Comparison of CGS-16949a versus megestrol acetate in postmenopausal women with breast carcinoma - F.A.C.T.
1990	CID90-321	Comparison of verapamil and adenosine for the treatment of paroxysmal supraventricular tachycardia in the emergency department

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1990	CID90-296	Intensive qod ifosfamide for the treatment of children with recurrent or progressive CNS tumors - a phase II study, POG 9060
1990	CID90-300	Emergency treatment request, therapy of refractory adult acute myelogenous leukemia with amsacrine given as a single agent to treat patient (name redacted)
1990	CID90-301	Emergency treatment request for use of fludarabine phosphate in patients with refractory chronic lymphocytic leukemia to treat patient (name redacted)
1990	CID90-305	Prevalence and clinical significance of radiographic abnormalities of the cervical spine
1990	CID90-315	Treatment of isolated central nervous system leukemia, POG 9061
1990	CID90-295	Evaluation of quality of life in patients with stage C adenocarcinoma of the prostate enrolled on SWOG 8794 (int-0086), SWOG 8994
1990	CID90-318	Prognostic value of cytometry measurements of breast cancer DNA from postmenopausal patients with involved nodes and receptor positive tumors: A companion protocol to SWOG 8814 (SWOG 8854)
1990	CID90-320	ADR-529 as a cardioprotective agent in a phase III randomized trial of FAC vs FAC + ADR-529 in the treatment of disseminated carcinoma of the breast
1990	CID90-328	Comparison of dual photon x-ray densitometry percent body fat determination with water immersion density determination of body fat
1990	CID90-337	Dose ranging study of intravenous amiodarone hydrochloride in patients with refractory ventricular tachycardia/ventricular fibrillation
1990	CID91-017	Thyroid hormone kinetics in elite athletes
1990	CID91-051	Pilot study of prophylactic ursodiol to reduce hyperbilirubinemia complicating allogenic bone marrow transplantation
1990	CID91-059	Phase II study of the treatment for lymphoma with Cytosan and VP-16 for cytoreduction followed by high-dose chemotherapy consisting of BCNU, ara-C, Cytosan and VP-16 (BACE) with autologous bone marrow transplant
1990	CID90-105	Evaluation of the efficacy and safety of two daily doses of isosorbide-5-mononitrate
1990	CID90-092	Multicenter crossover comparison of intravenous adenosine (Adenoscan) versus stress in the noninvasive/invasive assessment of cardiovascular disease (IND 30,974)

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1990	CID90-317	Phase III AZQ 24 hour infusion vs BCNU for adult high grade gliomas, SWOG 8737, (int 0093)
1990	CID90-187	HMJF RV-64, evaluation of cardiac function in patients with HIV-1 infection
1990	CID90-322	Evaluation of ADR-529 as a cardioprotective agent in a randomized double-blind phase III trial of CAV + placebo vs CAV + ADR-529 in the treatment of extensive disease small cell lung cancer
1990	CID90-294	Treatment of advanced Hodgkin's disease - a randomized phase III study comparing ABVD vs MOPP/ABV hybrid, SWOG 8952 (int-0111)
1990	CID90-110	Open, randomized single-dose study of intravenous MDL 73,147 EF versus standard anti-emetic therapy in patients receiving cisplatin-containing chemotherapy
1990	CID90-121	Emergency treatment request for use of fludarabine: A new agent with major activity against chronic lymphocytic leukemia, to treat patient (name redacted) for refractory chronic lymphocytic leukemia
1990	CID90-159	Adjuvant therapy of primary osteosarcoma: A phase III intergroup study, SWOG 8693
1990	CID90-115	Evaluation of pressure gradients and aortic valve area in patients with critical aortic stenosis
1990	CID90-211	Emergency treatment request for use of levamisole, a new agent with major activity against colon cancer, to treat patient (name redacted)
1990	CID90-282	Evaluation of vitamin B12 levels in patients undergoing chemotherapy for malignancy
1990	CID90-293	Comparison of bilateral orchiectomy with or without flutamide for the treatment of patients with histologically confirmed stage D2 prostate cancer, SWOG 8894
1990	CID90-158	Adjuvant chemotherapy with 5-fluorouracil, Adriamycin, and mitomycin-C (FAM) versus surgery alone for patients with locally advanced gastric adenocarcinoma, phase III, SWOG 7804
1990	CID90-283	Prospective evaluation of the effect of immunotherapy on lymphocyte surface markers using fluorescence-activated cell sorting
1990	CID90-216	Multi-center double-blind placebo controlled study of fluconazole in the early empirical treatment of suspected fungal infection in febrile neutropenic patients undergoing therapy for cancer - F.A.C.T.

370 Appendix 1—Records Search

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1990	CID90-265	Anticardiolipin antibodies and spontaneous abortion
1990	CID90-222	Neuroblastoma biology protocol, POG 9047
1990	CID90-221	VP-16, AMSA +/- 5-azacytidine in refractory acute non-lymphoblastic leukemia (ANLL), POG 8820
1990	CID90-289	Re-treatment protocol for the use of single-dose IV MDL 73,147 EF in patients receiving high-dose (> 80 mg/m ²) cisplatin-containing chemotherapy
1990	CID0054	Role of brachytherapy in the management of pancreatic malignancy
1990	CID0035	Treatment of children with high stage medulloblastoma: Cisplatin/VP-16 pre- vs post-irradiation; a phase III study, POG 9031
1990	CID0038	Phase I dose escalation with autologous bone marrow rescue in poor prognosis solid tumors
1990	CID0069	Coronal CT characteristics of paranasal sinuses in normal asymptomatic individuals
1991	CID92-027	Neoadjuvant chemotherapy using cisplatin, bleomycin, and vincristine prior to surgery and/or radiation therapy in advanced carcinoma of the uterine cervix
1991	CID91-206	Armed Forces regression study - F.A.C.T.
1991	CID92-077	Multicenter, double-blind randomized, comparative study on the efficacy and safety of intravenous temafloxacin versus imipenem-cilastatin sodium in the treatment of intra-abdominal infection
1991	CID91-211	Phase II study of high-dose melphalan with hemopoietic stem cell support and GM-CSF in refractory multiple myeloma, SWOG 8993
1991	CID91-203	Therapy for patients with recurrent or refractory neuroblastoma, POG 9140
1991	CID91-223	Phase II evaluation of hepatic chemoembolization with angiostat collagen and cisplatin, mitomycin and doxorubicin
1991	CID91-236	Isis-4 protocol - fourth international study of infarct survival
1991	CID92-022	Magnetic resonance imaging of post-arteriography puncture site hemorrhage
1991	CID92-039	IRS - IV stage 1 disease, POG 9150

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1991	CID92-040	Active
1991	CID92-041	IRS - IV stage 4 disease, POG 9152
1991	CID92-053	Randomized, double-blind comparison of intravenous amiodarone and bretylium in the treatment of patients with refractory, hemodynamically destabilizing ventricular tachycardia or fibrillation
1991	CID92-054	Sotalol for patients with refractory, serious or life-threatening supraventricular and ventricular cardiac arrhythmias: Compassionate use
1991	CID92-071	Treatment of malignant supratentorial tumors in children, POG 9135/9136
1991	CID92-072	Second induction and maintenance in childhood acute lymphoblastic leukemia, POG 9110 (simal 6)
1991	CID92-074	Randomized comparative study of high dose cyclophosphamide, cisplatin, and BCNU with autologous bone marrow support vs standard dose cyclophosphamide, cisplatin, and BCNU as consolidation to adjuvant cyclophosphamide, SWOG 9114
1991	CID91-181	Intergroup rectal adjuvant protocol, a phase III study, SWOG 9040, (intergroup 0114)
1991	CID91-150	Perspective pilot study of weekly oral cyclophosphamide in the treatment of refractory rheumatoid arthritis
1991	CID92-070	Intergroup rhabdomyosarcoma study, laboratory evaluation of tumor tissue, POG 9153
1991	CID91-082	Prospective study on the efficacy of orthotics for anterior knee pain in the airman basic population
1991	CID91-161	Phase II study of a 5-day infusion of vinblastine with oral diltiazem in the treatment of metastatic breast cancer
1991	CID91-167	Emergency treatment request for use of fludarabine phosphate for patient (name redacted) with refractory chronic lymphocytic leukemia
1991	CID91-078	Double-blind, randomized, parallel study of two different dose regimens of intravenous MDL 73,147 EF in patients receiving high dose (>80 mg/m ²) cisplatin-containing chemotherapy
1991	CID91-089	ALinC 15 classification protocol, POG 9000

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1991	CID91-090	ALinC 15, POG 9005/9006
1991	CID91-091	Phase III comparison of cyclophosphamide, doxorubicin, and 5-fluorouracil (CAF) and a 16-week multi-drug regimen as adjuvant therapy for patients with hormone receptor negative, node-positive breast cancer, SWOG 8931
1991	CID91-114	Comparative trial of Aredia versus placebo for the prevention of skeletal related complication in patients with breast cancer and lytic bone lesions treated with chemotherapy - F.A.C.T.
1991	CID91-118	Evaluation of low back pain in patients with rheumatoid arthritis
1991	CID91-156	Re-treatment protocol for the use of single or multiple dose intravenous MDL 73,2 147 EF in patients receiving high dose (>80mg/m ²) cisplatin-containing chemotherapy
1991	CID91-132	Evaluation of quality of life in patients with stage D2 cancer of the prostate enrolled in SWOG 8894 (int-0105), SWOG 9039
1991	CID91-137	Trial evaluating the effectiveness of regional chemotherapy in patients with colorectal liver metastasis following the resection of their primary tumor
1991	CID91-149	Percutaneous catheter ablation of accessory pathway conduction using radiofrequency energy
1991	CID91-163	Measurement of interleukin 4 (IL-4), interleukin 8 (IL-8), tumor necrosis factor (TNF alpha), granulocytes-macrophage colony stimulating factor (GM-CSF), histamine releasing factors (HRF) & histamine release inhibiting factors...
1991	CID91-054	Evaluation of bone density measurement of young adults with and without stress fractures
1991	CID0034	Clinical trial to evaluate the worth of tamoxifen in conjunction with lumpectomy and breast irradiation for the treatment of noninvasive intraductal carcinoma (DCIS) of the breast, NSABP Protocol B-24
1991	CID0032	Phase III randomized study of surgery vs. surgery plus adjunctive radiation therapy in intermediate risk endometrial adenocarcinoma, GOG 99
1991	60MG142	Effects of thionamides on the efficacy of radioiodine treatment in patients with Graves' disease
1991	60MG116	Phase III chemotherapy of disseminated advanced stage testicular cancer with cisplatin plus etoposide with either bleomycin or ifosfamide (SWOG 8997 - SGO 91-005)

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	CID92-154	Evaluation of cisplatin, etoposide, and bleomycin (BEP) induction followed by vincristine, dactinomycin, and cyclophosphamide (VAC) consolidation in advanced ovarian germ cell tumors - phase II, GOG 90
1992	CID92-155	Evaluation of intraperitoneal chromic phosphate suspension therapy following second-look laparotomy for epithelial ovarian carcinoma (stage III), phase III, GOG 93
1992	CID92-157	Randomized clinical trial for the treatment of women with selected stage Ic and II(a, b, c) and selected stage Ia and Ib ovarian cancer (phase III), GOG 95
1992	CID92-158	Master protocol for phase II intraperitoneal drug studies in treatment of minimal residual ovarian malignancies documented at second look surgery, GOG 102-A
1992	CID92-162	Ifosfamide (NSC 109724) and the uroprotector mesna (NSC 113891) with or without cisplatin (NSC 119875) in patients with advanced, persistent or recurrent mixed mesodermal tumors of the uterus - phase III, GOG 108
1992	CID92-165	Evaluation of adjuvant VP-16 and carboplatin therapy in totally resected ovarian dysgerminoma, GOG 116
1992	CID92-193	Phase III randomized study of cisplatin (NSC 119875) versus Taxol (NSC 125973) versus Taxol and cisplatin in patients with suboptimal stage III & IV epithelial ovarian carcinoma, GOG 132
1992	CID92-167	Study in the use of Provera and tamoxifen citrate (NSC 180973) for the treatment of advanced, recurrent or metastatic endometrial carcinoma, GOG 119
1992	CID92-187	Treatment of refractory multiple myeloma with myeloablative busulfan and cyclophosphamide and autologous bone marrow or peripheral blood stem cell support: A phase II study
1992	CID92-153	Master protocol for phase II drug studies in the treatment of recurrent or advanced uterine sarcomas, GOG 87-A
1992	CID92-100	Study investigating safety and duration of effect of isosorbide-5-mononitrate in a controlled-release formulation in patients with stable effort angina pectoris - F.A.C.T.
1992	CID92-196	Postoperative adjuvant interferon alpha-2b (Intron A) in resected high risk primary and regionally metastatic melanoma, SWOG 9111
1992	CID92-194	Phase II comparison of fludarabine phosphate vs chlorambucil vs fludarabine phosphate plus chlorambucil in previously untreated B-cell chronic lymphocytic leukemia, SWOG 9108

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	CID92-164	Bleomycin (NSC 125066), etoposide (NSC 141540), and cisplatin (NSC 119875) (BEP) as first-line therapy of malignant tumors of the ovarian stroma (granulosa cell, Sertoli-Leydig tumor, and unclassified sex cord..., GOG 115
1992	CID92-151	Master protocol for hormonal treatment of advanced or recurrent carcinoma of the endometrium, GOG 81-A
1992	CID92-120	Randomized comparison of chemoprophylaxis using methotrexate versus routine surveillance in the management of the high risk molar pregnancy, GOG 112
1992	CID92-119	Randomized study of cisplatin versus cisplatin plus dibromodulcitol (NSC 104800), versus cisplatin plus ifosfamide and mesna in advanced (stage III or IV), recurrent, or persistent squamous cell carcinoma of the cervix, GOG 110
1992	CID92-116	Monoclonal antibody against free beta-HCG to predict development of persistent gestational trophoblastic disease (PGTD) in patients with hydatidiform mole, GOG 100
1992	CID92-114	Master protocol for a phase II trials of chemotherapy in patients with advanced pelvic malignancies, GOG 26-A
1992	CID92-112	Ifosfamide, carboplatin, etoposide (ICE) treatment of recurrent/resistant malignant solid tumors of childhood - POG 9072
1992	CID92-096	Double blind study of prophylactic ursodiol vs placebo to reduce veno-occlusive disease of the liver (VOD) complicating allogeneic bone marrow transplantation (BMT)
1992	CID92-094	Randomized prospective study comparing radical prostatectomy alone versus radical prostatectomy preceded by androgen blockade in clinical B2 (T2BNXMO) prostate cancer
1992	CID91-038	Evaluation of the I-17m protocol in the management of patients with lymphoblastic lymphoma, a phase II pilot study, SWOG 8954
1992	CID92-036	Phase II/III study of 5-fluorouracil (5-FU) and its modulation in advanced colorectal cancer, SWOG 8905
1992	CID91-127	Comprehensive genetic analysis of brain tumors, POG 8930
1992	CID92-113	Treatment of newly diagnosed astrocytoma, POG 9130
1992	CID92-256	Double-blind placebo controlled trial of daunomycin and cytosine arabinoside with or without RHG-CSF in elderly patients with acute myeloid leukemia, phase III, SWOG 9031

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	CID93-005	Phase II trial of cisplatin and cyclophosphamide in the treatment of extraovarian peritoneal serous papillary carcinoma, GOG 138
1992	CID93-006	Randomized comparison of nephrectomy followed by interferon alpha 2-b (Intron-A) versus interferon alpha 2-b (Intron-A) alone in patients with advanced renal cell carcinoma, SWOG 8949
1992	CID93-007	Phase II study of high-dose ara-C/mitoxantrone for the treatment of relapsed/refractory acute lymphocytic leukemia, SWOG #030
1992	CID93-004	Phase III trial of Taxol at three dose levels and G-CSF at two dose levels in platinum-resistant ovarian carcinoma, GOG 134
1992	60MG006	Clinical trial to assess the relative efficacy of 5-FU + leucovorin with or without interferon alpha-2a in patients with Duke's B and C carcinoma of the colon
1992	CID92-260	Phase III randomized study of intravenous cisplatin and cyclophosphamide versus intravenous cisplatin and Taxol versus high dose intravenous carboplatin followed by intravenous Taxol and intraperitoneal cisplatin in..., GOG 114
1992	CID92-259	Acquisition of human ovarian and other tissue specimens and serum to be used in studying the causes, diagnosis, prevention and treatment of cancer, GOG 136
1992	CID92-280	Amlodipine study of the angina population (A.S.A.P.): A double-blind, randomized, placebo controlled study
1992	CID92-258	Whole abdominal radiotherapy versus circadian-timed combination doxorubicin - cisplatin chemotherapy in advance endometrial carcinoma, GOG 122
1992	CID92-257	Therapy in premenopausal women with advanced ER positive or PGR positive breast cancer: Surgical oophorectomy vs the LH-RH analog Zoladex, SWOG 8692
1992	CID92-207	Intensive chemotherapy for primary central nervous system malignant germ cell tumors in patient (name redacted)
1992	CID0036	Hyperfractionated irradiation for posterior fossa ependymoma, POG 9132
1992	CID92-247	Randomized study of standard chemotherapy versus STAMP 5 with autologous bone marrow transplant in stage IV, poor prognosis breast carcinoma, phase III (intergroup), SWOG 9115

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	CID0029	Randomized comparison of hydroxyurea versus hydroxyurea, 5-FU infusion and bolus cisplatin versus weekly cisplatin as an adjunct to radiation therapy in patients with stages IIb, III, and IVa carcinoma of the cervix and negative para-, GOG 120
1992	CID0028	Randomized comparison of 5-FU infusions and bolus cisplatin as an adjunct to radiation therapy, versus radiation therapy alone in selected patients, GOG 109
1992	CID0027	Phase II evaluation of preoperative chemoradiation for advanced vulvar cancer, GOG 101
1992	CID92-204	Multicenter, open-label clinical evaluation of Ativan (R) (lorazepam) injection in the treatment of preprocedural anxiety when used with Zofran (R) in patients undergoing chemotherapy
1992	CID0030	Randomized comparison of radiation therapy and adjunctive hysterectomy versus radiation therapy and weekly cisplatin and adjunctive hysterectomy in patients with bulky stage Ib carcinoma of the cervix, GOG 123
1992	CID92-205	Open-label compassionate-use study of oral recainam
1992	CID92-215	Baby POG 2, POG 9233/34
1992	CID0045	Trial of adjuvant chemo-irradiation after gastric resection for adenocarcinoma, phase III (RTOG 90-18)
1992	CID92-216	Treatment for children with intermediate risk neuroblastoma POG stage B (all ages and stages C, D, and DS) less than 365 days of diagnosis, POG 9243
1992	CID92-201	Phase II study of 13-cis retinoic acid in the treatment of condyloma acuminatum
1992	CID92-244	Five arm double blind randomized dose-response study of the antiemetic effectiveness of IV dolasetron mesylate in patients receiving cisplatin chemotherapy - F.A.C.T.
1992	CID92-238	Double-blind study of two doses of Lupron depot plus iron vs placebo plus iron in the preoperative treatment of iron deficiency anemia secondary to leiomyoma uteri-induced excessive uterine bleeding - F.A.C.T.
1992	CID92-230	Protocol for non-primary centers evaluating cryo valve heart valve allografts
1992	CID92-229	Use of all-trans retinoic acid (TRA) in setting of relapsed or refractory acute promyelocytic leukemia (APL)

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	CID92-228	Accuracy of body composition determination using dual-energy x-ray absorptiometry (DEXA) with changes in hydration
1992	60MG065	Clinical trial to evaluate the effect of dose intensification & increased cumulative dose of postop Adriamycin-cyclophosphamide therapy with G-CSF on disease-free survival and survival of patients with prim breast CA & pos ax nodes (NSABP B25-SOG92-209)
1992	60MG118	Phase III comparison of adjuvant chemoendocrine therapy with CAF and concurrent or delayed tamoxifen to tamoxifen alone in postmenopausal patient with involved axillary lymph nodes and positive receptors (SWOG 8814 - SGO 90-095)
1992	60MG120	Phase III comparison of combination chemotherapy (CAF) and chemohormonal therapy (CAF + Zoladex or CAF + Zoladex and tamoxifen) in premenopausal women with axillary node-positive, receptor-positive breast cancer (SWOG 8851 - SGO 90-226)
1992	60MG119	Phase III comparison of adjuvant chemotherapy with or without endocrine therapy in high-risk, node negative breast cancer patients, and a natural history follow-up study in low-risk node negative patients (SWOG 8897 - SGO 90-180)
1993	CID93-132	Assessing the variability of cephalometric roentgenogram measurements during quiet tidal breathing in patients with obstructive sleep apnea and normals
1993	CID93-157	Colon carcinogenesis: Modulation by dietary intervention
1993	CID93-012	Clinical trial comparing short, intensive AC +/- tamoxifen with conventional CMF +/- tamoxifen in node-negative breast cancer patients with ER-negative tumors, NSABP b-23
1993	CID93-180	Phase III, double-blind, randomized trial of 13-cis retinoic acid (13-CRA) to prevent second primary tumors (SPTS) in stage I non-small cell lung cancer, RTOG 91-01
1993	CID93-125	Randomized study of doxorubicin plus cisplatin versus circadian-timed doxorubicin plus cisplatin in patients with primary stage III & IV, recurrent endometrial adenocarcinoma (phase III), GOG 139
1993	CID93-114	Phase II pilot study of high dose 24-hour continuous infusion of 5-FU and leucovorin and low dose PALA for patients with pancreatic adenocarcinoma, SWOG 9100
1993	CID93-104	Serum vs plasma stability for anticardiolipin testing (ACL)

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1993	CID93-100	Regional cerebral blood flow and glucose rate in patients with complex partial seizures
1993	CID93-088	Effect of procainamide on direct current cardioversion in atrial fibrillation
1993	CID93-086	Phase II study of Taxol in children with recurrent/refractory soft tissue sarcoma, rhabdomyosarcoma, osteosarcoma, Ewing's sarcoma, neuroblastoma, germ cell tumor, Wilms' tumor, hepatoblastoma, and hepatocellular..., POG 9262
1993	CID93-189	Study of peritransplantational ultraviolet-B (UVB) photoprophylaxis of graft-versus-host disease (GVHD) after allogeneic bone marrow transplantation (BMT)
1993	CID93-109	Master protocol for phase II drug studies in treatment of advanced or recurrent carcinoma of the endometrium, GOG 86a
1993	CID93-085	Randomized trial of adjuvant immunotherapy with an allogeneic melanoma vaccine for patients with intermediate thickness, node negative malignant melanoma (T3NOMO), phase III, SWOG 9035
1993	CID93-069	Prospective study of radiographic erosions in rheumatoid arthritis: Does good clinical response in rheumatoid arthritis halt radiographic progression?
1993	CID93-068	Open-label safety study of intravenous amiodarone HCl in patients with life-threatening ventricular tachycardia/fibrillation
1993	CID93-065	Imaging myocardial blood flow with N-13 ammonia
1993	CID93-064	Imaging myocardial metabolism function with F-18 fluorodeoxyglucose (FDG)
1993	CID92-262	Thrombus prevention in tunneled central venous catheters
1993	CID93-027	Treatment of patients with localized non-Hodgkin's lymphoma, a pediatric oncology group phase IV study, POG 9219
1993	60MG035	Phase III study of postoperative radiotherapy for single brain metastases (rtog 90-21 - SGO 93-146)
1993	CID92-221	Phase II study of carboplatin in the treatment of children with progressive optic pathway tumors, POG 8936
1993	CID92-272	Idarubicin in recurrent and progressive childhood brain tumors, POG 9237

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1993	CID93-205	Randomized trial of estrogen replacement therapy versus no estrogen replacement in women with stage I or II endometrial adenocarcinoma, GOG 137
1993	CID94-031	Familial and reproductive factors in ovarian cancer, GOG 143
1993	CID92-245	Double-blind, randomized parallel study of the antiemetic effectiveness of IV dolasetron mesylate vs IV Zofran in patients receiving cisplatin chemotherapy
1993	CID93-045	Assessment of treatment with lisinopril and survival (ATLAS)
1993	CID94-033	Molecular genetic analysis of ovarian cancer families, GOG 144
1993	CID0057	Evaluations of operable bladder cancer patients with preoperative irradiation + 5-FU and inoperable patients with irradiation + 5-FU alone, phase II, SWOG 8733
1993	CID0061	Phase III, randomized prospective comparison between chemotherapy plus radiotherapy, and the same chemotherapy plus radiotherapy together with surgery for selected stage IIIa (positive mediastinal nodes) and selected stage IIIb, no MA, SWOG 9019
1993	CID0062	Randomized phase III study of CODE plus thoracic irradiation versus alternating CAV and EP for extensive stage small cell lung cancer
1993	CID94-029	Pilot study of large cell lymphomas in children and adolescents evaluation APO + IDMTX/HDARA-C, POG 9395
1993	CID0052	Phase II pilot study employing 5-fluorouracil, mitomycin-C, and 59.4 Gy radiotherapy in carcinoma of the anal canal, RTOG 92-08
1993	CID93-206	Controlled trial of cyclosporin as a chemotherapy-resistance modifier in high-risk acute myeloid leukemia, phase III, SWOG 9126
1993	CID0051	Phase I/II trial for localized cancer of the esophagus: External beam irradiation, esophageal brachytherapy and combination chemotherapy (RTOG 92-07)
1993	CID0050	Phase III study of radiation therapy, levamisole and 5-fluorouracil vs 5-fluorouracil and levamisole in selected patients with completely resected colon cancer, RTOG 92-03
1993	CID0048	Phase III evaluation of postoperative radiation in low grade intracranial astrocytomas and oligodendrogliomas, RTOG 91-10

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1993	CID0047	Prospective randomized trial of postoperative adjuvant therapy in patients with completely resected stage II and stage IIIa non-small cell lung cancer, RTOG 91-05
1993	CID0044	Phase III randomized study to compare twice daily hyperfractionation, accelerated hyperfractionation with a split and accelerated fractionation with concomitant boost to standard fractionation radiotherapy for squamous cell carcinoma (RTOG 90-03)
1993	CID0043	Phase III intergroup trial: A prospective randomized comparison of combined modality therapy for carcinoma of the esophagus: Chemotherapy plus surgery versus surgery alone for patients with local/regional disease, RTOG 89-11
1993	CID94-034	Incidence of bladder perforation following transurethral resection of bladder tumors
1993	CID94-002	Chemoprevention trial to prevent second primary tumors with low-dose 13-cis retinoic acid in head and neck cancer, RTOG 91-15
1993	CID93-249	Phase II trial of intravenous vinorelbine (Navelbine) in previously untreated extensive small cell lung carcinoma, SWOG 9058
1993	CID93-250	Evaluation of doxorubicin/vinblastine combined with inhibitors (trifluoperazine/verapamil) of P-glycoprotein in patients with advanced renal cell carcinoma, phase II, SWOG 9104
1993	CID0037A	Study for treatment of children with newly-diagnosed brain stem glioma using cisplatin as a radiosensitizer with either conventional or hyperfractionated radiotherapy, POG 9239
1993	CID93-251	Adjuvant therapy of primary osteogenic sarcomas, phase II, SWOG 9139
1993	CID93-253	Phase II evaluation of Taxol in patients with relapsed non-Hodgkin's lymphoma or relapsed Hodgkin's disease, SWOG 9246
1993	CID0042	Phase III study of radiotherapy with or without concurrent cisplatin in patients with nasopharyngeal cancer, RTOG 88-17
1993	CID93-257	Controlled trial of cyclosporin A as a chemotherapy resistant modifier in blast phase for chronic myelogenous leukemia, phase III, SWOG 9032
1993	CID94-032	Evaluation of cisplatin and pentoxifylline in advanced or recurrent squamous cell carcinoma of the cervix, GOG 127-c

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1993	CID94-004	GM-CSF randomization plus high-dose "ICE" in the treatment of recurrent/resistant malignant solid tumors of childhood, a pediatric oncology group phase II study, POG 9360
1993	CID94-005	Primary chemotherapy of poor prognosis soft tissue sarcomas, phase II, SWOG 9119
1993	CID94-006	Chemoprevention of prostate cancer with finasteride (Proscar), phase III, intergroup, SWOG 9217
1993	CID94-026	Effects of dilute epinephrine saline effluent on the tourniquet of routine knee arthroscopies
1993	CID94-030	Evaluation of cisplatin & cyclosporin in recurrent, platinum-resistant, and refractory ovarian cancer, GOG 126b
1993	CID93-254	Clinical trial to evaluate the worth of preoperative multi-modality therapy (5-FU-LV and RTX) in patients with operable carcinoma of the rectum, NSABP r-03
1993	60MG141	Effect of oral D-sotalol on mortality in patients with atherosclerotic coronary heart disease and left ventricular dysfunction (Bristol-Myers Squibb Pharmaceutical Research Institute cv102-023a - SGO 93-264)
1993	CID0071	Prospective randomized trial of postoperative adjuvant therapy in patients with completely resected stage II and stage IIIa non-small cell lung cancer, RTOG 91-05
1994	CID92-199	Phase III randomized study of all-trans retinoic acid vs cytosine arabinoside and daunorubicin as induction therapy for patients with previously untreated acute promyelocytic leukemia, SWOG 2911
1994	CID91-128	Study of the biological behavior of optic pathway tumors, POG 8935
1994	CID0053	Prospective randomized phase III clinical trial evaluating the use of postoperative adjuvant radiotherapy in the treatment of patients with cutaneous melanoma of the head and neck, RTOG 93-02
1994	CID94-121	Letrozole (CGS 20267) comparison of two doses (0.5 mg and 2.5 mg) of letrozole (CGS 20267) vs megestrol acetate in postmenopausal women with advanced breast cancer, protocol 02 - F.A.C.T.
1994	CID94-117	Open, uncontrolled study of Demadex to evaluate the distribution of doses required in patients with congestive heart failure

382 Appendix 1—Records Search

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1994	CID93-172	Hemodynamic consequences of colonoscopy in patients with aortic stenosis
1994	CID94-073	Phase III trial of r-Hu GM-CSF in patients with febrile neutropenia following cancer chemotherapy
1994	CID94-074	Double-blind, randomized, parallel sotalol-controlled, dose confirmation study to evaluate the safety and electrophysiologic effects of MK-499 in patients with sustaining ventricular tachyarrhythmias - (F.A.C.T.)
1994	CID94-100	Phase II study (A9303): Intravesical AD 32 in patients with transitional cell carcinoma of the bladder - F.A.C.T.
1994	CID94-102	Phase II study (A9301): Intravesical AD 32 in patients with carcinoma in situ of the bladder who have failed or have recurrence following treatment with BCG
1994	CID94-140	Randomized, double-blind study of orally administered dofetilide and placebo in patients with an implanted arrhythmia control device - F.A.C.T.
1994	CID94-115	Preoperative cardiovascular risk assessment in patients undergoing surgery for peripheral vascular disease
1994	CID94-135	SWOG #9321, Standard Dose Versus Myeloablative Therapy for Previously Untreated Symptomatic Multiple Myeloma
1994	CID94-105	Phase III trial of Adriamycin vs Taxol vs Taxol plus Adriamycin plus G-CSF in metastatic breast cancer, intergroup, SWOG 9332
Unknown	CID7524	Chemo-immunotherapy in stages III & IV ovarian and endometrial carcinoma
Unknown	CID7523	Phase II study of large cell and adenocarcinoma of the lung
Unknown	CID7518	Preoperative combined adjuvant therapy of rectal carcinoma
Unknown	CID0468	Comparison of myocardial adenylyl cyclase activity and contractility in response to normothermic ischemic arrest
Unknown	CID7611	Cis-platinum refractory sarcomas, phase II
Unknown	CIDS-2	Automatic data processing - cardiovascular operations (Apr/87)
Unknown	CIDS-11-71	Development and testing of a new type of aortic and mitral valve prosthesis
Unknown	CIDV-3-73	Transcatheter therapeutic embolization

AIR FORCE 1975-1994 (CONTINUED)

Wilford Hall Air Force Hospital/Medical Center, Lackland AFB, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	CIDS-7716	Tamoxifen in renal cell carcinoma
Unknown	CIDS-7636	Hexamethylmelamine in advanced breast cancer
Unknown	CIDS-7611	Cis-platinum for refractory sarcomas, phase II
Unknown	CIDS-7525	Adjuvant testicular protocol stage Ib & II non-seminomatous tumors
Unknown	CID7756G	Evaluation of the perineum as a source of dermatophytosis
Unknown	CID7756E	Evaluation of standard and newer techniques of transcutaneous peripheral blood flow estimation
Unknown	CID7756D	Evaluation of electrovaginography as a means of determining estrogen effect

Wright-Patterson AFB Medical Center, OH

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	AF0009	Phase III evaluation of technetium-99m electrolytically labeled human serum albumin
1979	AF0088	Comprehensive study of Wilson's disease and human copper metabolism. One-time use of copper-64 for study of enzymatic defect of Wilson's disease

384 Appendix 1—Records Search

ARMY 1975-1994

Army Research Institute of Environmental Medicine, Natick, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1985	MRDC002	Blood volume expansion and hypohydration
1988	MRDC003	Interaction of aerobic fitness and the hypohydration response during exercise-heat stress
1989	MRDC004	Role of thermal factors for metabolic adaptations to physical training
1991	MRDC006	Hyperhydration with a glycerol solution: Effects on fluid and electrolyte balance during rest and cold/exercise exposure
1992	MRDC031	Interaction of hypohydration and metabolic intensity on thermoregulatory responses during exercise-heat stress
1993	MRDC005	Interaction of hydration and metabolic intensity on thermoregulatory responses during exercise-heat stress
1993	MRDC007	Effects of autologous erythrocyte infusion in sea-level residents rapidly transported to high altitude

Brooke Army Medical Center, Fort Sam Houston, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	ACIR75000-G	Gallium-67 citrate for intravenous administration (NEN) NEN = New England Nuclear
1975	ACIR75000-E	Approval of iodine-123 labeled rose bengal orthiodohippurate
1975	ACIR75000-V	Clinical evaluation of indium-111 bleomycin
1975	ACIR75000-R	Clinical evaluation of indium-111 bleomycin (MPI Tumor Scintigraphin TM)
1975	ACIR75000-J	Treatment of patients for early testicular cancer with irradiation and chemotherapy with vinblastine and bleomycin, SWOG 7525
1975	ACIR75000-I	5-FU, meCCNU + radiotherapy with or without testolactone for localized adenocarcinoma of the exocrine pancreas, SWOG 7509
1976	ACIR76000-K	NEN 99m-Tc stannous glucoheptonate for intravenous administration
1976	ACIR76000-J	MPI 99m-Tc dimercaptosuccinic acid for intravenous administration

ARMY 1975-1994 (CONTINUED)

Brooke Army Medical Center, Fort Sam Houston, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1976	ACIR76000-D	Bone scanning as a method for detecting early renal osteodystrophy
1976	ACIR76000-V	Combined preoperative adjuvant therapy in rectal carcinoma, SWOG 7618
1976	ACIR76000-Y	Treatment of early squamous cell carcinoma of the head and neck with chemotherapy or chemoimmunotherapy following initial surgery and/or radiotherapy, SWOG 7620
1976	ACIR76000-U	Combined chemotherapy/radiation therapy/immunotherapy for small cell (oat cell) carcinoma of the lung, phase III, SWOG 7628
1977	ACIR77000-T	Radiation therapy with BCNU, DTIC, or procarbazine in malignant brain gliomas (phase III)
1977	ACIR77000-K	Effect of radiotherapy on regional lung function in patients with bronchogenic cancer
1978	ACIR78000-E	Radiotherapy-chemotherapy (MOPP) for stages I and II a and b Hodgkin's, SWOG 7811
1978	ACIR78000-L	Concurrent chemotherapy - radiation therapy of selected head and neck cancer, SWOG 7863
1978	ACIR78000-J	Noninvasive radioisotope measurement of esophageal acid clearance. Tc-99m sulphur colloid
1978	ACIR78000-I	Therapy with celiac artery infusion 5-fluorouracil plus radiation therapy followed by mitomycin-C and 5-fluorouracil maintenance chemotherapy for treatment of localized adenocarcinoma of the exocrine pancreas, SWOG 7861
1978	ACIR78000-G	Technetium-99m pyridoxylidene glutamate (99m-Tc-PG) for diagnosis of hepatobiliary disease (1978)
1978	ACIR78000-D	Radioisotopic esophageal clearance test
1978	ACIR78000-K	Adjuvant therapy of soft tissue sarcomas with radiation therapy vs. combination therapy, SWOG 7802
1979	ACIR79000-D	Technetium-99m sulfur colloid particles
1979	ACIR79289	Treatment of early squamous cell carcinoma of the head and neck with initial surgery and/or radiotherapy followed by chemotherapy vs no further treatment, SWOG 7965

386 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Brooke Army Medical Center, Fort Sam Houston, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1979	ACIR79303	Randomized comparison of melphalan vs intraperitoneal chromic phosphate in the treatment of women with stage I epithelial carcinoma of the ovary
1979	ACIR79470	Randomized study of radiation therapy vs. pelvic node resection for patients with invasive squamous cell carcinoma of the vulva having positive groin nodes, GOG 37
1979	ACIR79000-A	Distribution and control of peripheral blood flow following extensive leg surface injury
1980	ACIR80547	Technetium-99m diethyl-IDA for diagnosis of hepatobiliary and gall bladder pathology
1980	ACIR80540	Surgical pathological study of women with invasive carcinoma of the cervix, stage Ib, randomly assigned radiation vs no further therapy in selected patients
1980	ACIR80282	Radiation therapy in combination with CCNU in patients within completely resected gliomas of the brain, grade I and II
1980	ACIR80625	Intravenous administration of 131-I (NP-59) for adrenal evaluation and imaging [Study terminated at LAMC because of base closing]
1980	ACIR80641	Randomized study of Adriamycin as an adjuvant after surgery and radiation therapy in patients with high risk endometrial carcinoma, stage I and occult stage II
1980	ACIR80635	Treatment of women with cervical cancer stage IIb, IIIb, IVa, confined to the pelvis and/or para-aortic nodes with radiotherapy alone vs radiotherapy plus immunotherapy (phase II)(IV C. parvum - a killed germ)
1981	ACIR81448	Comparison of involved field (IF) radiotherapy and MOPP + low bleomycin with IF radiography and A-COPP in stage III Hodgkin's disease
1981	ACIR81000-F	Evaluation of indomethacin as a protective agent against radiation-induced esophagitis
1981	ACIR81254	Radiotherapy with and without chemotherapy for malignant mesothelioma localized to one hemithorax, phase III (intergroup mesothelioma study 1), SWOG 8094
1981	ACIR81000-B	Clinical evaluation of cisternography utilizing 111-indium DTPA (diethylenetriamine pentaacetic acid)

ARMY 1975-1994 (CONTINUED)

Brooke Army Medical Center, Fort Sam Houston, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1981	ACIR81258	Comparison of gray-scale ultrasonography and computed tomography with infusion nephrotomography in early diagnosis of adult-type polycystic kidney disease
1981	ACIR81255	Effect of propranolol on cardiac ejection fractions as determined by gated scans in thyrotoxic patients
1981	ACIR81147	Evaluation of young amateur boxers by computed tomography
1981	ACIR81024	Adjuvant intrahepatic chemotherapy with mitomycin-C and 5-fluorouracil combined with hepatic radiation in high risk patients with carcinoma of the colon, phase II pilot, SWOG 8066
1982	ACIR82465	Treatment of advanced seminoma (stage cII (n4) + cIII) with combined chemotherapy and radiation therapy, phase II, SWOG 8104
1982	ACIR82578	Ionizing radiation exposure of emergency room personnel
1982	ACIR82449	Evaluation of radiation exposure to personnel during cardiac catheterization
1982	ACIR82474	Evaluation of sodium ipodate as an adjunctive therapy to radioactive iodine for Graves' hyperthyroidism
1982	ACIR82084	Randomized comparison of hydroxyurea vs misonidazole as an adjunct to radiation therapy in patients with stage IIb, III and IVa carcinoma of the cervix and negative para-aortic nodes, GOG 56
1982	ACIR82627	Concurrent chemo-radiotherapy for limited small cell carcinoma of the lung, phase II - pilot
1982	ACIR82000-E	Clinical evaluation of the thyroid by in-vivo radionuclidic studies utilizing iodine-123
1983	ACIR83152	Treatment of squamous cell lung cancer with VP-16/cis-platinum alternating with vincristine/Adriamycin/cyclophosphamide and radiation vs concurrent VP-16/vincristine/Adriamycin/cyclophosphamide and radiation, phase III, SWOG 8232
1983	ACIR83017	Treatment of acute non-lymphocytic leukemia with conventional induction, consolidation chemotherapy: Maintenance with chemotherapy versus bone marrow transplantation following total body irradiation, phase III
1983	ACIR83111	Combined modality therapy for multiple myeloma VMCP-VBAP for remission induction therapy: VMCP + levamisole vs sequential half-body radiotherapy + vincristine-prednisone, SWOG 8229

388 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Brooke Army Medical Center, Fort Sam Houston, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1983	ACIR83224	Prospective evaluation of clinical, x-ray, histologic, scintigraphic and microbiologic characteristics of diabetic feet (a multicenter study)
1983	ACIR83558	Comparison of aggressive radiotherapy plus chemotherapy vs aggressive chemotherapy in the treatment of limited carcinoma of the pancreas, phase III
1983	ACIR83421	Combined radiation therapy and chemotherapy as adjuvant treatment for Duke's B and C colon cancer, phase I - II, SWOG 8263
1983	ACIR83585	Whole brain irradiation and intrathecal methotrexate in the treatment of solid tumor leptomeningeal metastases, phase II, SWOG 8102
1983	ACIR83004	Evaluation of indium oxine In-111 labeled cellular blood components
1984	ACIR84344	Comprehensive therapy for Ewing's sarcoma: Tailored vs standard radiation therapy
1984	ACIR84255	Treatment of advanced bladder cancer with preoperative irradiation and radical cystectomy versus radical cystectomy alone, phase III
1984	ACIR84211	Dipyridamole MUGA studies compared with quantitative tomographic stress and dipyridamole infusion TI-201 scintigrams for assessing coronary artery disease
1984	ACIR84495	Assessment of radiocontrast induced acute renal failure following coronary angiography: An evaluation of intravenous mannitol infusion as a preventive measure
1984	ACIR84002	Treatment for locally advanced non-small cell lung cancer: Radiation therapy plus cis-platinum and VP-16, a pilot study
1984	ACIR84494	Value of preoperative sulfur colloid marrow scintigraphy in the treatment of acute fractures of the femoral neck
1985	ACIR85556	Treatment of patients with sub-optimal ('bulky') stage Ib carcinoma of the cervix: A randomized comparison of radiation therapy versus radiation therapy plus adjuvant extrafascial hysterectomy (phase III), GOG 71
1985	ACIR85239	Post-radiotherapy overt and occult constrictive pericarditis in patients post-mediastinal radiotherapy: Evaluation by micromanometric hemodynamics, pulsed Doppler echocardiography, & right ventricular endomyocardial biopsy
1985	ACIR85244	Combination chemotherapy (COPE) and radiation therapy for extensive small cell lung cancer, phase II - pilot

ARMY 1975-1994 (CONTINUED)

Brooke Army Medical Center, Fort Sam Houston, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1985	ACIR85551	Simultaneous cis-platinum + radiation therapy compared with standard radiation therapy in the treatment of unresectable squamous or undifferentiated carcinoma of the head and neck, phase III
1985	ACIR85405	Platelet deposition at coronary angioplasty sites: Effect of an anti-platelet regimen and predictive value of platelet scanning
1985	ACIR85562	Postoperative pelvic radiation in stage I & II mixed mesodermal sarcoma of the uterus, GOG 75
1985	ACIR85564	Phase III study to determine the effect of combined chemotherapy with surgery and radiotherapy for resectable squamous cell carcinoma of the head and neck, SWOG 8590
1985	ACIR85064	Treatment of limited non-small cell lung cancer: Radiation versus radiation plus chemotherapy (FOMI/CAP), phase III, SWOG 8300
1985	ACIR85217	Radiation therapy + 5-fluorouracil vs sandwich SMF chemotherapy + radiation therapy as adjuvant surgical treatment of pancreatic cancer, phase III-intergroup, SWOG 8492
1986	ACIR86539	Treatment of limited small cell cancer with concurrent chemotherapy, radiotherapy, and intensification with high dose cyclophosphamide, SWOG 8573
1986	ACIR86468	Intensive chemotherapy (MOPP-ABVD) plus low-dose total nodal radiation therapy in the treatment of stages IIb, IIIa2, IIIb, and IV Hodgkin's disease in pediatric patients, a groupwide pilot study
1986	ACIR86434	Phase III trial comparing combination chemotherapy with whole abdominal radiation therapy for stage III optimal epithelial ovarian cancer with no gross residual disease or gross residual disease < or equal to 1 cm
1986	ACIR86619	Treatment of hepatoblastoma with surgery, chemotherapy, and radiation therapy, POG 8696
1986	ACIR86520	Evaluation of I-123 iofetamine HCL in brain scanning
1986	ACIR86041	Assessment of the value of brain scans (BS) and computerized axial tomograph (CT scans) in the management of patients with transient ischemic attacks (TIAs) and cerebral infarcts with transient signs (CITS)
1986	ACIR86571	Randomized phase III intergroup study of radiation therapy versus cisplatin plus etoposide plus bleomycin for advanced stage II seminoma, SWOG 8596

390 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Brooke Army Medical Center, Fort Sam Houston, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1986	ACIR86612	Intensive chemotherapy, delayed local irradiation, total body irradiation, total body irradiation and autologous bone marrow rescue in treating high risk Ewing's sarcoma
1986	ACIR86616	Intra-arterial cis-platinum and radiation therapy in primary brain tumors: A phase II randomized study comparing sequential and combined treatments
1986	ACIR86115	Trial of local irradiation and chemotherapy versus chemotherapy alone for the treatment of localized non-Hodgkin's lymphoma, POG 8314
1987	ACIR87047	Randomized study of radical vulvectomy and bilateral groin disease dissection versus radical vulvectomy and bilateral groin radiation, GOG 88
1987	ACIR87345	Treatment of children 3 years of age with malignant brain tumors using postoperative chemotherapy and delayed irradiation, POG 8633
1987	ACIR87367	Prospective trial for localized cancer of the esophagus: Comparing radiation as a single modality to the combination of radiation and chemotherapy, phase III
1987	ACIR87584	Evaluation of intraperitoneal chromic phosphate suspension therapy following negative second-look laparotomy for epithelial ovarian carcinoma (stage III), phase III, GOG 93
1987	ACIR87480	Randomized phase III intergroup study of supradiaphragmatic irradiation in stage IIa seminoma (RTOG 8514/intergroup 0055) - SWOG 8597
1987	ACIR87471	Role of routine radiographs in the evaluation of acute knee complaints in emergency department
1987	ACIR87344	Medulloblastoma favorable prognosis: Randomized study of reduced dose irradiation to brain and spinal contents versus standard dose irradiation, POG 8631
1987	ACIR87581	Randomized comparison of hydroxyurea versus 5-FU infusion and bolus cisplatin as an adjunct to radiation therapy in patients with stages IIb, III, and IVa carcinoma of the cervix and negative para-aortic nodes, GOG 85
1988	MRDC016	Study of salt and water balance and hormonal responses following burn injury
1988	ACIR88037	Treatment of stage III and IV disease of advanced endometrial carcinoma and all stages of papillary serous carcinoma and clear cell carcinoma of the endometrium with total abdominal radiation therapy, GOG 94

ARMY 1975-1994 (CONTINUED)

Brooke Army Medical Center, Fort Sam Houston, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	ACIR88135	Phase III randomized study of adjunctive radiation therapy in intermediate risk endometrial adenocarcinoma, GOG 99
1988	ACIR88520	Treatment of localized non-Hodgkin's lymphoma: Comparison of chemotherapy (CHOP) to chemotherapy plus radiation therapy, SWOG 8736
1988	ACIR88597	Prospective analysis of cardiac changes related to radiation therapy
1988	ACIR88600	Consolidation therapy with high-dose cyclophosphamide and total body irradiation, followed by autologous marrow infusion in metastatic breast cancer, SWOG 8700
1988	ACIR88604	Evaluations of operable bladder cancer patients with preoperative irradiation + 5-FU alone, phase II, a pilot study for patients ineligible for..., SWOG 8710
1988	ACIR88608	Randomized study of intensive chemotherapy (MOPP/ABVD) +/- low dose total nodal radiation therapy in the treatment of stages IIb, IIIa2, IIIb, and IV Hodgkin's disease in pediatric patients
1988	ACIR88613	Pre-radiation chemotherapy in the treatment of children with brain stem tumors - a phase II study
1989	ACIR89791	Low-grade glioma phase III: Surgery and immediate radiotherapy vs surgery and delayed radiotherapy, SWOG 8891
1989	ACIR89794	Acute serum potassium elevation after intravenous hypertonic contrast in patients with normal, impaired, and absent renal function
1989	ACIR89632	Treatment of limited small cell lung cancer with concurrent chemotherapy, radiotherapy, with or without GM-CSF and subsequent randomization to maintenance interferon or no maintenance
1989	ACIR89630	Neoadjuvant cisplatin and VP-16 plus concurrent chest and optional brain irradiation for patients with stage III non-small cell lung carcinoma, a phase II pilot
1989	ACIR89453	Assessment of revascularization via coronary artery bypass grafting by dipyridamole-thallium scintigraphy
1989	ACIR89283	Evaluation of interstitial lymphoscintigraphy with radioactive technetium antimony trisulfide colloid (99m-Tc-Sb2S3) for lymphoma, internal mammary and excised malignant melanoma lymphoscintigraphy
1989	ACIR89138	Surgical adjuvant therapy of rectal carcinoma: A) controlled evaluation of a protracted infusion of 5-fluorouracil as a radiation enhancer and, b) 5-FU plus methyl-CCNU chemotherapy, SWOG 8896

ARMY 1975-1994 (CONTINUED)

Brooke Army Medical Center, Fort Sam Houston, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1989	ACIR89089	Pilot study: Evaluation of the effects of treatment with 0.075 topical capsaicin in patients with reflex sympathetic dystrophy using three phase bone scintigraphy (protocol no. 1015-890-03)
1989	ACIR89040	Evaluation of 131-I-MIBG (131-I-metaiodobenzylguanidine sulfate) in patients suspected of having pheochromocytoma, paraganglioma, or medullary hyperplasia
1989	ACIR89431	Pre-irradiation combination chemotherapy with cisplatin and ara-C for children with incompletely resected supratentorial malignant tumors: A phase II study
1989	ACIR89795	Shoulder impingement syndrome: Response to conservative treatment and the predictive value of some associated clinical and radiographic findings
1990	MRDC001	Clinical study of the efficacy of low-dose dopamine therapy in hospitalized burn patients
1990	ACIR90322	Controlled, covariate analysis of radical prostatectomy versus radiation therapy for adenocarcinoma of the prostate
1990	ACIR90721	High dose etoposide, cyclophosphamide and either fractionated total body irradiation or carmustine combined with autologous bone marrow rescue for refractory or relapsed non-Hodgkin's lymphoma, SWOG 8942
1990	ACIR90689	Treatment of children with high stage medulloblastoma: Cisplatin/VP-16 pre-vs post-irradiation: A POG phase III study
1990	ACIR90633	Treatment of pathologic stage C carcinoma of the prostate with adjuvant radiotherapy
1990	ACIR90619	Evaluation of intraperitoneal chronic prosthate suspension, GOG 93
1990	ACIR90618	Treatment of selected patients with stage Ib carcinoma of the cervix after radical hysterectomy and pelvic lymphadenectomy: Pelvic radiation therapy versus no further therapy, GOG 92
1990	ACIR90617	Randomized comparison of hydroxyurea versus 5-FU infusion and bolus cisplatin as an adjunct to radiation therapy in patients with stages IIb, III, and IVa carcinoma of the cervix and negative para-aortic nodes
1990	ACIR90494	Radical prostatectomy versus radiation therapy for clinical stage A2 and B adenocarcinoma of the prostate (NO MO), SWOG 8890
1990	ACIR90305	Prostaglandin excretion in radiocontrast induced acute renal failure

ARMY 1975-1994 (CONTINUED)

Brooke Army Medical Center, Fort Sam Houston, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1990	ACIR90281	Phase I evaluation of multiple daily fraction radiation and 5-fluorouracil plus cisplatin in stage IIb, III, and IVa carcinoma of the cervix with negative para-aortic nodes
1990	ACIR90249	Evaluation of radiation treatment following surgical resection of solitary brain metastasis
1990	ACIR90722	High dose etoposide, cyclophosphamide, and either fractionated total body irradiation or carmustine combined with autologous bone marrow rescue for refractory or relapsed Hodgkin's disease, SWOG 9011
1990	ACIR90724	Phase II study of whole abdominal radiation in stage I and II papillary serous carcinoma, GOG 94
1990	ACIR90615	Feasibility trial of postoperative radiotherapy and cisplatin followed by three courses of 5-FU and cisplatin in patients with resected head and neck cancer, phase II pilot, SWOG 8957
1991	ACIR91060	Study of radiotherapy with or without concurrent cisplatin in patients with nasopharyngeal cancer, phase III
1991	ACIR91207	Changes in hepatocyte function measured by technetium Tc-99m mebrofenin
1991	ACIR91577	Dose-escalating study of cisplatin used concomitantly with hyperfractionated irradiation in the treatment of children with newly-diagnosed brain stem gliomas, POG 9139
1991	ACIR91204	High-dose cytosine arabinoside, fractionated total body irradiation, and autologous bone marrow transplantation in patients with acute lymphoblastic leukemia in second hematologic remission: A phase II study
1991	ACIR91677	Phase I/II dose escalating trial of hyperfractionated irradiation in the treatment of supratentorial malignant tumors of childhood
1991	ACIR91515	Phase I evaluation of multiple daily fraction radiation and hydroxyurea in stage IIb, III, and IVa carcinoma of the cervix with negative para-aortic nodes
1991	ACIR91704	Comparison of exercise Tc-99m sestamibi myocardial scintigraphy and adenosine Tc-99m sestamibi myocardial scintigraphy for the diagnosis of coronary artery disease in patients with left bundle branch block
1992	ACIR92184	Randomized comparison of radiation therapy and adjuvant hysterectomy vs radiation therapy and weekly cisplatin and adjuvant hysterectomy in patients with bulky stage Ib carcinoma of the cervix, phase III

ARMY 1975-1994 (CONTINUED)

Brooke Army Medical Center, Fort Sam Houston, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	ACIR92689	Comparison of film screen radiography, computer radiography, and Kodak insight filmscreen in demonstrating mediastinal anatomy
1992	ACIR92439	Extended field radiation therapy with concomitant 5-FU infusion and cisplatin chemotherapy in patients with cervical carcinoma metastatic to para-aortic lymph nodes (phase II)
1992	ACIR92069	Postoperative radiotherapy for single brain metastases, phase III, SWOG 9021
1992	ACIR92441	Whole abdominal radiotherapy versus circadian-timed combination doxorubicin-cisplatin chemotherapy in advanced endometrial carcinoma
1992	ACIR92607	Randomized comparison of hydroxyurea vs hydroxyurea, 5-FU infusion & cisplatin vs weekly cisplatin as adjunct to radiation therapy in patients with stages IIb, III, or IVa carcinoma of cervix and negative para-aortic nodes
1992	ACIR92070	Study of external brain irradiation and cisplatin/BCNU followed by BCNU for the treatment of primary malignant brain tumor, phase II
1992	ACIR92066	Randomized comparison of 5-FU infusion and bolus cisplatin vs weekly cisplatin as adjunction to radiation therapy in patients with stages IIb, IIIa, IIIb, and IVa carcinoma of the cervix and negative para-aortic nodes, GOG 120
1993	ACIR93352	Myocardial imaging utilizing positron emission tomography to detect and assess coronary artery disease
1993	ACIR93348	Evaluation of radionuclide angiography and echocardiography for assessment of doxorubicin induced ventricular dysfunction
1993	ACIR93304	Randomized trial of subtotal nodal irradiation versus doxorubicin plus vinblastine and subtotal nodal irradiation for stage I-IIa Hodgkin's disease, phase III
1993	ACIR93436	High-dose chemotherapy and total body irradiation with autologous stem cell support and alpha interferon consolidation in the treatment of patients with non-Hodgkin's lymphoma with a poor prognosis
1993	ACIR93369	Measurement of o 6 mgmt in patients with high grade primary brain tumors treated with radiation therapy and BCNU, ancillary study, SWOG 9218
1994	ACIR94322	Trial of adjuvant chemoradiation after gastric resection for adenocarcinoma, phase II

ARMY 1975-1994 (CONTINUED)

Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1978	ACIR78000-N	Prevention of gonadal damage in men treated with combination chemotherapy/radiotherapy for Hodgkin's disease and non-Hodgkin's lymphomas. Addendum 1 to WRAMC 7810
1980	ACIR80202	Prevention of gonadal damage in women treated with combination chemotherapy or radiotherapy below the diaphragm for Hodgkin's or non-Hodgkin's lymphoma
1980	ACIR80282	Radiation therapy in combination with CCNU in patients within completely resected gliomas of the brain, grade I and II
1982	ACIR82098	Predictive ability of body CT scan
1983	ACIR83346	Treatment of small cell lung cancer with VP-16/cis-platinum, alternating with vincristine/Adriamycin/cyclophosphamide and radiation vs concurrent VP-16/vincristine/Adriamycin/cyclophosphamide and radiation, phase III
1983	ACIR83559	Combined therapy for multiple myeloma, VMCP-VBAP for remission: VMCP + levamisole vs sequential half-body radiation + vincristine-prednisone for patients who fail to achieve remission status with chemotherapy alone, phase III
1983	ACIR83585	Whole brain irradiation and intrathecal methotrexate in the treatment of solid tumor leptomeningeal metastases, phase II, SWOG 8102
1983	ACIR83017	Treatment of acute non-lymphocytic leukemia with conventional induction, consolidation chemotherapy: Maintenance with chemotherapy versus bone marrow transplantation following total body irradiation, phase III
1984	ACIR84229	Intergroup mesothelioma study 1 - radiotherapy with and without chemotherapy for malignant mesothelioma localized to one hemithorax, phase III, SWOG 8094
1984	ACIR84410	Treatment for brain metastases, phase III, intergroup study (surgery and/or radiation therapy), SWOG 8292
1984	ACIR84399	Comparison of aggressive radiotherapy + chemotherapy vs aggressive chemotherapy in the treatment of limited carcinoma of the pancreas, phase III
1985	ACIR85064	Treatment of limited non-small cell lung cancer: Radiation versus radiation plus chemotherapy (FOMI/CAP), phase III, SWOG 8300
1987	ACIR87372	Effect of oral hydration on bone-to-soft tissue ratio and subjective scan interpretation in Tc-99m medronate bone scans

ARMY 1975-1994 (CONTINUED)

Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1987	ACIR87367	Prospective trial for localized cancer of the esophagus: Comparing radiation as a single modality to the combination of radiation and chemotherapy, phase III
1988	ACIR88289	Distal thigh pain and stress transfer in uncemented total hip arthroplasties. A scintigraphic analysis
1989	ACIR89080	Assessment of subclinical contrast nephropathy using urinary adenosine deaminase binding protein
1989	ACIR89005	Stress radiography in the detection of shoulder instability
1989	ACIR89811	Correlation of clinical hip examination findings with scintigraphic and radiographic results in Army trainees with hip pain performed at Fort Jackson
1990	ACIR90103	Technetium 99m antimony trisulfide colloid for investigation of lymphatic drainage
1990	ACIR90471	In vitro labeling of red blood cells with technetium-99m utilizing a pre-prepared 'kit'
1990	ACIR90516	Relationship of the sense of coherence and hardiness to the nutritional status of anorectic head and neck cancer patients currently undergoing radiation therapy
1991	ACIR91316	Treatment of limited small cell lung cancer with concurrent chemotherapy, radiotherapy, with or without GM-CSF and subsequent randomization to maintenance interferon or no maintenance, SWOG 8812
1991	ACIR91456	Stability of technetium sulfur colloid labeled egg substitute in gastric acid: Comparison to in vivo labeled chicken liver
1991	ACIR91457	Adrenal imaging with 131-iodine 6-beta-iodomethyl-norcholesterol (NP-59)
1991	ACIR91153	Scintigraphy of tumors of neuroectodermal origin with 131-iodine-metaiodobenzylguanidine sulfate (131-I MIBG)
1991	ACIR91460	Treatment of localized non-Hodgkin's lymphoma: Comparison of chemotherapy (CHOP) to chemotherapy plus radiation therapy
1992	ACIR92123	Trial of adjuvant chemoradiation after gastric resection for adenocarcinoma, phase III, SWOG 9008
1992	ACIR92662	Evaluation of the use of 99m-technetium pertechnetate with potassium perchlorate wash-out and 99m-technetium MIBI in parathyroid imaging in patients with suspected parathyroid neoplasia or hyperplasia

ARMY 1975-1994 (CONTINUED)

Dwight D. Eisenhower Army Medical Center, Fort Gordon, GA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	ACIR92369	Clinical study of the relationship between computed tomography and bone sounding
1992	ACIR92477	Cisplatin plus etoposide combined with standard fractionation thoracic radiotherapy vs cisplatin plus etoposide combined with multiple daily fractionated thoracic radiotherapy for limited stage small cell lung cancer, SWOG 8991
1992	ACIR92658	Comparison of standard radiotherapy vs radiotherapy plus cisplatin, vs split-course radiotherapy plus simultaneous cisplatin and 5-FU, in patients with unresectable squamous cell carcinoma of head & neck, SWOG 9059
1993	ACIR93159	Phase III trial to preserve the larynx: Induction chemotherapy and radiation therapy versus concomitant chemotherapy and radiation therapy versus radiation, SWOG 9201
1993	ACIR93304	Randomized trial of subtotal nodal irradiation versus doxorubicin plus vinblastine and subtotal nodal irradiation for stage I-IIa Hodgkin's disease, phase III
1993	ACIR93003	Comparative study of liver biopsies and quantitative hepatobiliary scanning in patients with hepatitis C
1994	ACIR94158	Phase II evaluation of cisplatin + 5-FU + radiation therapy in patients with locally advanced/inoperable bladder cancer, SWOG 9312
1994	ACIR94109	Conservative treatment of adenocarcinoma of the distal rectum: Local resection plus adjuvant 5-FU/radiation therapy, a phase II intergroup study, SWOG 9306
1994	ACIR94108	Phase III study of radiation therapy, levamisole and 5-fluorouracil versus 5-fluorouracil and levamisole in selected patients with completely resected colon cancer, SWOG 9303

Fitzsimons Army Medical Center, Aurora, CO

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1978	ACIR78000-F	CNS tumor protocol for study of combined surgery, chemotherapy, and radiotherapy
1980	ACIR80414	Intravenous administration of 131-I 6B-iodomethylnorcholesterol (NP-59) for adrenal evaluation and imaging

ARMY 1975-1994 (CONTINUED)

Fitzsimons Army Medical Center, Aurora, CO (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1980	ACIR80525	Study of women with invasive carcinoma of the cervix; stage Ib and study of radiation therapy in patients with positive lymph nodes, GOG 49
1980	ACIR80282	Radiation therapy in combination with CCNU in patients within completely resected gliomas of the brain, grade I and II
1980	ACIR80252	Technetium 99m p-isopropylacetanilidoiminoacetic acid (99m-Tc-pipIDA) for diagnosis of hepatobiliary disease
1980	ACIR80512	Treatment of women with cervical cancer stage IIb, IIIb, and IVa confined to the pelvis and/or para-aortic nodes with radiotherapy versus radiotherapy plus immunotherapy, GOG 24
1980	ACIR80516	Randomized study of Adriamycin after surgery and radiation therapy in patients with high risk endometrial carcinoma stage I and occult stage II, GOG 34
1980	ACIR80264	Study of coagulation parameters prior to and following intravenous injection of radiographic contrast media
1981	ACIR81281	Treatment of early squamous cell carcinoma of the head and neck with initial surgery and/or radiotherapy followed by chemotherapy vs no further treatment, SWOG 7925
1981	ACIR81268	Radiation therapy in combination with BCNU, DTIC, or procarbazine in patients with malignant gliomas of the brain, SWOG 7703
1981	ACIR81178	Multimodal therapy of metastatic Ewing's sarcoma with chemotherapy including Adriamycin, vincristine, cyclophosphamide, 5-fluorouracil, actinomycin-D plus irradiation and surgery, intergroup Ewing's sarcoma study, phase III
1981	ACIR81448	Comparison of involved field (IF) radiotherapy and MOPP + low bleomycin with IF radiography and A-COPP in stage III Hodgkin's disease
1982	ACIR82536	Pharmacologic attempts of bone suppression in 99m-Tc pyrophosphate myocardial scanning
1982	ACIR82368	Extended field radiation therapy and hydroxyurea (NSC 032065) followed by randomized cisplatin (NSC 119875) or no further therapy in patients with cervical squamous cell carcinoma metastatic to lymph nodes (phase III), GOG 59
1982	ACIR82124	Randomized double blind clinical trial evaluation of cholestyramine prophylaxis for radiation-induced diarrhea, GOG 53

ARMY 1975-1994 (CONTINUED)

Fitzsimons Army Medical Center, Aurora, CO (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1982	ACIR82627	Concurrent chemo-radiotherapy for limited small cell carcinoma of the lung, phase II - pilot
1982	ACIR82699	Hepatoma III, treatment of hepatoblastoma and hepatocellular carcinoma (H-HCC) in children with surgery, radiation, and chemotherapy (phase III), POG 8103
1982	ACIR82126	Randomized comparison of hydroxyurea vs misonidazole as an adjunct to radiation therapy in patients with stage IIb, III, and IVa carcinoma of the cervix and negative para-aortic nodes, phase III, GOG 56
1983	ACIR83559	Combined therapy for multiple myeloma, VMCP-VBAP for remission: VMCP + levamisole vs sequential half-body radiation + vincristine-prednisone for patients who fail to achieve remission status with chemotherapy alone, phase III
1983	ACIR83043	Assessment of regional wall motion abnormalities by radionuclide angiography; effect of sublingual nitroglycerin. Tc-99m sulphur colloid
1983	ACIR83044	Gallium index: Qualitative vs quantitative analysis
1983	ACIR83585	Whole brain irradiation and intrathecal methotrexate in the treatment of solid tumor leptomeningeal metastases, phase II, SWOG 8102
1983	ACIR83346	Treatment of small cell lung cancer with VP-16/cis-platinum, alternating with vincristine/Adriamycin/cyclophosphamide and radiation vs concurrent VP-16/vincristine/Adriamycin/cyclophosphamide and radiation, phase III
1983	ACIR83004	Evaluation of indium oxine In-111 labeled cellular blood components
1983	ACIR83332	Evaluation of indium oxine In-111 labeled cellular blood components
1983	ACIR83017	Treatment of acute non-lymphocytic leukemia with conventional induction, consolidation chemotherapy: Maintenance with chemotherapy versus bone marrow transplantation following total body irradiation, phase III
1983	ACIR83316	CT scan of medial meniscus tears of the knee
1983	ACIR83209	Multi-agent chemotherapy with adjuvant whole-body irradiation in half-body increments in patients with clinical group IV rhabdomyosarcoma
1984	ACIR84041	Intergroup mesothelioma study 1 - radiotherapy with and without chemotherapy for malignant mesothelioma localized to one hemithorax, phase III, SWOG 8094

400 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Fitzsimons Army Medical Center, Aurora, CO (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1984	ACIR84255	Treatment of advanced bladder cancer with preoperative irradiation and radical cystectomy versus radical cystectomy alone, phase III
1984	ACIR84399	Comparison of aggressive radiotherapy + chemotherapy vs aggressive chemotherapy in the treatment of limited carcinoma of the pancreas, phase III
1984	ACIR84036	Prospective evaluation of esophageal changes in patients undergoing esophageal radiation
1984	ACIR84043	Treatment of advanced seminoma with combined chemotherapy and radiation therapy, SWOG 8104
1984	ACIR84125	Postoperative pelvic radiation in stage I and II mixed mesodermal sarcomas of the uterus, GOG 75
1985	ACIR85398	Treatment of limited non-small cell lung cancer; radiation versus radiation plus chemotherapy (FOMI/CAP), phase III, SWOG 8300
1985	ACIR85165	Evaluation of computed tomography of the chest in changing the stage or treatment of patients with Hodgkin's disease
1985	ACIR85177	Phase III study to determine the effect of combining chemotherapy (cisplatin and 5-FU) with surgery and radiotherapy for resectable squamous cell carcinoma of the head and neck
1985	ACIR85187	Radiation therapy + 5-fluorouracil vs sandwich SMF chemotherapy + radiation therapy as adjuvant surgical treatment of pancreatic cancer, phase III - intergroup, SWOG 8492
1985	ACIR85400	Phase III simultaneous cis-platinum plus radiation therapy compared with standard radiation therapy in the treatment of unresectable squamous or undifferentiated carcinoma of the head and neck
1986	ACIR86468	Intensive chemotherapy (MOPP-ABVD) plus low-dose total nodal radiation therapy in the treatment of stages IIb, IIIa2, IIIb, IV Hodgkin's disease in pediatric patients, a groupwide pilot study
1986	ACIR86497	Lung cancer study group - phase II pilot program of concurrent chemotherapy and radiation therapy before surgery in patients with stage III non-small cell lung cancer, LCSG 852
1986	ACIR86545	Phase III trial comparing combination chemotherapy (CAP) with whole abdominal radiation therapy for stage III optimal epithelial ovarian cancer with no gross residual disease or gross residual disease less than 1 cm

ARMY 1975-1994 (CONTINUED)

Fitzsimons Army Medical Center, Aurora, CO (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1986	ACIR86643	Treatment of limited small cell lung cancer with concurrent chemotherapy, radiotherapy, and intensification with high dose cyclophosphamide, phase II pilot, SWOG 8573
1987	ACIR87027	Comparison of hydroxyurea versus cis-platinum and 5-FU as an adjunct to radiation therapy in patients with advanced carcinoma of the cervix, GOG 85
1987	ACIR87367	Prospective trial for localized cancer of the esophagus: Comparing radiation as a single modality to the combination of radiation and chemotherapy, phase III
1988	ACIR88240	Phase II study of whole abdominal radiation for stage I and II papillary serous carcinoma, GOG 94a
1988	ACIR88239	Radiation therapy vs. no further therapy in selected patients with stage Ib, invasive carcinoma of the cervix, GOG 92
1988	ACIR88472	Adjunctive radiation therapy in intermediate risk endometrial carcinoma, GOG 99
1988	ACIR88471	Evaluation of intraperitoneal chromic phosphate after negative second-look laparotomy in ovarian carcinoma (stage III), phase III, GOG 93
1988	ACIR88608	Randomized study of intensive chemotherapy (MOPP/ABVD) +/- low dose total nodal radiation therapy in the treatment of stages IIb, IIIa2, IIIb, and IV Hodgkin's disease in pediatric patients
1989	ACIR89632	Treatment of limited small cell lung cancer with concurrent chemotherapy, radiotherapy, with or without GM-CSF and subsequent randomization to maintenance interferon or no maintenance
1989	ACIR89176	Ventilatory effects of transtracheal oxygenation
1989	ACIR89757	Evaluation of preoperative chemoradiation for advanced vulvar cancer, GOG 101
1990	ACIR90633	Treatment of pathologic stage C carcinoma of the prostate with adjuvant radiotherapy
1990	ACIR90637	Study of chest irradiation plus concurrent daily low-dose cisplatin followed by high-dose consolidation for locally advanced non-small cell lung cancer, SWOG 8836
1990	ACIR90638	Intergroup, surgical adjuvant therapy of rectal carcinoma: A controlled evaluation of (a) protracted infusion of 5-fluorouracil as a radiation enhancer and (b) 5-fluorouracil plus methyl-CCNU chemotherapy, SWOG 8896

402 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Fitzsimons Army Medical Center, Aurora, CO (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1990	ACIR90689	Treatment of children with high stage medulloblastoma: Cisplatin/VP-16 pre-vs post-irradiation: A POG phase III study
1990	ACIR90144	5-FU infusion and bolus cisplatin as adjunct to radiation therapy vs radiation alone in selected patients with stage Ia2, Ib, or IIa carcinoma of the cervix following radical hysterectomy and node dissection, GOG 109
1990	ACIR90602	Comparison of liver biopsy versus non-invasive testing using hepatic ultrasound, radionuclide scanning, erythrocyte folate levels, and methotrexate levels for the determination of methotrexate-induced hepatotoxicity
1991	ACIR91460	Treatment of localized non-Hodgkin's lymphoma: Comparison of chemotherapy (CHOP) to chemotherapy plus radiation therapy
1991	ACIR91060	Study of radiotherapy with or without concurrent cisplatin in patients with nasopharyngeal cancer, phase III
1991	ACIR91397	5-FU infusion and bolus cisplatin as an adjunct to radiation therapy vs radiation therapy alone in selected patients with stage Ia2, Ib, or IIa carcinoma of the cervix following radical hysterectomy and node dissection, GOG 109
1991	ACIR91595	Dose-escalating study of cisplatin, used concomitantly with hyperfractionated irradiation in the treatment of children with newly-diagnosed brain stem gliomas, a phase I study
1991	ACIR91676	Pre-radiation chemotherapy for children with supratentorial malignant gliomas and poorly differentiated embryonal tumors of childhood
1992	ACIR92704	Cisplatin plus etoposide combined with standard fractionation thoracic radiotherapy vs cisplatin plus etoposide combined with multiple daily fractionated thoracic radiotherapy for limited stage small cell lung cancer, SWOG 8991
1992	ACIR92590	Randomized comparison of radiation versus radiation plus continuous 5-fluorouracil infusion for palliation of bone metastases: Phase II study
1992	ACIR92707	Clinical and radiographic comparison of parenteral gold versus parenteral methotrexate in the treatment of early rheumatoid arthritis
1992	ACIR92385	Phase I/II dose-escalating trial of hyperfractionated irradiation in the treatment of supratentorial malignant tumors of childhood, POG 9136
1992	ACIR92383	Hyperfractionated irradiation for posterior fossa ependymoma

ARMY 1975-1994 (CONTINUED)

Fitzsimons Army Medical Center, Aurora, CO (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	ACIR92362	Feasibility trial of postoperative radiotherapy plus cisplatin followed by three courses of 5-FU plus cisplatin in patients with resected head and neck cancer, phase II pilot
1992	ACIR92232	Effect of smoking, alcohol ingestion, radiation therapy, and b-carotene on Langerhans cells in human oral mucosa: A pilot study
1992	ACIR92070	Study of external brain irradiation and cisplatin/BCNU followed by BCNU for the treatment of primary malignant brain tumor, phase II
1993	ACIR93357	Daily carboplatin and simultaneous accelerated, hyperfractionated chest irradiation followed by carboplatin in patients with inoperable (stages IIIa & IIIb) non-small cell lung cancer (coop study with U. Colorado Cancer Center & NCI)
1993	ACIR93358	Induction therapy with daily etoposide, daily cisplatin and simultaneous chest irradiation followed by consolidation cisplatin/etoposide therapy in limited stage small cell lung cancer (cooperative study with U. Colorado Cancer Center & NCI)
1993	ACIR93129	Strontium-89 therapy for intractable bone pain from metastatic breast and prostate cancer
1993	ACIR93367	Cisplatin and hyperfractionated versus conventional radiotherapy for brain stem glioma, POG 9239
1993	ACIR93079	Treatment of stage I, IIa, and IIIa1 Hodgkin's disease with ABVE and low-dose irradiation, POG 9226
1993	ACIR93339	Iodine-131 metaiodobenzylguanidine (MIBG) to rule out pheochromocytoma, one-time, emergency use
1993	ACIR93334	Phase III randomized trial of standard versus dose-intensified chemotherapy for children 3 years of age with a CNS malignancy treated with or without radiation therapy
1993	ACIR93563	Prospective evaluation of technetium-99m sestamibi in the detection of breast cancer
1993	ACIR93486	Comparison of three quality control methods used in the preparation of Tc-99m exametazine (Ceretek)
1994	ACIR94065	Protocol for evaluation of Cedars-Sinai and Emory algorithm for analysis of myocardial Tc-99m sestamibi tomographs

404 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Lawrence Livermore National Laboratory, Livermore, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1980	ACIR80503	Clinical trial of seven drug vs nine drug chemotherapy in extensive disease, and a seven drug with late consolidative radiotherapy in limited disease oat cell lung cancer, NCOG 2091

Letterman Army Medical Center, San Francisco, CA

1975	ACIR75000-U	BCNU and irradiation in the treatment of malignant glioma of the brain
1975	ACIR75000-P	Technetium-99m DTPA for the measurement of glomerular filtration rate and imaging of the kidneys and brain
1975	ACIR75000-N	Gallium-67 citrate for diagnosis of malignant neoplasms and/or abscess localizations
1976	ACIR76000-Q	Thallium-201 chloride for diagnosis of myocardial ischemia and/or myocardial infarction
1977	ACIR77000-R	Technetium-99m pyridoxylidene glutamate (99m-Tc-pg) for diagnosis of hepatobiliary disease (1977)
1980	ACIR80568	Study of gastric emptying by use of technetium-99m-tagged chicken liver as a marker of solid food in patients with reflux esophagitis
1980	ACIR80625	Intravenous administration of 131-I (NP-59) for adrenal evaluation and imaging [Study terminated at LAMC because of base closing]
1980	ACIR80394	Detection of subclinical effects of radiation therapy on the spinal cord by averaged somatosensory evoked potential
1980	ACIR80004	Comparative sensitivity of tomographic and planar scintigraphy in myocardial perfusion and small organ imaging
1980	ACIR80042	Natural history of the technetium 99m-(Tc mDP) bone scan after elective joint replacement
1980	ACIR80149	Evaluation of hematochezia with double contrast barium enema and colonoscopy
1980	ACIR80191	Protocol to compare segmental mastectomy and axillary dissection with and without radiation of the breast and total mastectomy and axillary dissection
1980	ACIR80627	Clinical trial to evaluate post-operative radiation and post-operative systemic chemotherapy in the management of resectable rectal carcinoma, NSABP r-01

ARMY 1975-1994 (CONTINUED)

Letterman Army Medical Center, San Francisco, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1981	ACIR81205	Non-randomized trial of combination chemotherapy and sequential hemi-body radiation therapy in high tumor burden multiple myeloma, NCOG 9m91
1981	ACIR81154	Technetium Tc-99m disofenin kit for hepatobiliary imaging
1981	ACIR81000-G	Technetium-99m disofenin kit for hepatobiliary imaging
1982	ACIR82354	Phase I-II study evaluating the toxicity and effectiveness of charged particle radiotherapy for patients with unresectable localized gastric carcinoma, NCOG 3s91
1982	ACIR82353	Phase II protocol of heavy charged particle radiotherapy for localized esophageal squamous cell carcinoma, NCOG 3e81
1982	ACIR82287	Randomized phase II study of irradiation, irradiation plus misonidazole, and irradiation plus BCNU for the treatment of metastases to the brain, NCOG 6g81
1982	ACIR82348	Effect of glucagon injection on diagnostic accuracy of double contrast and barium examinations of the upper and lower gastrointestinal tract
1982	ACIR82349	CT (computed tomography) evaluation of retroperitoneal gas resorption after abdominal aortic surgery: A prospective study
1982	ACIR82355	Phase III study comparing Adriamycin and Ftorafur vs radiation and Adriamycin + Ftorafur vs mitomycin C + Ftorafur for patients with disseminated gastric cancer, NCOG 35801j
1982	ACIR82553	Reverse redistribution on 201-thallium chloride stress and redistribution images-reproducible?
1982	ACIR82437	Identification of tubular ectasia and medullary sponge kidney on radionuclide renal scan
1982	ACIR82000-D	Clinical evaluation of cisternography utilizing indium-111 DTPA (1982)
1983	ACIR83043	Assessment of regional wall motion abnormalities by radionuclide angiography; effect of sublingual nitroglycerin. Tc-99m sulphur colloid
1983	ACIR83004	Evaluation of indium oxine In-111 labeled cellular blood components
1983	ACIR83405	Phase I-II study of radiotherapy plus BUDR and procarbazine, CCNU, vincristine (PCV) for the treatment of primary malignant brain tumors, NCOG 6g821

ARMY 1975-1994 (CONTINUED)

Letterman Army Medical Center, San Francisco, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1984	ACIR84216	Rest and exercise radionuclide angiography in the assessment of ischemic heart disease in patients with aorto-iliac occlusive disease
1984	ACIR84419	Phase III trial of 7-drug vs 3-drug chemotherapy regimens with or without prophylactic cranial irradiation (PCI) for undifferentiated small cell anaplastic lung cancer (oat cell): Extensive disease, NCOG 20831
1984	ACIR84423	CT scanning and myelography in the diagnosis of metastasis to the axial skeleton
1984	ACIR84061	Rest and exercise radionuclide ventriculography in the assessment of coronary artery disease
1985	ACIR85151	Left ventricular diastolic function in the assessment of doxorubicin cardiotoxicity using radionuclide ventriculography
1985	ACIR85177	Phase III study to determine the effect of combining chemotherapy (cisplatin and 5-FU) with surgery and radiotherapy for resectable squamous cell carcinoma of the head and neck
1985	ACIR85364	Phase III randomized trial of heavy charged particle radiotherapy vs. standard photon irradiation of unresectable non-oat cell carcinoma of the lung, NCOG 2n-84-1
1986	ACIR86461	Subtotal lymphoid irradiation (STLI) or total lymphoid irradiation vs involved field irradiation (IF) plus vinblastine, bleomycin, and methotrexate (VBM) chemotherapy in favorable Hodgkin's disease, NCOG 8h-85-1
1986	ACIR86155	Controlled randomized trial comparing supervoltage external beam irradiation alone with combined supervoltage x-ray therapy and heavy charged particle therapy for patients with localized stage T3-4 prostatic cancer, NCOG 4p-85-1
1986	ACIR86073	Randomized phase III study of heavy charged particle radiotherapy vs iodine (125-I) plaque radiotherapy in the treatment of localized uveal melanoma, NCOG 70-85-1
1986	ACIR86576	Procarbazine, L-phenylalanine mustard, vinblastine, & total lymph radiation vs nitrogen mustard, vincristine, procarbazine, prednisone, & Adriamycin, bleomycin, vinblastine, DTIC (MOPP/ABVD) in advanced Hodgkin's disease, NCOG 8h852
1986	ACIR86058	Evaluation of indium 111 oxine labeled autologous leukocytes in localization of inflammatory processes

ARMY 1975-1994 (CONTINUED)

Letterman Army Medical Center, San Francisco, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1986	ACIR86575	Phase II study of radiotherapy with chemotherapy for inoperable advanced squamous cell carcinoma of the head and neck, NCOG 71181
1986	ACIR86017	Phase II study of infusion chemotherapy (5-FU, mitomycin-C, cisplatin) and radiotherapy for advanced carcinoma of the cervix, NCOG 5c841j
1987	ACIR87285	Randomized phase III study of conventional fractionated radiotherapy versus conventional fractionated radiotherapy and bromodeoxyuridine (BUDR) for tumors metastatic to the brain, NCOG 6g-85-2
1988	ACIR88555	Phase III study of Zoladex adjuvant to radiotherapy in unfavorable prognosis carcinoma of the prostate, RTOG 85-31
1988	ACIR88570	Treatment of localized non-Hodgkin's lymphoma: Comparison of chemotherapy (CHOP) to chemotherapy plus radiation therapy
1988	ACIR88352	Compare adjuvant methyl-CCNU, vincristine, 5-fluorouracil (MOF) with and without radiation to adjuvant leucovorin and 5-fluorouracil (LV-F-FU) with and without radiation in patients with Dukes' B and C carcinoma of rectum, NSABP r-02
1988	ACIR88350	Phase III study of no therapy vs radiation therapy vs eflornithine (DFMO) plus methylbismuany-hydrazone (MGBG) for non-enhancing moderately and mildly anaplastic gliomas of the brain, NCOG 6g-87-1 (nci t86-0226)
1989	ACIR89235	Geographically dispersed phase III protocol for strontium-89 chloride injection
1989	ACIR89074	Prospective trial for localized cancer of the esophagus: Comparing radiation as a single modality to the combination of radiation therapy and chemotherapy, phase III, SWOG 8598, RTOG 85-01
1989	ACIR89406	Prospective comparison study of arthrography, double-contrast computerized arthrotomography, and magnetic resonance imaging (MRI) of the shoulder
1989	ACIR89522	Randomized phase II study of external brain irradiation with neon ions followed by procarbazine, CCNU and vincristine (PCV) for the treatment of primary glioblastoma multiforme, NCOG d6g-87-2
1989	ACIR89723	Clinical trial to determine the worth of tamoxifen and the worth of breast radiation in the management of patients with node-negative, clinically occult, invasive breast cancer treated by lumpectomy
1989	ACIR89000	Assessment of glomerular filtration rate in intensive care patients with renal dysfunction using 99-m-Tc-DTPA clearance

408 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Letterman Army Medical Center, San Francisco, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1989	ACIR89523	Phase II study of external brain irradiation and hydroxyurea with an interstitial 'boost' followed by procarbazine, CCNU, and vincristine (PCV) for the treatment of primary brain tumors
1990	ACIR90425	Phase III study of radiation therapy alone or in combination with chemotherapy for patients with non-small cell lung cancer, RTOG 88-08/ECOG EST 4588
1990	ACIR90457	Phase III randomized study employing 5-fluorouracil and radiotherapy versus 5-fluorouracil, mitomycin-C, and radiotherapy in carcinoma of the anal canal, RTOG 87-04/ECOG 1289
1990	ACIR90580	Feasibility trial of postoperative radiotherapy plus cisplatin followed by three courses of 5-FU plus cisplatin in patients with resected head and neck cancer, phase II pilot
1990	ACIR90516	Relationship of the sense of coherence and hardiness to the nutritional status of anorectic head and neck cancer patients currently undergoing radiation therapy
1991	ACIR91112	Use of strontium-89 chloride: A patient with prostate cancer with metastases to bone
1991	ACIR91114	Cisplatin plus etoposide combined with standard fractionation thoracic radiotherapy vs cisplatin plus etoposide combined with multiple daily fractionated thoracic radiotherapy for limited stage small cell lung cancer, RTOG 8815
1991	ACIR91115	Role of neoadjuvant MCV chemotherapy combined with transurethral surgery plus cisplatin with radiation therapy for the selected bladder preservation in patients with muscle-invading bladder cancer, RTOG 8903

Madigan Army Medical Center, Tacoma, WA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	ACIR75000-M	Stage IIIa and b Hodgkin's disease remission induction by radiation therapy plus chemotherapy combination vs. chemotherapy alone, SWOG 7518
1975	ACIR75000-H	5-FU, meCCNU + radiotherapy with or without testolactone for localized adenocarcinomas of the exocrine pancreas, SWOG 7509
1975	ACIR75000-D	Gallium-67 citrate body scanning for tumor or abscesses

ARMY 1975-1994 (CONTINUED)

Madigan Army Medical Center, Tacoma, WA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1976	ACIR76000-Y	Treatment of early squamous cell carcinoma of the head and neck with chemotherapy or chemoimmunotherapy following initial surgery and/or radiotherapy, SWOG 7620
1976	ACIR76000-U	Combined chemotherapy/radiation therapy/immunotherapy for small cell (oat cell) carcinoma of the lung, phase III, SWOG 7628
1976	ACIR76000-M	Combined modality treatment of limited squamous carcinoma of the lung, phase III, SWOG 7635
1977	ACIR77000-P	Radiation therapy in combination with BCNU, DTIC, or procarbazine in patients with malignant gliomas of the brain - phase III, SWOG 7703
1978	ACIR78000-M	Phase III protocol - radiotherapy-chemotherapy (MOPP) for stages I and II, a and b Hodgkin's, SWOG 781
1979	ACIR79294	Evaluation of radiation therapy in the management of endoscopically visible tumors of the lung
1980	ACIR80133	Effects of exogenous iodine on the I-123 uptake of patients with hyperthyroidism and an elevated I-123 uptake
1980	ACIR80236	Chemotherapy or chemotherapy and immunotherapy following initial surgery and/or radiotherapy for treatment of early squamous cell cancer of the head and neck, SWOG 7965
1980	ACIR80221	Comparison of involved field radiotherapy with involved field radiotherapy plus adjuvant chemotherapy and extended field radiotherapy in the treatment of stages I and II Hodgkin's disease in children, CCG 541
1980	ACIR80335	In vivo uptake of 131-I by semen and other body fluids
1980	ACIR80540	Surgical pathological study of women with invasive carcinoma of the cervix, stage Ib, randomly assigned radiation vs no further therapy in selected patients
1980	ACIR80635	Treatment of women with cervical cancer stage IIb, IIIb, IVa confined to the pelvis and/or para-aortic nodes with radiotherapy alone vs radiotherapy plus immunotherapy (phase II) (IV C. parvum - a killed germ)
1980	ACIR80641	Randomized study of Adriamycin as an adjuvant after surgery and radiation therapy in patients with high risk endometrial carcinoma, stage I and occult stage II

410 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Madigan Army Medical Center, Tacoma, WA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1981	ACIR81528	Randomized double blind clinical trial evaluating cholestyramine prophylaxis for radiation-induced diarrhea, phase III, GOG 53
1981	ACIR81508	Prophylactic alternate day corticosteroid therapy following irradiation for lung carcinoma
1981	ACIR81329	Randomized study of radiation therapy vs pelvic node resection for patients w/ invasive squamous cell carcinoma of vulva having positive groin nodes, GOG 37
1981	ACIR81534	Treatment of newly diagnosed acute non-lymphocytic leukemia w/multiagent chemotherapy (cyclic vs continuous) or bone marrow transplantation following total body irradiation, CCG 251
1982	ACIR82017	Randomized comparison of extended field radiation therapy and hydroxyurea followed by cisplatin or no further therapy in patients with cervical squamous cell metastatic to lymph nodes (phase III)
1982	ACIR82149	Randomized comparison of hydroxyurea vs misonidazole as an adjunct to radiation therapy in patients with stages IIb, III, and IVa carcinoma of the cervix and negative para-aortic nodes (phase III)
1982	ACIR82005	Protocol to compare segmental mastectomy and axillary dissection with and without radiation of the breast and total mastectomy and axillary dissection, NSABP b-06
1983	ACIR83328	Combined modality therapy for multiple myeloma. VMCP-VBAP for remission induction therapy: VMCP and levamisole vs sequential half-body radiotherapy-chemotherapy alone, phase III - SWOG 8229/30
1983	ACIR83224	Prospective evaluation of clinical, x-ray, histologic, scintigraphic, and microbiologic characteristics of diabetic feet (a multicenter study)
1983	ACIR83346	Treatment of small cell lung cancer with VP-16/cis-platinum, alternating with vincristine/Adriamycin/cyclophosphamide and radiation vs concurrent VP-16/vincristine/Adriamycin/cyclophosphamide and radiation, phase III
1983	ACIR83431	Treatment of primary brain tumors with adjuvant chemotherapy and radiation therapy utilizing intra-arterial cis-platinum and CCNU, phase I - II, pilot, SWOG 8272
1983	ACIR83343	Patients with suboptimal stage Ib carcinoma of cervix: Randomized radiation therapy and post-treatment para-aortic and common iliac lymphadenectomy vs radiation lymphadenectomy and extrafascial hysterectomy, GOG 71

ARMY 1975-1994 (CONTINUED)

Madigan Army Medical Center, Tacoma, WA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1984	ACIR84466	Postoperative pelvic radiation in state I & II mixed mesodermal sarcomas of the uterus, GOG 75
1984	ACIR84423	CT scanning and myelography in the diagnosis of metastasis to the axial skeleton
1984	ACIR84255	Treatment of advanced bladder cancer with preoperative irradiation and radical cystectomy versus radical cystectomy alone, phase III
1984	ACIR84425	Use of x-ray pelvimetry and ultrasonic parameters to predict cephalo-pelvic disproportion and shoulder dystocia
1984	ACIR84637	Surgery, radiation, and chemotx with bleomycin, vinblastine, cis-platinum diamine-dichloride, actinomycin-D, cyclophosphamide, & Adriamycin in local and metastatic malignant germ cell ovarian tumors of childhood, CCG 861
1985	ACIR85177	Phase III study to determine the effect of combining chemotherapy (cisplatin and 5-FU) with surgery and radiotherapy for resectable squamous cell carcinoma of the head and neck
1985	ACIR85244	Combination chemotherapy (COPE) and radiation therapy for extensive small cell lung cancer, phase II - pilot
1985	ACIR85130	Comparison of thallium stress testing and cardiac pacing stress testing in the preoperative evaluation of patients undergoing abdominal aortic aneurysmectomy and/or aortofemoral revascularization
1985	ACIR85551	Simultaneous cis-platinum + radiation therapy compared with standard radiation therapy in the treatment of unresectable squamous or undifferentiated carcinoma of the head and neck, phase III
1985	ACIR85300	Phase II study of cisplatin plus continuous infusion 5-fluorouracil and radiotherapy in locally advanced esophageal cancer (part 1 and 2) to be done in conjunction with the University of Indiana
1985	ACIR85306	Use of serial bone scans, x-rays, and CT scans in assessing the response of bone metastasis to systemic treatment
1985	ACIR85307	Use of serial computed tomography (CT) scans to evaluate response to radiation therapy
1985	ACIR85261	Treatment of limited non-small cell lung cancer: Radiation versus radiation plus chemotherapy (FOMI/CAP), phase III, SWOG 8300

412 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Madigan Army Medical Center, Tacoma, WA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1986	ACIR86068	CT scanning, CT myelography, and magnetic resonance imaging in the diagnosis of the metastasis to the axial spine
1986	ACIR86616	Intra-arterial cis-platinum and radiation therapy in primary brain tumors: A phase II randomized study comparing sequential and combined treatments
1986	ACIR86434	Phase III trial comparing combination chemotherapy with whole abdominal radiation therapy for stage III optimal epithelial ovarian cancer with no gross residual disease or gross residual disease < or equal to 1 cm
1986	ACIR86643	Treatment of limited small cell lung cancer with concurrent chemotherapy, radiotherapy, and intensification with high dose cyclophosphamide, phase II pilot, SWOG 8573
1987	ACIR87047	Randomized study of radical vulvectomy and bilateral groin disease dissection versus radical vulvectomy and bilateral groin radiation, GOG 88
1987	ACIR87367	Prospective trial for localized cancer of the esophagus: Comparing radiation as a single modality to the combination of radiation and chemotherapy, phase III
1987	ACIR87082	Clinical and field testing of the National Bureau of Standards (NBS) hand-held dental x-ray system
1987	ACIR87103	Prospective evaluation of testicular shielding in preventing hypogonadism in prostate cancer patients receiving external beam radiotherapy
1987	ACIR87105	Bone scan versus spinal magnetic resonance imaging in the evaluation of new back pain in patients with cancer
1987	ACIR87487	High dose cisplatin, VP-16 with or without radiation therapy in advanced non-small cell lung cancer
1987	ACIR87480	Randomized phase III intergroup study of supradiaphragmatic irradiation in stage IIa seminoma (RTOG 8514/intergroup 0055) - SWOG 8597
1987	ACIR87378	Phase II study of the treatment of papillary serous carcinoma of the endometrium stage I and II and maximally debulked advanced endometrial carcinoma with total abdominal radiation therapy, GOG 94
1988	ACIR88073	Phase II evaluation of preoperation chemoradiation for advanced vulvar cancer, GOG 101
1988	ACIR88135	Phase III randomized study of adjunctive radiation therapy in intermediate risk endometrial adenocarcinoma, GOG 99

ARMY 1975-1994 (CONTINUED)

Madigan Army Medical Center, Tacoma, WA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	ACIR88071	Treatment of selected patients with stage Ib carcinoma of the cervix after radical hysterectomy and pelvic lymphadenectomy: Pelvic radiation therapy versus no further therapy, GOG 92
1988	ACIR88504	Investigation into thyroid function abnormality associated with Hexabrix, a new intravenous iodine-containing contrast agent
1988	ACIR88348	Induction chemotherapy with high-dose cyclophosphamide for poor prognosis, disseminated breast cancer with radiation therapy in complete responders, phase II pilot, SWOG 8571
1988	ACIR88482	Clinical and radiographic evaluation of base wedge osteotomies of the first metatarsal
1989	ACIR89712	Evaluation of intraperitoneal chromic phosphate suspension therapy following negative second-look laparotomy for epithelial ovarian carcinoma (stage III), phase III
1989	ACIR89632	Treatment of limited small cell lung cancer with concurrent chemotherapy, radiotherapy, with or without GM-CSF and subsequent randomization to maintenance interferon or no maintenance
1989	ACIR89523	Phase II study of external brain irradiation and hydroxyurea with an interstitial 'boost' followed by procarbazine, CCNU, and vincristine (PCV) for the treatment of primary brain tumors
1989	ACIR89741	Phase II study of high dose methotrexate and craniospinal irradiation for the treatment of primary lymphoma of the central nervous system, UWNG 88-01
1989	ACIR89195	Treatment of localized non-Hodgkin's lymphoma: Comparison of chemotherapy (CHOP) to chemotherapy plus radiation therapy, SWOG 8736
1990	ACIR90617	Randomized comparison of hydroxyurea versus 5-FU infusion and bolus cisplatin as an adjunct to radiation therapy in patients with stages IIb, III, and IVa carcinoma of the cervix and negative para-aortic nodes
1990	ACIR90249	Evaluation of radiation treatment following surgical resection of solitary brain metastasis
1990	ACIR90516	Relationship of the sense of coherence and hardiness to the nutritional status of anorectic head and neck cancer patients currently undergoing radiation therapy
1991	ACIR91437	Measurement of radiation exposure to all personnel in an emergency department

414 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Madigan Army Medical Center, Tacoma, WA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1991	ACIR91060	Study of radiotherapy with or without concurrent cisplatin in patients with nasopharyngeal cancer, phase III
1992	ACIR92557	Evaluation of hydroxyurea 5-FU infusion and bolus cisplatin as an adjunct to radiation therapy in patients with stages IIb, III, and IVa carcinoma of the cervix and negative para-aortic nodes, GOG 113
1992	ACIR92362	Feasibility trial of postoperative radiotherapy plus cisplatin followed by three courses of 5-FU plus cisplatin in patients with resected head and neck cancer, phase II pilot
1992	ACIR92650	Prospective evaluation of gonadal damage in thyroid cancer patients treated with radioactive iodine
1992	ACIR92070	Study of external brain irradiation and cisplatin/BCNU followed by BCNU for the treatment of primary malignant brain tumor, phase II
1993	ACIR93127	Multicenter clinical study using a technetium-labeled monoclonal antibody for imaging patients with small cell lung cancer
1993	ACIR93633	Multicenter clinical study to compare imaging of non-small cell lung cancer with a technetium-labeled monoclonal antibody produced by two different manufacturers
1994	ACIR94278	Randomized comparison of 5-FU and cisplatin as adjunct to radiation therapy in patients with stages Ia2, Ib, and IIa carcinoma of the cervix following radical hysterectomy and node dissection phase III intergroup
1994	ACIR94333	Comparison of a high resolution computed tomography technique and fiberoptic bronchoscopy in the evaluation of hemoptysis
1994	ACIR94322	Trial of adjuvant chemoradiation after gastric resection for adenocarcinoma, phase II
1994	ACIR94239	Indium-111 labeled pentetreotide for carcinoid tumor for patient (name redacted), one-time emergency use

Naval Blood Research Laboratory, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1985	MRDC002	Blood volume expansion and hypohydration

ARMY 1975-1994 (CONTINUED)

Naval Blood Research Laboratory, Boston, MA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	MRDC003	Interaction of aerobic fitness and the hypohydration response during exercise-heat stress
1989	MRDC004	Role of thermal factors for metabolic adaptations to physical training
1991	MRDC006	Hyperhydration with a glycerol solution: Effects on fluid and electrolyte balance during rest and cold/exercise exposure
1992	MRDC031	Interaction of hypohydration and metabolic intensity on thermoregulatory responses during exercise-heat stress
1993	MRDC007	Effects of autologous erythrocyte infusion in sea-level residents rapidly transported to high altitude

Pikes Peak, CO

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1993	MRDC007	Effects of autologous erythrocyte infusion in sea-level residents rapidly transported to high altitude

Tripler Army Medical Center, Honolulu, HI

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1976	ACIR76000-S	Clinical evaluation of fluorescent scanning of the thyroid with americium (external source)
1976	ACIR76000-P	Clinical evaluation of cisternography utilizing indium-111 DTPA (1976)
1976	ACIR76000-R	Clinical evaluation of the thyroid by in vivo radionuclidic studies utilizing 123-I
1976	ACIR76000-N	Gallium-67 citrate in the diagnosis of tissue tumors and/or abscesses, TAMC 13/76
1976	ACIR76000-I	Evaluation of posterior spine fusions in scoliosis by radioisotope bone scan, TAMC 44/76
1976	ACIR76000-Q	Thallium-201 chloride for diagnosis of myocardial ischemia and/or myocardial infarction
1977	ACIR77000-E	Correlation of CT scanning with positive bone scans in evaluation of metastatic disease to bone

416 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Tripler Army Medical Center, Honolulu, HI (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1977	ACIR77000-F	Comparison of treatment regimens for first CNS relapse in childhood acute lymphoblastic leukemia (CNS leukemia study 6) , SWOG 7712
1977	ACIR77000-G	Indium-111 bleomycin in the diagnosis of tumors, TAMC 19/77
1977	ACIR77000-U	Indium-111 bleomycin in the diagnosis of tumors
1977	ACIR77000-D	Comparison of diagnostic accuracy of double contrast knee arthrography and computed tomography of the knee
1978	ACIR78000-C	Evaluation of patients for thyroid disease who experienced childhood irradiation to the head and neck, TAMC 8/78
1979	ACIR79035	Radiographic differential diagnosis of lower extremity bowing
1979	ACIR79000-C	Rescue therapy for non-CNS extramedullary disease in children with acute lymphoblastic leukemia, phase III, SWOG 7901
1979	ACIR79000-B	Radionuclide imaging in cases of suspected child abuse
1980	ACIR80000-B	Radioisotope scanning in the diagnosis of bone and joint infections, TAMC 29/80
1980	ACIR80000-A	Study of internal mammary lymph nodes in patients with inner quadrant breast cancer, TAMC 19/80
1980	ACIR80143	Thallium-201 myocardial imaging in detecting right ventricular dysfunction in chronic obstructive pulmonary disease
1980	ACIR80144	Minimum exposure requirements for an excretory urogram
1980	ACIR80399	In vivo evaluation of the hepatobiliary system with technetium-99m
1980	ACIR80309	National study of contrast media reactions
1981	ACIR81263	Study of the size of the thoracic aorta with computerized tomography in normal and abnormal patients
1981	ACIR81484	Comparison of involved field (IF) radiotherapy plus MOPP and low bleomycin with IF radiotherapy and A-COPP in stage III Hodgkin's disease, SWOG 7612
1981	ACIR81488	Comparison of involved field radiotherapy with adjuvant MOPP chemotherapy in the treatment of stage I and II Hodgkin's disease phase III, SWOG 7660

ARMY 1975-1994 (CONTINUED)

Tripler Army Medical Center, Honolulu, HI (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1981	ACIR81507	Multimodal therapy of metastatic Ewing's sarcoma with chemotherapy plus irradiation and surgery (if possible) intergroup, phase III, SWOG 8095
1981	ACIR81498	A-COPP plus for non-Hodgkin's lymphoma in children, phase III , SWOG 7905
1981	ACIR81501	Therapy for extraocular retinoblastoma with cyclophosphamide, vincristine, Adriamycin, and irradiation, SWOG 7994
1982	ACIR82000-A	Intermittent L-thyroxine suppression of thyroid function, TAMC 3a062110a822
1982	ACIR82627	Concurrent chemo-radiotherapy for limited small cell carcinoma of the lung, phase II - pilot
1982	ACIR82000-B	Clinical, radiologic, and physiologic effects of malaria on the lung, TAMC 3a062110a822
1982	ACIR82000-C	Thyroid function in pediatric patients on chronic iodide expectorant medication, TAMC 3a062110a822
1983	ACIR83499	Treatment of advanced seminoma (stage cII (n4) + cIII) with combined chemotherapy and radiation therapy, phase II, SWOG 8104
1983	ACIR83000-A	Enhancing visualization of small nodules in radiographic examinations, TAMC 31/83
1983	ACIR83209	Multi-agent chemotherapy with adjuvant whole-body irradiation in half-body increments in patients with clinical group IV rhabdomyosarcoma
1984	ACIR84154	Treatment of small cell lung cancer with VP-16/cis-platinum, alternating with vincristine/Adriamycin-cyclophosphamide and radiation vs concurrent VP-16/ vincristine/Adriamycin/cyclophosphamide and radiation, phase III, SWOG 8232
1984	ACIR84000	Perfecting radiological technique of percutaneous transhepatic portal venography, TAMC 1t84
1984	ACIR84399	Comparison of aggressive radiotherapy + chemotherapy vs aggressive chemotherapy in the treatment of limited carcinoma of the pancreas, phase III
1984	ACIR84344	Comprehensive therapy for Ewing's sarcoma: Tailored vs standard radiation therapy
1985	ACIR85323	Simultaneous cis-platinum plus radiation therapy compared with standard radiation therapy in the treatment of unresectable squamous or undifferentiated carcinoma of the head and neck, phase III, SWOG 8493

418 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Tripler Army Medical Center, Honolulu, HI (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1985	ACIR85230	Trial of cis-diamine-dichloro-platinum (II) (DDP) combined with small-field pelvic radiation therapy for patients with clinically localized invasive primary carcinoma of the bladder who are unsuitable for cystectomy, group...
1985	ACIR85502	Comparison of pregnancy rates using oil-based and water-based contrast medium in the evaluation of tubal patency
1985	ACIR85321	Management of locally or regionally recurrent but surgically resectable breast cancer, phase III, SWOG 8293
1985	ACIR85235	Small field pelvic, high-dose, external beam radiation for patients with persistent or recurrent low stage bladder cancer following transurethral resection and/or fulguration and intravesical chemotherapy and/or immunotherapy, NBCCGA 15
1985	ACIR85462	Golytely colon preparation for double-contrast barium enema
1985	ACIR85177	Phase III study to determine the effect of combining chemotherapy (cisplatin and 5-FU) with surgery and radiotherapy for resectable squamous cell carcinoma of the head and neck
1985	ACIR85160	Randomized trial of radical cystectomy compared to preoperative radiation therapy and radical cystectomy in patients with invasive primary carcinoma of the bladder
1985	ACIR85064	Treatment of limited non-small cell lung cancer: Radiation versus radiation plus chemotherapy (FOMI/CAP), phase III, SWOG 8300
1986	ACIR86195	Trial of neoadjuvant chemotherapy followed by combined cis-platinum and radiation for patients with localized invasive bladder cancer unsuitable for cystectomy, phase I/II, NBCG 18
1986	ACIR86468	Intensive chemotherapy (MOPP-ABVD) plus low-dose total nodal radiation therapy in the treatment of stages IIb, IIIa2, IIIb, IV Hodgkin's disease in pediatric patients, a groupwide pilot study
1987	ACIR87480	Randomized phase III intergroup study of supradiaphragmatic irradiation in stage IIa seminoma (RTOG 8514/intergroup 0055) - SWOG 8597
1987	ACIR87367	Prospective trial for localized cancer of the esophagus: Comparing radiation as a single modality to the combination of radiation and chemotherapy, phase III
1987	ACIR87702	Treatment of hepatoblastoma (HB) with surgery, chemotherapy, and radiation therapy, POG 8696/97

ARMY 1975-1994 (CONTINUED)

Tripler Army Medical Center, Honolulu, HI (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1987	ACIR87543	Medulloblastoma favorable prognosis: Randomized study of reduced dose irradiation to brain and spinal contents versus standard dose irradiation, a POG phase III study in conjunction with CCSG
1987	ACIR87581	Randomized comparison of hydroxyurea versus 5-FU infusion and bolus cisplatin as an adjunct to radiation therapy in patients with stages IIb, III, and IVa carcinoma of the cervix and negative para-aortic nodes, GOG 85
1988	ACIR88000	Treatment of selected intermediate risk patients with stage Ib carcinoma of the cervix after radical hysterectomy and pelvic lymphadenectomy: Pelvic radiation therapy vs no further treatment, GOG 92
1988	ACIR88570	Treatment of localized non-Hodgkin's lymphoma: Comparison of chemotherapy (CHOP) to chemotherapy plus radiation therapy
1988	ACIR88608	Randomized study of intensive chemotherapy (MOPP/ABVD) +/- low dose total nodal radiation therapy in the treatment of stages IIb, IIIa2, IIIb, and IV Hodgkin's disease in pediatric patients
1988	ACIR88398	Randomized phase II study of carboplatin (CBDCA) vs CHIP in the treatment of children with progressive or recurrent brain tumors, POG 8638
1989	ACIR89723	Clinical trial to determine the worth of tamoxifen and the worth of breast radiation in the management of patients with node-negative, clinically occult, invasive breast cancer treated by lumpectomy
1989	ACIR89632	Treatment of limited small cell lung cancer with concurrent chemotherapy, radiotherapy, with or without GM-CSF and subsequent randomization to maintenance interferon or no maintenance
1989	ACIR89782	Study of radiotherapy with and without concurrent cisplatin in patients with nasopharyngeal cancer, phase III, SWOG 8892
1989	ACIR89147	Clinical utility of post-thoracentesis chest roentgenography
1989	ACIR89318	Treatment of children less than three years of age with malignant brain tumors using postoperative chemotherapy and delayed irradiation, POG 8633/34
1989	ACIR89630	Neoadjuvant cisplatin and VP-16 plus concurrent chest and optional brain irradiation for patients with stage III non-small cell lung carcinoma, a phase II pilot
1990	ACIR90580	Feasibility trial of postoperative radiotherapy plus cisplatin followed by three courses of 5-FU plus cisplatin in patients with resected head and neck cancer, phase II pilot

420 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Tripler Army Medical Center, Honolulu, HI (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1990	ACIR90665	Protocol for surgical adjuvant therapy of rectal carcinoma: A controlled evaluation of a) protracted infusion 5-FU as a radiation enhancer, and b) 5-FU plus methyl-CCNU chemotherapy, SWOG 8896
1990	ACIR90633	Treatment of pathologic stage C carcinoma of the prostate with adjuvant radiotherapy
1990	ACIR90442	Pre-irradiation chemotherapy in supratentorial malignant tumors, POG 8832
1990	ACIR90546	Radiologic evaluation of cervical spine trauma: A selective approach
1991	ACIR91676	Pre-radiation chemotherapy for children with supratentorial malignant gliomas and poorly differentiated embryonal tumors of childhood
1991	ACIR91555	Phase II study of external beam radiation therapy and implant boost with or without hyperthermia for primary glioblastoma multiforme, NCOG 6g-90-2
1991	ACIR91595	Dose-escalating study of cisplatin, used concomitantly with hyperfractionated irradiation in the treatment of children with newly-diagnosed brain stem gliomas, a phase I study
1991	ACIR91677	Phase I/II dose escalating trial of hyperfractionated irradiation in the treatment of supratentorial malignant tumors of childhood
1992	ACIR92598	Contrast radiography in small bowel obstruction: A prospective randomized trial
1992	ACIR92184	Randomized comparison of radiation therapy and adjuvant hysterectomy vs radiation therapy and weekly cisplatin and adjuvant hysterectomy in patients with bulky stage Ib carcinoma of the cervix, phase III
1992	ACIR92602	Phase III randomized trial of standard vs. dose-intensified chemotherapy for children 3 years of age with a central nervous system (CNS) malignancy treated with or without radiation therapy, POG 9233/34
1992	ACIR92111	High-stage medulloblastoma, POG 9031
1992	ACIR92123	Trial of adjuvant chemoradiation after gastric resection for adenocarcinoma, phase III, SWOG 9008
1992	ACIR92383	Hyperfractionated irradiation for posterior fossa ependymoma
1992	ACIR92118	Clinical trial to evaluate the worth of tamoxifen in conjunction with lumpectomy and breast irradiation for the treatment of noninvasive intraductal carcinoma (DCIS) of the breast, NSABP b-24

ARMY 1975-1994 (CONTINUED)

Tripler Army Medical Center, Honolulu, HI (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1993	ACIR93018	Randomized, prospective comparison between chemotherapy plus radiotherapy together with surgery for selected stage IIIa and selected stage IIIb (no malignant effusion) non-small cell lung cancer, SWOG 9019
1993	ACIR93123	¹³¹ I 6-beta-iodomethyl-19-norcholesterol (NP-59) for primary hyperaldosteronism and bilateral adrenal masses, one time use
1993	ACIR93079	Treatment of stage I, IIa, and IIIa1 Hodgkin's disease with ABVE and low-dose irradiation, POG 9226
1993	ACIR93017	Chronic wrist pain: Diagnostic accuracy of magnetic resonance imaging (MRI) and radionuclide bone scanning
1993	ACIR93016	Postoperative scaphoid: A comparison of magnetic resonance imaging (MRI), computed tomography (CT), and conventional radiography in the diagnosis of fracture healing
1993	ACIR93019	Treatment of children with newly-diagnosed brain stem glioma (BSG) using cisplatin as a radiosensitizer with either conventional or hyperfractionated radiotherapy, POG 9239
1993	ACIR93413	Evaluation of ¹³¹ I-MIBG (¹³¹ I metaiodobenzylguanidine sulfate) in patients suspected of having pheochromocytoma, neuroblastoma or medullary hyperplasia
1993	ACIR93412	In-cyt-103 as diagnostic imaging agent in the preoperative differentiation of benign and malignant mammographic abnormalities
1993	ACIR93517	Ultrasound versus bone scan in the evaluation of shin splints and stress fractures

Walter Reed Army Hospital/Medical Center, Washington, DC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	ACIR75000-B	Clinical evaluation of indium-111 DTPA
1975	ACIR75000-A	Clinical evaluation of indium-111 chloride
1975	ACIR75000-K	Broad clinical evaluation of technetium-99m labeled stannous glucoheplonate as a diagnostic agent for studying the kidney
1975	ACIR75000-Q	BCNU and radiotherapy versus BCNU, radiotherapy, and hydroxyurea for primary intracranial malignant glioma double blind study

422 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	ACIR75000-T	Clinical evaluation of cisternography utilizing indium-111 DTPA (1975)
1975	ACIR75000-F	Treatment of non-Hodgkin's lymphomas in children: Methotrexate, vincristine, dexamethasone, cyclophosphamide, 6-mercaptopurine plus radiation therapy to involved areas, a phase III study, CALGB 7542
1976	ACIR76000-G	Clinical evaluation of 99m-technetium electrolytically labeled human serum albumin for injection, 99m-Tc(e)HSA
1976	ACIR76000-E	Combination chemotherapy of stage III and IV histiocytic lymphoma (reticulum cell sarcoma) in adults with or without radiotherapy or Adriamycin consolidation, CALGB 7652
1976	ACIR76000-F	Clinical evaluation of 123-iodine
1976	ACIR76000-B	Treatment of unresectable bronchogenic carcinoma with CCNU (2-chlorethyl-3-cyclohexyl-1-nitrosourea), cyclophosphamide, Adriamycin, procarbazine, hexamethylmelamine, methotrexate, and irradiation, WRAMC 7601-a
1976	ACIR76000-A	I-131 induced hypothyroidism: Relationship to iodine metabolism and measurement of onset by RIA-T4 determination
1976	ACIR76000-Z	Comparison of involved field radiotherapy with adjuvant MOPP chemotherapy and extended field radiotherapy in the treatment of stage I and II Hodgkin's disease in children, phase III, CALGB 7691
1976	ACIR76000-O	Use of fluorescent thyroid scanning to evaluate iodine kinetics during propylthiouracil therapy of Graves' disease
1977	ACIR77000-V	Evaluation of deep vein thrombosis by use of 99m technetium labeled microspheres
1977	ACIR77000-B	Study of thallium chloride TI-201 for myocardial imaging in acute infarction and/or ischemia
1977	ACIR77000-T	Radiation therapy with BCNU, DTIC, or procarbazine in malignant brain gliomas (phase III)
1977	ACIR77000-Q	Small cell carcinoma of the lung: Localized disease. A phase III study combination chemotherapy vs alternating chemotherapy and radiotherapy with or without immunotherapy, CALGB 7781
1977	ACIR77000-N	Randomized comparison of pelvic and abdominal radiation therapy vs. pelvic radiation and melphalan alone in stage II carcinoma of the ovary, phase III

ARMY 1975-1994 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1977	ACIR77000-J	Effect of a diet controlled in lactose, gluten, fat, and residue on female oncology patients receiving abdominal radiation treatment
1977	ACIR77000-S	Comparative effectiveness of combination chemotherapy alone and with radiation therapy by involved field or extended field in poor risk patients with stage I or II Hodgkin's disease, CALGB 7751
1978	ACIR78000-N	Prevention of gonadal damage in men treated with combination chemotherapy/radiotherapy for Hodgkin's disease and non-Hodgkin's lymphomas. Addendum 1 to WRAMC 7810
1978	ACIR78000-H	Pulmonary aspiration from gastroesophageal reflux defined by pulmonary scintiscan and overnight intra-esophageal pH monitoring
1978	ACIR78000-B	Comparative study of high dose (5000 rads) vs low dose (2000 rads) preoperative radiation to radical cystectomy for control of transitional cell carcinoma of the bladder
1978	ACIR78021	Randomized study of Adriamycin as an adjuvant after surgery and radiation therapy in patients with high risk endometrial carcinoma stage I and occult stage II, GOG 34
1979	ACIR79303	Randomized comparison of melphalan vs intraperitoneal chromic phosphate in the treatment of women with stage I epithelial carcinoma of the ovary
1979	ACIR79494	Randomized comparison of melphalan versus radioisotopes in the treatment of patients with no microscopic residual disease having all stages Ic and II (a, b, and c) and selected stages Ia II and Ib II ovarian cancer, GOG 7602
1979	ACIR79490	Combination chemotherapy for stages III and IV lymphocytic lymphoma in adults with or without radiotherapy consolidation, CALGB 7651
1979	ACIR79131	Acute lymphocytic leukemia in adults: Comparison of vincristine, prednisone, and L-asparaginase with or without daunorubicin for induction with central nervous system prophylaxis with radiotherapy and intrathecal method, CALGB 7612
1979	ACIR79480	Esophageal clearing, quantitated by radioisotope scan
1979	ACIR79481	Esophageal emptying in achalasia, quantitated by a radioisotope method
1979	ACIR79470	Randomized study of radiation therapy vs. pelvic node resection for patients with invasive squamous cell carcinoma of the vulva having positive groin nodes, GOG 37

ARMY 1975-1994 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1979	ACIR79380	Role of hyperuricuria in the nephrotoxicity of radiocontrast agents
1979	ACIR79149	Randomized comparison of mephalan vs intraperitoneal chromic phosphate in the treatment of women with stage I epithelial carcinoma of the ovary, phase III, GOG 46
1980	ACIR80078	Determination of glomerular filtration rate using radiotracer techniques
1980	ACIR80000-E	Technetium-99m pyridoxylidene glutamate (99m-Tc-PG) for diagnosis of hepatobiliary disease (1980)
1980	ACIR80080	Combination chemotherapy and radiotherapy for stage IV Hodgkin's disease, no prior treatment, CALGB 7551
1980	ACIR80000-F	Localized small cell carcinoma of the lung, phase III study; simultaneous chemotherapy and radiotherapy vs sequential therapy (chemotherapy, radiotherapy, chemotherapy) vs chemotherapy alone, CALGB 8083
1980	ACIR80568	Study of gastric emptying by use of technetium-99m-tagged chicken liver as a marker of solid food in patients with reflux esophagitis
1980	ACIR80565	Technetium-99m hIDA (n-2-6-dimethylphenylcarbamoylmethyliminodiacetic acid) for hepatobiliary scintigraphy
1980	ACIR80202	Prevention of gonadal damage in women treated with combination chemotherapy or radiotherapy below the diaphragm for Hodgkin's or non-Hodgkin's lymphoma
1980	ACIR80128	MOPP plus BLEO and A-COPP with IF radiation therapy in stage III Hodgkin's disease in children, POG 7612
1980	ACIR80300	Comparison of Estracyt vs cis-diamine-dichloro-platinum (DDP) vs Estracyt plus DDP in patients with advanced carcinoma of the prostate who have had extensive irradiation to the pelvis or lumbosacral area, NPCP 1200
1980	ACIR80646-G	Therapy for extraocular retinoblastoma with cyclophosphamide, vincristine, Adriamycin, and irradiation, SWOG 7994
1980	ACIR80417	Surgical-pathologic study of women with invasive carcinoma of the cervix stage Ib and randomly assigned radiation therapy vs no further therapy in selected patients, GOG 49
1980	ACIR80635	Treatment of women with cervical cancer stage IIb, IIIb, IVa, confined to the pelvis and/or para-aortic nodes with radiotherapy alone vs radiotherapy plus immunotherapy (phase II)(IV C. parvum - a killed germ)

ARMY 1975-1994 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1981	ACIR81180	Adjuvant chemotherapy of advanced head/neck cancer; & part b, induction chemotherapy, surgery, radiation, and adjuvant chemotherapy for stage III and IV squamous cell carcinoma of the head and neck, WRAMC 8101
1981	ACIR81000-C	Clinical evaluation of technetium-99m pipIDA-tin as a hepatobiliary agent
1981	ACIR81004	Intravenous administration of 131-I 6b-iodomethylnorcholesterol (NP-59) for adrenal evaluation and imaging
1981	ACIR81000-D	Adjuvant chemotherapy of advanced head & neck cancer; and part b, induction chemotherapy, surgery, radiation, & subsequent adjuvant chemotherapy for stage III and IV squamous cell carcinoma of the head & neck
1981	ACIR81000-E	Adjuvant chemotherapy following surgery and/or radiation for stage III and IV head and neck cancer
1981	ACIR81524	Radionuclide assessment of cardiac functions in patients with acromegaly
1981	ACIR81178	Multimodal therapy of metastatic Ewing's sarcoma with chemotherapy including Adriamycin, vincristine, cyclophosphamide, 5-fluorouracil, actinomycin-D plus irradiation and surgery, intergroup Ewing's sarcoma study, phase III
1981	ACIR81553	Technetium-99m antimony trisulfide colloid for interstitial lymphoscintigraphy
1981	ACIR81245	Radionuclide assessment of cardiac functional reserve in patients with hyperthyroidism and hypothyroidism
1981	ACIR81057	Technetium-99m DMSA for renal scintigraphy
1981	ACIR81242	Localized small cell carcinoma of the lung. A phase III study. Simultaneous chemotherapy and radiotherapy vs sequential therapy, CALGB 8083
1982	ACIR82149	Randomized comparison of hydroxyurea vs misonidazole as an adjunct to radiation therapy in patients with stages IIb, III, and IVa carcinoma of the cervix and negative para-aortic nodes (phase III)
1982	ACIR82160	Severe urinary tract infection - the role of ultrasound and computerized tomography
1982	ACIR82310	Technetium-99m labeled diisopropyl-IDA (DISIDA) for hepatobiliary scintigraphy
1982	ACIR82501	Comparison of liver/spleen scintigraphy, selective spleen scintigraphy, computer tomography, and ultrasound in the diagnosis of splenic trauma

426 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1982	ACIR82017	Randomized comparison of extended field radiation therapy and hydroxyurea followed by cisplatin or no further therapy in patients with cervical squamous cell metastatic to lymph nodes (phase III)
1982	ACIR82104	Multi-agent chemotherapy with adjuvant whole body irradiation in half-body increments in patients with clinical group IV rhabdomyosarcoma - POG 8157
1982	ACIR82113	Superfractionation radiotherapy and chemotherapy for patients with small cell carcinoma of the lung who fail locally after chemotherapy on, CALGB 8083
1982	ACIR82669	Comparison of Stilphostrol, Megace, and streptozotocin as single agents and Megace + minidose estrogen in patients with hormone refractory carcinoma of prostate who had extensive irradiation, >2000R to pelvis or lumbosacral, NPCP 1600
1983	ACIR83004	Evaluation of indium oxine In-111 labeled cellular blood components
1983	ACIR83224	Prospective evaluation of clinical, x-ray, histologic, scintigraphic, and microbiologic characteristics of diabetic feet (a multicenter study)
1983	ACIR83442	Evaluation of postprandial supine reflux events by simultaneous esophageal manometry, esophageal pH monitoring, and gastroesophageal scintiscanning in patients with hiatus hernia and esophagitis
1984	ACIR84026	Evaluation of computerized axial tomography of the chest in changing the stage or treatment of patients with Hodgkin's disease
1984	ACIR84344	Comprehensive therapy for Ewing's sarcoma: Tailored vs standard radiation therapy
1984	ACIR84125	Postoperative pelvic radiation in stage I and II mixed mesodermal sarcomas of the uterus, GOG 75
1984	ACIR84294	Cisplatin and 5-FU infusion prior to definitive radiation for unresectable non-small cell lung cancer
1984	ACIR84296	Stage IV rhabdomyosarcoma: Fractionated total body radiation as an adjunct to chemotherapy-POG pilot study
1985	ACIR85339	Characterization of radioactive uptake of indium-111 white blood cells in fractures
1985	ACIR85011	Diagnostic imaging of adrenal medulla (pheochromocytoma and neuroblastomas) with I-131 MIBG (metaiodobenzlguanidine sulfate)

ARMY 1975-1994 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1985	ACIR85115	Characterization of the postoperative radionuclide scan patterns in patients with porous coated total hip prosthesis
1985	ACIR85156	Cis-diamine-dichloro-platinum (NSC 119875) combined with small field pelvic radiation therapy for patients with clinically localized invasive primary carcinoma of the bladder who are unsuitable for cystectomy, NBCCGA 8
1985	ACIR85493	MVPP, irradiation, and late intensification in advanced bulky mediastinal Hodgkin's disease, CALGB 8551
1985	ACIR85637	Trial of local irradiation and chemotherapy versus chemotherapy alone for the treatment of localized non-Hodgkin's lymphoma, phase III, POG 8314
1985	ACIR85636	Treatment of patients with suboptimal (bulky) stage Ib carcinoma of the cervix: A randomized comparison of radiation therapy vs radiation therapy plus adjuvant extrafascial hysterectomy, phase III, GOG 71
1985	ACIR85541	Evaluation of radiographic and electronic methods for locating the apical terminus of root canals
1985	ACIR85503	I-123 iofetamine imaging of the brain
1985	ACIR85342	Phase III study of combining chemotherapy with surgery and radiotherapy for resectable squamous cell carcinoma of the head and neck, CALGB 8591
1985	ACIR85373	Treatment of limited stage small cell lung cancer with intensive ACE/CEP combination chemotherapy, irradiation, and warfarin, CALGB 8532
1985	ACIR85502	Comparison of pregnancy rates using oil-based and water-based contrast medium in the evaluation of tubal patency
1985	ACIR85160	Randomized trial of radical cystectomy compared to preoperative radiation therapy and radical cystectomy in patients with invasive primary carcinoma of the bladder
1986	ACIR86688	Combination chemotherapy with intensive ACE/PCE and radiation therapy to the primary tumor and prophylactic whole-brain radiation therapy with or without warfarin in limited small cell carcinoma of the lung, CALGB 8534
1986	ACIR86545	Phase III trial comparing combination chemotherapy (CAP) with whole abdominal radiation therapy for stage III optimal epithelial ovarian cancer with no gross residual disease or gross residual disease less than 1 cm

428 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1986	ACIR86453	Evaluation of scintigraphy as a gastroesophageal reflux test, and its comparative value to standard testing methods in patients with symptomatic gastroesophageal reflux
1986	ACIR86468	Intensive chemotherapy (MOPP-ABVD) plus low-dose total nodal radiation therapy in the treatment of stages IIb, IIIa2, IIIb, IV Hodgkin's disease in pediatric patients, a groupwide pilot study
1987	ACIR87356	Retrospective review of clinical laboratory, radiologic, and pathologic findings in adult patients with splenomegaly of unknown origin
1987	ACIR87449	Phase II study of the treatment of papillary serous carcinoma of the endometrium stage I and II and maximally debulked advanced endometrial carcinoma with total abdominal radiation therapy, GOG 94
1987	ACIR87047	Randomized study of radical vulvectomy and bilateral groin disease dissection versus radical vulvectomy and bilateral groin radiation, GOG 88
1987	ACIR87056	Chromosomal radiosensitivity during the G2 cell cycle period of normal lymphocytes from individuals with malignant lymphoma: A pilot study
1987	ACIR87113	Radiographic evaluation of a new device to measure ankle range of motion: A pilot study
1987	ACIR87138	Randomized comparison of hydroxyurea vs 5-FU infusion and bolus cisplatin as adjunct to radiation therapy in patients with stages IIb, III, and IVa carcinoma of the cervix and negative para-aortic nodes, phase III, GOG 85
1987	ACIR87242	Investigation of the yield of single photon emission tomography (SPECT) in focal epilepsy
1987	ACIR87243	Evaluation of postprandial supine reflux events by simultaneous esophageal manometry, esophageal pH monitoring and gastroesophageal scintiscanning in patients with progressive systemic sclerosis with severe endoscopic...
1987	ACIR87327	Retrospective review of indium-111 white blood cell scanning in orthopaedic patients
1987	ACIR87543	Medulloblastoma favorable prognosis: Randomized study of reduced dose irradiation to brain and spinal contents versus standard dose irradiation, a POG phase III study in conjunction with CCSG
1987	ACIR87447	Treatment of children less than 3 years of age with malignant brain tumors using postoperative chemotherapy and delayed irradiation, a pediatric oncology group phase III study, POG 8633

ARMY 1975-1994 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1987	ACIR87643	Evaluation of intraperitoneal chromic phosphate suspension therapy following negative second-look laparotomy for epithelial ovarian carcinoma (stage III), phase III, GOG 93
1987	ACIR87704	Clinical roentgenographic, CT, and pathological correlation of t1n0n0 lesions in the chest
1987	ACIR87702	Treatment of hepatoblastoma (HB) with surgery, chemotherapy, and radiation therapy, POG 8696/97
1988	ACIR88139	Combined chemotherapy and radiotherapy for stage III lung cancer, CALGB 8736
1988	ACIR88267	Postoperative evaluation of patients with differentiated thyroid cancer: A study comparing 131-I, 201-Tl, and magnetic resonance imaging (MRI)
1988	ACIR88135	Phase III randomized study of adjunctive radiation therapy in intermediate risk endometrial adenocarcinoma, GOG 99
1988	ACIR88326	Strontium-89 chloride for palliation of bone pain in subjects with metastatic bone disease
1988	ACIR88527	Multi-center randomized trial of adjuvant cisplatin/bleomycin plus whole pelvis irradiation versus cisplatin/bleomycin alone in high risk stage Ib and IIa carcinoma of the cervix
1988	ACIR88530	Randomized intensive chemotherapy (MOPP/ABVD) + low dose total nodal radiation therapy in treatment of stages IIb, IIIa2, IIIb, IV Hodgkin's disease in pediatric patients - a pediatric oncology group phase III study, POG 8725
1988	ACIR88613	Pre-radiation chemotherapy in the treatment of children with brain stem tumors - a phase II study
1988	ACIR88622	Combined chemotherapy and radiotherapy for stage III lung cancer, CALGB 8831
1989	ACIR89748	Effect of face mask CPAP on radionuclide ventilation-perfusion scanning of the lung in the setting of postoperative atelectasis
1989	ACIR89431	Pre-irradiation combination chemotherapy with cisplatin and ara-C for children with incompletely resected supratentorial malignant tumors: A phase II study
1989	ACIR89088	Evaluation of spinal instrumentation in posterior spinal fusion utilizing radionuclide imaging (using Tc-99m and In-111-MDP)

430 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1989	ACIR89517	Phase II study of simultaneous radiotherapy and cisplatin chemotherapy followed by 5-FU and cisplatin chemotherapy in patients with locally advanced inoperable squamous cell carcinoma of the head and neck, group...
1989	ACIR89581	Indium-111 labeled white blood cell uptake in primary musculoskeletal tumors
1990	ACIR90430	Magnetic resonance imaging (MRI) characteristics following surgical excision of soft tissue sarcomas and radiation therapy in determining 'normal' postsurgical and radiation changes from recurrent disease: Retrospective study
1990	ACIR90688	Phase III trial of treatment of pathologic stage C carcinoma of the prostate with adjuvant radiotherapy, ECOG-EST 9887
1990	ACIR90689	Treatment of children with high stage medulloblastoma: Cisplatin/VP-16 pre-vs post-irradiation: A POG phase III study
1990	ACIR90281	Phase I evaluation of multiple daily fraction radiation and 5-fluorouracil plus cisplatin in stage IIb, III, and IVa carcinoma of the cervix with negative para-aortic nodes
1990	ACIR90092	Nasal radioiodine activity: A study of frequency, intensity, and pattern
1990	ACIR90516	Relationship of the sense of coherence and hardiness to the nutritional status of anorectic head and neck cancer patients currently undergoing radiation therapy
1991	ACIR91604	Dose-escalating study of cisplatin used concomitantly with hyperfractionated irradiation in the treatment of children with newly diagnosed brain stem glioma cancer: A phase I study, POG 9139
1991	ACIR91676	Pre-radiation chemotherapy for children with supratentorial malignant gliomas and poorly differentiated embryonal tumors of childhood
1991	ACIR91677	Phase I/II dose escalating trial of hyperfractionated irradiation in the treatment of supratentorial malignant tumors of childhood
1991	ACIR91607	Prospective evaluation of 99m-technetium (99m-Tc) sulfur colloid liver-spleen scan (LSS) and 99m-Tc mebrofenin hepatobiliary (BIDA) radionuclide scan for diagnosis of diffuse hepatocellular disease
1991	ACIR91515	Phase I evaluation of multiple daily fraction radiation and hydroxyurea in stage IIb, III, and IVa carcinoma of the cervix with negative para-aortic nodes
1991	ACIR91415	Response of multinodular goiters to therapeutic doses of iodine-131

ARMY 1975-1994 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1991	ACIR91198	Study of combination chemotherapy plus irradiation for early stage Hodgkin's disease, CALGB 9051
1991	ACIR91570	Phase II study of pre-irradiation chemotherapy for pediatric and adolescent patients with nasopharyngeal carcinoma, NPC-1
1992	ACIR92260	Trial of adjuvant chemoradiation versus observation after gastric resection of adenocarcinoma, CALGB 9195
1992	ACIR92607	Randomized comparison of hydroxyurea vs hydroxyurea, 5-FU infusion & cisplatin vs weekly cisplatin as adjunct to radiation therapy in patients with stages IIb, III, or IVa carcinoma of cervix and negative para-aortic nodes
1992	ACIR92606	Treatment of children with newly diagnosed brainstem glioma using cisplatin as a radiosensitizer with either conventional or hyperfractionated radiotherapy: A pediatric oncology group phase III study, POG 9239
1992	ACIR92544	Acute changes in total and free thyroid hormone levels following radioiodine ablation therapy in the treatment of Graves' disease
1992	ACIR92509	Randomized, prospective comparison of chemotherapy plus radiotherapy and the same chemotherapy plus radiotherapy together with surgery for stage IIIa and stage IIIb non-mediastinal non-small cell lung cancer, SWOG 9019
1992	ACIR92441	Whole abdominal radiotherapy versus circadian-timed combination doxorubicin-cisplatin chemotherapy in advanced endometrial carcinoma
1992	ACIR92439	Extended field radiation therapy with concomitant 5-FU infusion and cisplatin chemotherapy in patients with cervical carcinoma metastatic to para-aortic lymph nodes (phase II)
1992	ACIR92383	Hyperfractionated irradiation for posterior fossa ependymoma
1992	ACIR92257	Trial of chemotherapy and radiation with or without carboplatin for inoperable lung cancer, CALGB 9130
1992	ACIR92184	Randomized comparison of radiation therapy and adjuvant hysterectomy vs radiation therapy and weekly cisplatin and adjuvant hysterectomy in patients with bulky stage Ib carcinoma of the cervix, phase III
1992	ACIR92141	Extended field radiation therapy with concomitant 5-FU infusion and cisplatin chemotherapy in patients with cervical carcinoma metastatic to para-aortic lymph nodes, GOG 8906

432 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

Walter Reed Army Hospital/Medical Center, Washington, DC (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	ACIR92013	Roentgenographic evaluation of the AML porous coated acetabular component: A six-year minimum follow-up study
1992	ACIR92011	Documentation of irradiated lymphocyte inactivation using the CD69 surface marker and flow cytometry
1992	ACIR92418	Phase II evaluation of preoperative chemoradiation for advanced vulvar cancer, GOG 101
1993	ACIR93191	Administration of intravenous doses of 111-In-Cyt-356 in the detection of occult prostate carcinoma (protocol 356in14)
1993	ACIR93334	Phase III randomized trial of standard versus dose-intensified chemotherapy for children 3 years of age with a CNS malignancy treated with or without radiation therapy
1993	ACIR93328	Treatment of stage I, IIa, and IIIa1 Hodgkin's disease with Adriamycin, bleomycin, vincristine, & etoposide & low-dose irradiation: A phase II study, POG 9226
1993	ACIR93170	Effects of administration of the contrast agent Hexabrix on thyroid function tests and thyroid uptake of iodine
1993	ACIR93242	Radiation effects on salivary epithelial growth factor (EGF): A pilot study
1993	ACIR93192	Multicenter study of intravenously administered 111-In-Cyt-356 in the evaluation of patients with primary prostate cancer prior to staging pelvic lymph node dissection (protocol 356in15)
1993	ACIR93473	Evaluation of breast masses using technetium-99m sestamibi scintigraphy
1993	ACIR93405	Development of Graves' disease and Graves' ophthalmopathy in patients with Hodgkin's disease: Relationship to prior history of radiation therapy
1994	ACIR94076	Method for radiographic evaluation of pedicle screw violation of the vertebral endplate: A pilot study
1994	ACIR94055	Effect of irradiation on red blood cell antigen densities: A flow cytometric analysis
1994	ACIR94278	Randomized comparison of 5-FU and cisplatin as adjunct to radiation therapy in patients with stages Ia2, Ib, and IIa carcinoma of the cervix following radical hysterectomy and node dissection phase III intergroup
1994	ACIR94167	Tumoral calcinosis: A clinical and radiographic review

ARMY 1975-1994 (CONTINUED)

William Beaumont Army Medical Center, El Paso, TX

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	ACIR7500-C	125-I bone scan densitometry in the hyperthyroid state
1975	ACIR75000-O	Blood pool imaging with technetium-99m human serum albumin
1975	ACIR75000-S	Diagnostic adrenal scanning with 131-iodocholesterol
1975	ACIR75000-L	99m-Tc-sn-DTPA chelate in the detection of vesicoureteral reflux
1976	ACIR76000-C	99m-Tc pyrophosphate bone scanning agents in the diagnosis and assessment of myocardial infarction
1976	ACIR76000-H	Early detection of fatigue fracture by bone scanning with Tc-99m bone scan agents
1976	ACIR76000-AA	Technetium-99m pyrophosphate bone scanning agents in the diagnosis and assessment of myocardial infarction
1977	ACIR77000-H	Thallium-201 chloride for diagnosis of myocardial ischemia and/or myocardial infarction
1977	ACIR77000-L	Myocardial perfusion scanning with radioactive particles (99-Tc and 131-I)
1977	ACIR77000-O	Radionuclide angiographic evaluation of cardiopulmonary function using a mobile dual cardiac probe
1978	ACIR78000-N	Prevention of gonadal damage in men treated with combination chemotherapy/radiotherapy for Hodgkin's disease and non-Hodgkin's lymphomas. Addendum 1 to WRAMC 7810
1979	ACIR79414	Radiation therapy in combination with BCNU, DTIC, or procarbazine in patients with malignant gliomas of the brain, SWOG 7703
1980	ACIR80375	Direct and indirect radionuclide cytography in the detection of vesicle ureteral reflux
1980	ACIR80000-E	Technetium-99m pyridoxylidene glutamate (99m-Tc-PG) for diagnosis of hepatobiliary disease (1980)
1980	ACIR80600	Prevention of gonadal damage in men treated w/combination chemotherapy/radiotherapy for Hodgkin's disease and non-Hodgkin's lymphomas
1980	ACIR80331	Randomized trial of chemotherapy and radiation vs radiation alone in the treatment of advanced non-small cell lung cancer

434 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

William Beaumont Army Medical Center, El Paso, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1980	ACIR80000-H	Clinical evaluation of 99m-technetium DMSA as a kidney imaging agent
1980	ACIR80596	Treatment of early squamous cell carcinoma of head & neck with initial surgery and/or radiotherapy followed by chemotherapy vs no further treatment, phase III, SWOG 7965
1980	ACIR80282	Radiation therapy in combination with CCNU in patients with completely resected gliomas of the brain, grade I and II
1980	ACIR80202	Prevention of gonadal damage in women treated with combination chemotherapy or radiotherapy below the diaphragm for Hodgkin's or non-Hodgkin's lymphoma
1980	ACIR80232	Transvaginal absorption of estrogens in patients following pelvic irradiation
1980	ACIR80198	Clinical evaluation of 99m-technetium DMSA (dimercaptosuccinic acid) as a kidney imaging agent
1981	ACIR81000-C	Clinical evaluation of technetium-99m pipIDA-tin as a hepatobiliary agent
1981	ACIR81526	Technetium-99m pyridoxylidene glutamate (Tc-99m-PG) for diagnosis of hepatobiliary disease
1981	ACIR81135	Clinical evaluation of technetium-99m pipIDA-tin as a hepatobiliary agent
1981	ACIR81248	Transfer of I-131 from male to female during sexual intercourse
1982	ACIR82478	Clinical and surgical correlations between computerized axial tomography (CT) vs metrizamide myelography in patients with low back pain
1982	ACIR82134	Comparison of bone and joint scans in patients with new onset polyarthritis or polyarthralgias
1982	ACIR82130	Renal scanning as an adjunct in differential diagnosis of renal failure
1982	ACIR82178	Evaluation of saline purge as conventional barium enema preparation in cleansing the colon for air contrast barium enema
1982	ACIR82596	Diagnostic adrenal scanning with 131-I np-59
1983	ACIR83224	Prospective evaluation of clinical, x-ray, histologic, scintigraphic, and microbiologic characteristics of diabetic feet (a multicenter study)

ARMY 1975-1994 (CONTINUED)

William Beaumont Army Medical Center, El Paso, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1983	ACIR83559	Combined therapy for multiple myeloma, VMCP-VBAP for remission: VMCP + levamisole vs sequential half-body radiation + vincristine-prednisone for patients who fail to achieve remission status with chemotherapy alone, phase III
1983	ACIR83558	Comparison of aggressive radiotherapy plus chemotherapy vs aggressive chemotherapy in the treatment of limited carcinoma of the pancreas, phase III
1984	ACIR84028	Use of in vitro labeled 99m-Tc red blood cells (RBC) blood pool imaging and computer aided acquisition and processing in localization of upper gastrointestinal (UGI) bleeding sites: A pilot study
1984	ACIR84076	Treatment of limited small cell lung cancer with VP-16/cis-platinum, alternating with vincristine/Adriamycin/cyclophosphamide and radiation therapy, phase I, SWOG 8232
1984	ACIR84522	Improved pregnancy rates after using oil-soluble contrast media (OSCM) for hysterosalpingography (HSG)
1985	ACIR85352	Radionuclide detection and treatment of pulmonary contusion in the pre-clinical state
1985	ACIR85064	Treatment of limited non-small cell lung cancer: Radiation versus radiation plus chemotherapy (FOMI/CAP), phase III, SWOG 8300
1985	ACIR85017	Intergroup - Adjuvant therapy of soft tissue sarcoma with radiation therapy and chemotherapy
1986	ACIR86396	Incidental renal scanning during brain scintigraphy
1986	ACIR86213	Does computerized axial tomography correlate with surgical findings of esophageal tumor?
1986	ACIR86616	Intra-arterial cis-platinum and radiation therapy in primary brain tumors: A phase II randomized study comparing sequential and combined treatments
1986	ACIR86119	Diagnosis of diaphragmatic disruption with Tc-99m-macroaggregated albumin
1987	ACIR87432	Phase III study to determine the effect of combining chemotherapy with surgery and radiotherapy of resectable squamous cell carcinoma of the head and neck, SWOG 8590
1987	ACIR87367	Prospective trial for localized cancer of the esophagus: Comparing radiation as a single modality to the combination of radiation and chemotherapy, phase III

436 Appendix 1—Records Search

ARMY 1975-1994 (CONTINUED)

William Beaumont Army Medical Center, El Paso, TX (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	ACIR88324	131-I MIBG compassionate one time use, IND 31, 571
1989	ACIR89712	Evaluation of intraperitoneal chromic phosphate suspension therapy following negative second-look laparotomy for epithelial ovarian carcinoma (stage III), phase III
1990	ACIR90281	Phase I evaluation of multiple daily fraction radiation and 5-fluorouracil plus cisplatin in stage IIb, III, and IVa carcinoma of the cervix with negative para-aortic nodes
1992	ACIR92439	Extended field radiation therapy with concomitant 5-FU infusion and cisplatin chemotherapy in patients with cervical carcinoma metastatic to para-aortic lymph nodes (phase II)
1992	ACIR92167	Phase III randomized study of surgery versus surgery plus adjunctive radiation therapy in intermediate risk endometrial adenocarcinoma, GOG 99
1992	ACIR92437	Randomized comparison of 5-FU infusion & bolus cisplatin as adjunct to radiation therapy, vs radiation alone in patients with stages Ia2, Ib, & IIa carcinoma of the cervix following radical hysterectomy & node dissection, GOG 109
1992	ACIR92441	Whole abdominal radiotherapy versus circadian-timed combination doxorubicin-cisplatin chemotherapy in advanced endometrial carcinoma
1993	ACIR93471	Effect of meal consumption before radionuclide ventriculography
1994	ACIR94007	Phase II study of interferon-modulated indium-111-labeled b72.3 monoclonal antibody (MOAB) scintigraphy in the staging and follow-up of breast cancer patients of poor prognosis

Womack Army Medical Center, Fort Bragg, NC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1989	ACIR89004	Clinical testing of the lightweight, Special Forces x-ray system

437 Appendix 1—Records Search

NAVY 1975-1994

Armed Forces Radiobiology Research Institute, Bethesda, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1978	NNMC-098	Clinical application of the kidney to aortic blood flow index (K/A ratio)

Balboa Naval Hospital, San Diego, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	NMCSD-277	Protective effects of corticosteroids in contrast material anaphylaxis
Unknown	NMCSD-287	Pretreatment with corticosteroids to alleviate reactions to intravenous contrast material

Cryopharm Corporation, Pasadena, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1991	ONR-01	Freeze-dried human red blood cells

Geisinger Medical Center, Danville, PA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	NMCSD-277	Protective effects of corticosteroids in contrast material anaphylaxis

Hamilton General Hospital, Hamilton, Ontario, Canada

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	NMCSD-277	Protective effects of corticosteroids in contrast material anaphylaxis

Ito Thyroid Clinic and Hospital, Tokyo, Japan

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1976	NMCSD-001	Clinical evaluation of Ga-76 scanning in diagnosis of anaplastic carcinoma and malignant lymphoma in thyroid gland

438 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Lawrence Berkeley Laboratory, Berkeley, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1981	NHOAK-012	All sites, phase I & II protocol of heavy charged particle for locally advanced and or recurrent cancers of multiple sites and types, NCOG OR81

Lawrence Livermore National Laboratory, Livermore, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1978	NMRI-04	Tracer gas kinetic studies for decompression table design
1986	NMRI-03	Nitrogen gas exchange in the human knee

Lemuel Shattuck Hospital, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1982	NHGL-013	Phase II master protocol for the evaluation of new treatment in patients with advanced soft tissue sarcomas, bone sarcomas and mesothelioma

Louisiana State University Medical Center, New Orleans, LA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	NMCSD-277	Protective effects of corticosteroids in contrast material anaphylaxis

Marine Corps Recruit Depot, San Diego, San Diego, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1981	NMCSD-059	Comparative study of cefadroxil vs. cephalixin in treatment of bacterial pneumonia in ambulatory patients
1991	NHRC-04	Use of noninvasive bone structural measurements to evaluate stress fracture susceptibility among selected Marine Corps and Navy populations

National Cancer Institute

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	NHPTS-013	Immunologic evaluation and therapy of patients with carcinoma of the lung

NAVY 1975-1994 (CONTINUED)

National Naval Medical Center, Bethesda, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	NNMC-103	Radioisotopes myelography in detection of spinal fluid leaks due to dorsal column stimulator implantation: Case report
1975	NNMC-104	Patterns of excretion of radioactive chelates in obstructive uropathy
1975	NNMC-034	IgE antipolymyxin B antibody formation in a T-cell depleted bone marrow transplant patient
1975	NNMC-113	Regional lung function with variation of respirator parameters in patients requiring mechanical ventilatory support
1975	NNMC-114	Evaluation of chest therapy by pulmonary function testing and ventilation perfusion scanning in obstructive lung disease
1976	NNMC-110	Chronic pleural thickening: Some observations on cause and pathogenesis
1977	NNMC-101	Efficacy of preoperative and postoperative bone scanning in the management of breast carcinoma
1978	NNMC-099	Transient unilateral hypoperfusion of the lung following mediastinoscopy
1978	NNMC-098	Clinical application of the kidney to aortic blood flow index (K/A ratio)
1978	NNMC-124	Exercise tolerance test
1978	NNMC-145	Clinical application of the kidney to aortic blood flow index (K/A ratio)
1978	NNMC-123	Premature craniosynostosis: Common complication of juvenile thyrotoxicosis
1978	NNMC-127	Radioimmunoassay for 3', 5'-diiodothyronine
1980	NNMC-045	Randomized study of Adriamycin as an adjuvant after surgery and radiation therapy in patients with high risk endometrial carcinoma in stage I and occult stage II
1980	NNMC-128	Thyroid hormone homeostasis in state of relative caloric deprivation
1981	NNMC-111	Effect of exogenous triiodothyronine on the metabolism of carbohydrate, protein and fat in starvation and undernutrition: Effects on lean body mass as measured by K-40
1981	NHPTS-031	Surgical pathologic study of women with invasive carcinoma of the cervix and randomly assigned radiation therapy vs. no further therapy in selected patients, phase III, GOG 49

440 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

National Naval Medical Center, Bethesda, MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1981	NNMC-112	Measurement of intragastric digestion and of gastric emptying in peptic ulcer disease
1982	NNMC-077	Treatment of limited small cell bronchogenic carcinoma: Chemotherapy alone or with radiation therapy
1982	NNMC-078	Evaluation of chemohomonal therapy and breast carcinoma patients with no evidence of disease following an exised or curatively irradiated recurrence
1982	NNMC-121	Secondary adrenal insufficiency after intrathecal steroid administration
1982	NNMC-126	Malignant pheochromocytoma
1983	NNMC-076	Monoclonal antibody serotherapy of chronic lymphocytoc leukemia and cutaneous T-cell lymphoma and radioimaging with radiolabeled monoclonal antibody T-101
1983	NNMC-122	Fasting decreases thyrotropin responsiveness to thyrotropin-releasing hormone: Potential cause of misinterpretation of thyroid function tests in critically ill
1984	NNMC-048	Treatment of patients with suboptimal stage Ib carcinoma of the cervix: A randomized comparison of radiation therapy versus radiation therapy plus adjuvant extrafascial hysterectomy
1986	NNMC-133	Inguinal hernia demonstrated incidentally during bone imaging
1987	NNMC-081	Phase III study of indium-111 labeled granulocytes for detection of inflammation process in humans
1987	NNMC-079	Treatment of cutaneous T-cell lymphoma (CTCL) and chronic lymphocytic leukemia (CLL) with yttrium-90 radiolabeled T-101 monoclonal antibody
1987	NNMC-050	Randomized comparison of hydroxyurea versus 5-FU infusion and bolus cisplatin as an adjunct to radiation therapy in patients with stage IIb, III, and IVa carcinoma of the cervix and negative para-aortic nodes
1987	NNMC-049	Phase II study of the treatment of stage III & IV disease of advanced endometrial carcinoma and all stages of papillary serous carcinoma and clear cell carcinoma of the endometrium with total abdominal radiation therapy
1987	NNMC-137	Barrett esophagus: Decreased esophageal clearance shown by radionuclide esophageal scintigraphy

NAVY 1975-1994 (CONTINUED)

National Naval Medical Center, Bethesda, MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1987	NHPTS-53	Randomized clinical trial for treatment of women with selected stage Ic and II(a,b,c) and selected stage IaI, IbI, and IbII ovarian cancer, GOG 95
1988	NNMC-037	Effects of oral therapy with verapamil upon ventricular diastolic function in hypertensive patients
1988	NNMC-051	Phase III randomized study of surgery plus adjunctive radiation therapy in intermediate risk endometrial adenocarcinoma
1988	NNMC-035	SPECT imaging of regional cerebral blood flow
1988	NNMC-075	Scintigraphic characterization of parathyroid glands in chronic renal insufficiency
1988	NNMC-036	Phase III study 131-I metaiodobenzylguanidine sulfate (IBG) for the localization of adrenal medullae of humans
1988	NNMC-074	Randomized study of radical vulvectomy and bilateral groin radiation, phase III
1988	NNMC-131	Spontaneous reduction of testicular torsion during scrotal imaging
1989	NNMC-052	Evaluation of intraperitoneal chromic phosphate suspension therapy following negative second-look laparotomy for epithelial ovarian carcinoma (stage III, phase III)
1989	NNMC-053	Treatment of selected intermediate risk patients with stage Ib carcinoma of the cervix after radical hysterectomy and pelvic lymphadenectomy: Pelvic radiation therapy versus no further therapy
1989	NNMC-038	Phase III study 131-I 6B-iodomethyl-19-norcholesterol (NP-59) for the localization of the adrenal cortex in humans
1989	NNMC-082	Glucose metabolism by positron emission tomography
1989	NNMC-132	Axillary iodine-131 accumulation due to perspiration
1990	NNMC-039	Assessment of the effect of converting enzyme inhibition on proteinuria with steroid unresponsive nephrotic syndrome
1990	NNMC-040	Influence of thyroid disorders and their treatment on nuclear binding of T3 in human leukocytes
1990	NNMC-135	Morphine augmented cholescintigraphy in acute cholecystitis

442 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

National Naval Medical Center, Bethesda, MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1991	NNMC-064	ALinC 15: Up-front alternating 6-MP/MTX versus up-front alternating chemotherapy for acute lymphocytic leukemia in childhood
1991	NNMC-080	Randomized study of intensive chemotherapy (MOPP/AVBD) +1-low-dose total nodal radiation therapy in treatment of stages IIb, IIIa2, IIIb, IV Hodgkin's disease in pediatric patients
1991	NNMC-042	Renal and systematic hemodynamic response to the creation of vascular access for hemodialysis in patients with chronic renal failure
1991	NNMC-041	Magnetic resonance and Tc-99m HMPAO SPECT imaging in evolving and completed stroke diffusion/perfusion imaging and metabolite spectroscopy
1991	NNMC-068	Pre-radiation chemotherapy for children with supratentorial malignant gliomas and poorly-differentiated embryonal tumors
1991	NNMC-065	Study of the biological behavior of optic pathway tumors - a phase II study
1991	NNMC-062	Pilot & phase II study of low dose rate chest radiotherapy for treatment of intrathoracic relapse of small cell lung cancer
1991	NNMC-067	Phase I/II dose escalating trial of hyperfractionated irradiation in the treatment of supratentorial malignant tumors of childhood
1991	NNMC-066	Study of childhood soft tissue sarcoma (STS) other than rhabdomyosarcoma and its variants - a pediatric oncology group phase III study
1991	NNMC-058	Randomized comparison of radiation therapy and adjuvant hysterectomy versus radiation therapy and weekly cisplatin and adjuvant hysterectomy in patients with bulky stage Ib carcinoma of the cervix
1991	NNMC-063	Combined therapy and restaging in the treatment of stages I and IIa Hodgkin's disease in pediatric patients - A pediatric oncology group phase III study
1991	NNMC-130	Superior vena cava obstruction in fibrosing mediastinitis: Demonstration of right to left shunt and venous collaterals
1992	NNMC-083	Sensitivity and specificity of MRI-CT arthrography and MRI arthrography for evaluation of shoulder injuries
1992	NNMC-084	Phase I evaluation of intravenously administered ¹³¹ I Col-1 monoclonal antibody in patients with advanced carcinoma

NAVY 1975-1994 (CONTINUED)

National Naval Medical Center, Bethesda, MD (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	NNMC-060	Phase I trial of etoposide and cisplatin plus chest radiotherapy for patients with limited stage small cell lung cancer
1992	NNMC-073	Use of radiocopper in the diagnosis of Wilson's disease
1992	NNMC-056	Whole abdominal radiotherapy versus combination doxorubicin cisplatin chemotherapy in advanced endometrial carcinoma
1992	NNMC-069	Treatment for newly diagnosed low grade astrocytomas
1992	NNMC-055	Randomized comparison of hydroxyurea versus hydroxyurea 5-FU infusion & cisplatin as adjunct radiation therapy in patients with stages IIb, III, & IVa carcinoma of cervix & negative para-aortic nodes
1992	NNMC-043	Association of bone density and menstrual dysfunction with fractures in USNA midshipmen
1992	NNMC-059	Randomized comparison of 5-FU infusion and bolus cisplatin as an adjuvant radiation
1992	NNMC-070	Treatment of first marrow and/or extramedullary relapse childhood acute T-lymphoblastic leukemia and T non-Hodgkin's lymphoma with combination chemotherapy including 2'-deoxycoformycin
1992	NNMC-129	Retained esophageal activity on iodine-131 survey in patient with benign esophageal stricture
1993	NNMC-044	Comparison of ultrasonographic Doppler flow hysterosalpingography with conventional hysterosalpingography
1993	NNMC-071	Clinical trial to evaluate the worth of tamoxifen in conjunction with lymphectomy & breast irradiation for treatment of noninvasive intraductal carcinoma (DCIS) of the breast
1993	NNMC-072	Clinical trial to determine worth of breast radiation in the management of patients with node-negative, occult invasive breast cancer treated by lumpectomy
1993	NNMC-057	Phase II trial of doxorubicin (NSC 123127) and ifosfamide (NSC 11389) in the treatment of recurrent or uterine leiomyosarcomas
1994	NNMC-061	Phase III trial of adjuvant radiotherapy versus adjuvant radiotherapy plus systemic chemotherapy for local and regional neuroendocrine (Merkel) cancer of the skin
Unknown	NNMC-100	Oblique views in lung perfusion scanning: Clinical utility and limitations

444 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Academy, Annapolis, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	NMCLANNAP-10	Functional instability of ankle joint

Naval Blood Research Laboratory, Boston, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHCHEL-024	Factors that influence the process of Cr-51 labeling of human granulocytes isolated from blood by counterflow centrifugation

Naval Health Research Center, San Diego, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	NHRC-02	Body composition estimation in females
1994	NHRC-03	Validity of Navy body fat estimation among racial groups

Naval Hospital, Bethesda, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	NHPTS-013	Immunologic evaluation and therapy of patients with carcinoma of the lung
1977	NNMC-102	Phantom kidney in technetium-99m DTPA studies of renal blood flow: Case report

Naval Hospital, Charleston, SC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1979	NHCHA-001	Inderal treatment of menopausal vasomotor symptoms

Naval Hospital, Chelsea, MA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NHCHEL-006	Pathophysiological adaptations in pregnancy: A study of oxygen transport mechanisms in normal and abnormal pregnancy of fetal manifestations of intrauterine hypoxia of dysfunctional labor and of trace metal cadmium as possible factors in hypertensive syndrome

NAVY 1975-1994 (CONTINUED)

Naval Hospital, Great Lakes, IL

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	NHGL-007	Evaluation of the oral surgery patient for IV sedation
1975	NHGL-006	Study of oral cavity during hyperalimentation
1975	NHGL-008	Evaluation of oral surgery implants
1977	NHGL-056	Combination chemotherapy or chemohormonotherapy for recurrent or metastatic breast cancer in pre-menopausal women: Oophorectomy plus CAF vs. CAF without oophorectomy, EST 2177
1977	NHGL-057	Phase II master protocol for evaluation of new agents in patients with esophageal carcinoma, EST 2278
1977	NHGL-049	Evaluation of long-term maintenance therapy for patients in complete remission from metastatic breast carcinoma, EST 1177
1977	NHGL-009	VA cooperative bowel prep study
1977	NHGL-058	Phase II-III master protocol for treatment of advanced pancreatic adenocarcinoma PALA vs. streptozotocin +ADE ADR+ meCCMD (SAM), EST 2279
1977	NHGL-067	Phase III combination chemotherapy with or without consolidation radiation therapy for localized small cell carcinoma of the lung
1978	NHGL-050	Comparative phase III trial of cis-diamine-dichloro-platinum vs. Adriamycin. Cyclophosphamide..and cis-diamine-dichloro-platinum and phase II study of TM-26 in disseminated transition cell carcinoma of the urinary tract, EST 1878
1978	NHGL-059	Adjuvant chemotherapy of soft tissue sarcomas, EST 2377
1980	NHGL-053	Phase II master protocol for evaluation of new agents and combinations in patients with lymphoma, EST 1480
1981	NHGL-054	Combination chemotherapy and radiotherapy for advanced Hodgkin's disease, EST 1481
1981	NHGL-035	Localized radiotherapy vs. localized radiotherapy and chemotherapy vs. localized radiotherapy and half-body thorax
1981	NHGL-051	Phase II-III studies of Adriamycin and 5-FU vs. streptozotocin + 5-FU in the treatment of carcinoid tumor, EST 1291
1981	NHGL-052	Radiotherapy with and without chemotherapy for malignant pleural mesothelioma localized to one hemithorax. An intergroup study, EST 1390

446 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital, Great Lakes, IL (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1981	NHGL-066	Clinical protocols, rationales and procedures for using two diagnostic drugs, HIDA and DMSA
1982	NHGL-044	Phase III chemohormonal therapy of previously treated metastatic breast cancer in patients with no prior exposure to Adriamycin or tamoxifen
1982	NHGL-042	Phase III adjuvant clinical trial to compare CMFPT to alternating CMF(P)TH and TSAVBTH and short- versus long-term tamoxifen in premenopausal patients with operable N+ breast cancer
1982	NHGL-043	Phase III comparative evaluation of three intensive induction chemotherapy regimens and controlled evaluation of adjuvant radiotherapy consolidation for unfavorable (diffuse) histologic subtypes of non-Hodgkin's lymphoma
1982	NHGL-041	Phase II master protocol for the evaluation of new agents on patients with small cell bronchogenic carcinoma
1982	NHGL-060	Protocol for treatment of lymphoblastic lymphoma in adults, EST 2481
1982	NHGL-045	Phase III combination chemotherapy of advanced breast cancer for women who have received prior tamoxifen, but no prior Adriamycin
1982	NHGL-046	Phase III comparison of cyclophosphamide, Adriamycin, vincristine, to an alternating sequence of CAV and intensive hexamethylmelamine, etoposide (VP-16), methotrexate followed by comparison of maintenance vs. no-maintenance
1982	NHGL-048	Phase III chemohormonal therapy of previously treated metastatic breast cancer in patients with no prior exposure to Adriamycin or tamoxifen: A comparative evaluation of DATH vs. D(DATH)TH, ECOG 7181
1982	NHGL-062	Phase III combined modality treatment protocol for stages III and IV favorable (modular) histologic subtypes of non-Hodgkin's lymphoma, ECOG EST 4477
1982	NHGL-064	Phase III comparative evaluation of 3 intensive induction chemotherapies, ECOG 5477
1982	NHGL-065	Phase III adjuvant therapy for post-menopausal women with breast cancer, ECOG 4181
1982	NHGL-040	Multiple myeloma: Timed sequential high dose cyclophosphamide and vincristine in treatment of multiple myeloma
1982	NHGL-047	Phase II master protocol for evaluation of new agents in treatment of breast cancer

NAVY 1975-1994 (CONTINUED)

Naval Hospital, Great Lakes, IL (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1982	NHGL-021	Phase III comparative of soft tissue sarcomas
1982	NHGL-010	Evaluation of long-term maintenance therapy for patients in complete remission from metastatic breast carcinoma
1982	NHGL-011	Adjuvant therapy with tamoxifen vs. placebo in older post-menopausal patients with stage II breast cancer
1982	NHGL-012	Evaluation of adjuvant therapy and biological parameters in node negative operable female breast cancer
1982	NHGL-014	Radiotherapy with and without chemotherapy for malignant pleural mesothelioma localized to one hemithorax, an intergroup study
1982	NHGL-015	Phase III treatment of advanced malignant mesothelioma: Comparison of CIA vs. CA, intergroup II
1982	NHGL-016	Chemotherapy of adrenal cortical carcinoma
1982	NHGL-018	Phase III combination chemotherapy of metastatic breast cancer followed by maintenance or no maintenance therapy: An evaluation of DAVTH as induction regimen
1982	NHGL-027	Phase II master protocol for evaluation of new treatment in patients with malignant melanoma
1982	NHGL-020	Phase II master protocol for evaluation of new agents in patients with esophageal carcinoma
1982	NHGL-039	Phase III protocol for the treatment of favorable non-Hodgkin's lymphomas
1982	NHGL-022	Adjuvant chemotherapy of soft tissue sarcomas
1982	NHGL-023	Phase II study of new agents in treatment of advanced cancer of the head and neck
1982	NHGL-024	Phase III multiple myeloma: Evaluation of combination chemotherapy in previously untreated patients
1982	NHGL-025	Protocol for treatment of lymphoblastic lymphoma in adults
1982	NHGL-033	Phase II and III chemotherapy of advanced soft tissue sarcomas, bone sarcomas, and mesothelioma

448 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital, Great Lakes, IL (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1982	NHGL-038	Surgical adjuvant protocol for resectable rectal carcinoma modified Duke's B, C1, and CS
1982	NHGL-026	Patients with advanced Hodgkin's disease who have relapsed
1982	NHGL-028	Phase II study of chemotherapy of advanced ovarian cancer using low or high dose cis-diamine-dichloro-platinum
1982	NHGL-029	Phase II master protocol for evaluation of new treatment in patients with endometrial cancer
1982	NHGL-030	Phase II study of disseminated transitional cell carcinoma of urinary tract
1982	NHGL-031	Management of resectable locally advanced primary breast cancer
1982	NHGL-032	Studies in chemotherapy of islet cell carcinoma
1982	NHGL-037	Testicular cancer intergroup study
1982	NHGL-036	Phase II master protocol for evaluation of new agents in treatment of non-small cell bronchogenic carcinoma
1982	NHGL-034	Treatment of acute non-lymphocytic leukemia in elderly: Full dose versus attenuated dose
1982	NHGL-019	Phase II-III evaluation of combination of methyl CCNU, mitomycin-C, Adriamycin, and 5-fluorouracil in advanced measurable gastric cancer

Naval Hospital, Guam

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1982	GUAM-01	Radionuclide biliary imaging utilizing 99 m-Tc EHIDA

Naval Hospital, Memphis, TN

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1982	NHMEP-001	Clinical study of intraocular lenses implantation after cataract extraction; Precision-Cosmet

NAVY 1975-1994 (CONTINUED)

Naval Hospital, Naples, FL

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1980	NHNAP-001	Full thickness skin cultures in betadine scrubbed and betadine sprayed surgical patients

Naval Hospital, Oakland, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1979	NHOAK-002	Supernumary toe arising from medical cuneiform
1979	NHOAK-001	Localization of Ga-67 citrate in plasma granuloma of lung
1979	NHOAK-004	Functional asplenia after Thorotrast administration
1991	NHOAK-043	Clinical trial to assess the relative efficacy of 5-FU + leucovorin with or without interferon alpha-2a, NSABP C-05
Unknown	NHOAK-005	Gallium-67 uptake in a benign thymic cyst

Naval Hospital, Orlando, FL

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1976	NHORL-001	Acute respiratory disease in recruits at Naval Training Center, Orlando, Florida
Unknown	NHORL-002	Smoking and lung cancer

Naval Hospital, Philadelphia, PA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	NHPHIL-013	Evaluation of cardiorespiratory effects of perhexiline in patients with angina pectoris
1975	NHPHIL-017	Behavior of Gaviscon in gastric fundus in erect and supine position
1975	NHPHIL-018	Study of gastric ulcers
1976	NHPHIL-020	Comparison of four methods of bowel preparation for colonoscopy
1976	NHPHIL-021	Efficacy of sucralfate in the treatment of gastric ulcers

450 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital, Philadelphia, PA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1976	NHPHIL-019	Phase I-II study using Adriamycin and cis-diamino-dichloro-platinum in advanced solid tumors
1977	NHPHIL-026	Comparison study of ultrasound and oral cholecystography in detecting gallstones
1977	NHPHIL-023	Tamoxifen with and without sequential chemotherapy for recurrent metastatic breast cancer in patients with positive estrogen receptors
1977	NHPHIL-024	Monoamine oxidase: Clinical use as a indicator of incipient hepatic fibrosis
1977	NHPHIL-025	Study of the effect of jogging on cardiorespiratory fitness of alcoholics in the NRMCA Alcohol Rehab Unit
1981	NHPHIL-022	Effect of combination oral contraceptives on hepatic cyclic adenosine monophosphate

Naval Hospital, Portsmouth, VA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	NHPTS-013	Immunologic evaluation and therapy of patients with carcinoma of the lung
1975	NHPTS-012	Protocol for the use of Adriamycin in certain metastatic malignant tumors
1975	NHPTS-011	Protocol for the treatment of acute myelocytic leukemia and related disorders. Number PWH001
1975	NHPTS-010	Closed internal fixation of fractures using the image intensifier
1975	NHPTS-009	Participation in acute leukemia group B (ALGB)
1975	NHPTS-002	Closed internal fixation of fractures using image intensifier control
1976	NHPTS-70	Treatment of chronic osteomyelitis with hyperbaric oxygenation
1976	NHPTS-015	Evaluation of freeze-dried bone in the treatment of periodontal osseous defects
1976	NHPTS-014	Clinical use of a hypothalamic releasing hormone: Gonadotropin-releasing hormone
1977	NHPTS-021	Minoxidil as an antihypertensive in patients refractory to available medications

NAVY 1975-1994 (CONTINUED)

Naval Hospital, Portsmouth, VA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1977	NHPTS-017	Study of gastric ulcers, NHPTS-17
1977	NHPTS-018	Use of Ca(OH) ₂ to prevent, arrest and/or reverse the external and/or resorption of teeth following their luxation or avulsion
1977	NHPTS-019	Platinum-Adriamycin therapy
1977	NHPTS-71	Chemoluminothorapy of carcinoma of lung using high dose methotrexate and BCG
1977	NHPTS-016	Classification and treatment of fractures of the base of the fifth metacarpal
1978	NHPTS-022	Immunologic evaluation and phase I immunotherapy trial in patients with carcinoma
1979	NHPTS-73	Cardiovascular dynamics of toxemia of pregnancy. Effects of magnesium sulfate therapy and epidural anesthesia
1979	NHPTS-74	Urinary tract evaluation of DES exposed progeny
1979	NHPTS-023	Extracranial cerebrovascular reconstruction-cerebral blood flow and neuro-psychological function
1981	NHPTS-031	Surgical pathologic study of women with invasive carcinoma of the cervix and randomly assigned radiation therapy vs. no further therapy in selected patients, phase III, GOG 49
1981	NHPTS-024	An adjuvant clinical trial to compare cytoxan, methotrexate, 5-FU (CMF) to CMF, prednisone (CMFP) with or without tamoxifen in premenopausal women with stage II breast cancer, ECOG EST 5177, phase III
1982	NHPTS-75	Use of electrospondinal instrumentation in idiopathic scoliosis
1982	NHPTS-76	Computerized axial tomography versus complex motion tomography as predictor of surgical finding to middle ear and mastoid cholesteotoma
1983	NHPTS-025	Evaluation of adjuvant vincristine, dactinomycin, and cyclophosphamide therapy in malignant germ cell tumors of the ovary after resection of all gross tumor, GOG 44
1983	NHPTS-032	Study of Adriamycin as postoperative therapy of ovarian carcinomas, GOG 50
1984	NHPTS-36	Treatment of previously untreated acute lymphoblastic leukemia for pediatric patients with unfavorable prognostic features, CCSG-193

452 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital, Portsmouth, VA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1986	NMCSD-125	Utility of endoscopy for x-ray negative dysphagia: A prospective analysis
1987	NHPTS-97	Phase II trial of hexamethylmelamine (MSC 13875) in patients with advanced or recurrent endometrial carcinoma
1987	NHPTS-58	Phase II evaluation of preoperative chemoradiation for advanced vulvar cancer, GOG 101
1987	NHPTS-52	Phase III trial of high vs. intermediate dose medroxyprogesterone acetate (MPA) in patients with advanced or recurrent endometrial carcinoma with unknown estrogen and progesterone levels, GOG 81E
1987	NHPTS-54	Phase I-II trial of medroxyprogesterone acetate (MPA) in patients with advanced or recurrent endometrial carcinoma negative for estrogen and progesterone receptors, GOG 81C
1987	NHPTS-53	Randomized clinical trial for treatment of women with selected stage Ic and II (a,b,c) and selected stage IaI, IbI, and IbII ovarian cancer, GOG 95
1987	NHPTS-86	Treatment of selected patients with stage Ib carcinoma of the cervix, GOG 92
1988	NHPTS-57	Phase II trial of gallium nitrate in patients with advanced squamous cell carcinoma of cervix, GOG 76F
1988	NHPTS-89	Thyroid dysfunction following therapy for the head and neck
1988	NHPTS-61	Lateral tomograms of scaphoid
1988	NHPTS-60	Diagnosis of sarcoidosis: Correlation of gallium-67 scanning, minor salivary biopsy, parotid gland biopsy, and transbronchial lung biopsy
1988	NHPTS-59	Effect of radiation therapy on serum angiotensin converting enzyme levels in patients with bronchogenic carcinoma
1988	NHPTS-62	Utility of endoscopy for x-ray negative dysphagia: Prospective analysis
1990	NHPTS-92	Effect of race in responsiveness to atrial natriuretic peptide
1990	NHPTS-81	C-reactive levels in asthma
1990	NHPTS-63	Spontaneous pneumothorax: Treatment using standard tube thoracostomy vs. Cook catheter with a Ueimlich valve

NAVY 1975-1994 (CONTINUED)

Naval Hospital, Portsmouth, VA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1990	NHPTS-90	Effect of the addition of electrical stimulation on the examination of lumbar fusion rates in patients
1991	NHPTS-66	Phase III randomized study of surgery vs. surgery plus adjunctive radiation therapy in intermediate risk endometrial adenocarcinoma, GOG 99
1991	NHPTS-65	Phase I evaluation of multiple daily fraction radiation and hydroxyurea in patients with stage IIb, III, and IVa carcinoma of cervix and negative para-aortic nodes, GOG 8801
1991	NHPTS-85	High resolution CT in evaluation of hemoptysis
1991	NHPTS-64	Phase I evaluation of multiple daily fraction radiation and 5-fluorouracil plus cisplatin in stage IIb, III, and IVa carcinoma of cervix with negative para-aortic nodes, GOG 8901
1992	NHPTS-68	Extended field radiation therapy with concomitant 5-FU infusion and cisplatin chemotherapy in patients with cervical carcinoma metastatic para-aortic lymph nodes, GOG 125
1992	NHPTS-69	Randomized comparison of hydroxyurea vs. hydroxyurea 5-FU infusion and bolus cisplatin vs. weekly cisplatin adjunct to radiation therapy in patients with stages IIb, III, IVa carcinoma of cervix and negative para-aortic nodes, GOG 120
1993	NHPTS-88	Adjuvant ifosfamide (NSC 109724) and mesna..., GOG 117

Naval Hospital/Medical Center, San Diego, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	NMCSD-017	Angiographic analysis of left ventricular mechanics in young patients with atypical chest pain and ischemic disease
1975	NMCSD-019	Abnormalities involving alternative pathway in urticaria or angioedema
1975	NMCSD-251	Postresection irradiation for primary lung cancer
1975	NMCSD-250	Afterloading interstitial implant in the treatment of oral cavity and oropharyngeal cancers (1977)
1975	NMCSD-267	Thyroid uptake of I-131: Further comparisons of capsules and liquid preparations

454 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1976	NMCSD-026	Effect of hyperthyroidism on serum gastrin and gastric acid production before and after treatment
1976	NMCSD-025	Distribution of ventilation/perfusion ratios in acute and chronic cardiopulmonary disease
1976	NMCSD-023	Bone and gallium scanning in evaluation of disseminated coccidiomycosis
1976	NMCSD-020	Clinical trial to compare combination chemotherapy with and without <i>C. parvum</i> in management of patients with surgically curable breast cancer who have one or more axillary nodes
1976	NMCSD-022	Use of 99m Tc-pyrophosphate bone scanning in early detection of stress fractures
1976	NMCSD-021	Detection of pericardial effusion by echocardiography in hypothyroid patients
1976	NMCSD-276	Thyroid uptake of I-131: Further comparisons of capsules and liquid preparations
1977	NMCSD-246	Current status and recent advances in the radiotherapy of lung cancer
1977	NMCSD-248	Persistent carcinoma of the oropharynx and oral cavity retreated by afterloading interstitial 192 Ir implant
1977	NMCSD-268	Functional evaluation of a hepatic scintigraphic defect using ultrasound and a fatty meal
1977	NMCSD-269	Bone scanning in the evaluation of exercise related stress injuries
1977	NMCSD-027	Vasodilated excretory urography - a diagnostic approach to renovascular hypertension
1977	NMCSD-028	Contrast media reactions - role of histamine, complement, and dilutional skin tests
1977	NMCSD-030	Combination chemotherapy of disseminated testicular carcinoma with cis-diamino-dichloro-platinum with diuresis, bleomycin
1977	NMCSD-029	Pilot study for treatment of previously untreated brain tumor in children
1978	NMCSD-247	Iridium-192 afterload implant in the retreatment of head and neck cancers
1978	NMCSD-034	Efficacy of corticosteroid in treatment of acute asthma

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1978	NMCSD-036	Adjuvant immunotherapy in stage I non-oat cell lung carcinoma
1978	NMCSD-245	Primary treatment of carcinoma of the lower rectum and anal canal by a combination of external irradiation and interstitial implant
1978	NMCSD-033	Comparison of three iodinated contrast media for excretory urography
1978	NMCSD-032	Clinical trial to evaluate postoperative immunotherapy and postoperative systemic chemotherapy in the management of resectable colon cancer, NSABP C-01
1978	NMCSD-031	Clinical trial to evaluate postoperative radiation and postoperative systemic chemotherapy in management of resectable rectal carcinoma, NSABP R-01
1978	NMCSD-035	Usefulness of computerized axial tomography in evaluation of pulmonary metastases
1979	NMCSD-263	Functional asplenia after Thorotrast
1979	NMCSD-244	Uterine cervical cancer: Treatment with megavoltage radiation results and afterloading intracavity techniques
1979	NMCSD-241	Nuclear angiocardiogram to demonstrate right atrial myxoma
1979	NMCSD-240	Localization of Ga-67 citrate in plasma cell
1979	NMCSD-257	Splenic artifact caused by barium in the colon
1979	NMCSD-038	Treatment of lower respiratory tract infection with ceforanide vs. cefazolin
1979	NMCSD-260	Evaluation of abdominal mass in a child (letter)
1979	NMCSD-039	Evaluation of a new cephalosporin, HR-756, in treatment of infections caused by susceptible bacteria
1979	NMCSD-037	Bone scanning in evaluation of stress fractures
1979	NMCSD-082	A-COP plus for non-Hodgkin's lymphoma in children
1980	NMCSD-239	Focal increased lung perfusion and intrapulmonary veno-arterial shunting in broncho-alveolar cell carcinoma
1980	NMCSD-243	Scintiscan detection of splenic arteriovenous fistulae

456 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1980	NMCSD-046	Ventilatory function after flail chest injury
1980	NMCSD-041	Evaluation of ketoconazole in treatment of systemic mycoses
1980	NMCSD-042	Controlled study on use of dopamine in neonatal asphyxia
1980	NMCSD-047	Combination chemotherapy of diffuse malignant pleural mesothelioma with either Adriamycin and Cytoxan or Cytoxan, Oncovin, methotrexate, and 5-fluorouracil
1980	NMCSD-256	Value of total body scan in a child with osteomyelitis
1980	NMCSD-264	Gallium-67 uptake in a benign thymic cyst
1980	NMCSD-043	Evaluation of profile changes following vestibuloplasty techniques
1980	NMCSD-044	National study of contrast media reactions
1980	NMCSD-048	Radionuclide biliary imaging utilizing 99m Tc-PIPIDA
1980	NMCSD-045	Quantitative assessment of facial soft tissue response following use of methylprednisolone after singular orthognathic surgical procedures
1980	NMCSD-049	Ventilation changes resulting from drainage and pleurodesis for malignant pleural effusion
1980	NMCSD-050	Terminal deoxynucleotidyl transferase (TdT) immunofluorescence of bone marrow smears
1980	NMCSD-040	Phase III clinical investigation of indium DTPA for cisternography
1981	NMCSD-063	Combination chemotherapy of multiple myeloma, CALGB 7761
1981	NMCSD-054	Protocol to compare Alkeran (L-PAM) and 5-fluorouracil (5-FU) + tamoxifen with/without Adriamycin in the management of patients with primary breast cancer and positive axillary nodes whose tumors are positive for estrogen receptor, NSABP B-12
1981	NMCSD-061	Establishment of radioimmunoassay for measuring human immunoglobulin
1981	NMCSD-053	Protocol to compare Alkeran (L-PAM) + 5-fluorouracil (5-FU) with and without Adriamycin in the management of patients with primary breast cancer and positive axillary nodes whose tumors are negative for estrogen receptors, NSABP B-11

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1981	NMCSD-060	Serial angiographic assessment of effect of risk factor modification in young active duty Navy men
1981	NMCSD-059	Comparative study of cefadroxil vs. cephalixin in treatment of bacterial pneumonia in ambulatory patients
1981	NMCSD-058	Combination chemotherapy, whole-body radiotherapy, and non-cross resistant chemotherapy for small cell carcinoma of the lung, extensive disease
1981	NMCSD-057	Double-blind controlled study comparing indomethacin and placebo in prevention of radiation esophagitis
1981	NMCSD-056	Radionuclide biliary imaging utilizing 99m-Tc-P-butyl-IDA
1981	NMCSD-055	Randomized controlled trial of indomethacin, PGI2, heparin in acute phase of cerebral ischemia
1981	NMCSD-052	A protocol to compare segmental mastectomy and axillary dissection with and without radiation of the breast and total mastectomy and axillary dissection
1981	NMCSD-064	Protocol for clinical evaluation of percutaneous coronary angioplasty
1981	NMCSD-062	Comparative effectiveness of combination chemotherapy alone or with radiation therapy to involved field or extended field, in poor risk patients with stage I and II Hodgkin's disease
1981	NMCSD-051	Surgical adjuvant chemotherapy of stage II breast cancer: Two CMFVP regimens with or without subsequent Adriamycin combination
1981	NMCSD-255	Gallium-67 citrate imaging of pyomyositis
1981	NMCSD-272	Preoperative whole pelvic external irradiation in stage I endometrial cancer
1982	NMCSD-242	Accumulation of MDP in hepatic metastases
1982	NMCSD-065	Use of VP16-213 in combination with cisplatin for treatment of recurrent testicular cancer in a single patient
1982	NMCSD-258	Hot spot on perfusion lung scan produced by bronchiolo-aveolar cell carcinoma
1982	NMCSD-067	Chemotherapy of advanced pancreatic cancer - a comparative phase II study
1982	NMCSD-072	Comparative study of high dose ara-C alone or given sequentially with L-asparaginase for remission induction in patients with acute myelogenous leukemia after failure of initial induction or in relapse

458 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1982	NMCSD-068	Study of effectiveness of intensification with two courses of cytosine arabinoside and daunorubicin following remission induction with acute lymphocytic leukemia
1982	NMCSD-069	Randomized study comparing combination of hormonal therapy and chemotherapy with chemotherapy alone for treatment of advanced breast cancer in women
1982	NMCSD-070	Surgical adjuvant chemotherapy of stage II breast cancer; two CMFVP regimens with or without subsequent Adriamycin combination
1982	NMCSD-081	Intergroup rhabdomyosarcoma (RMS) study II (IRS 2)
1982	NMCSD-278	Nonoperative management of delayed splenic rupture in an adult
1982	NMCSD-073	Vinblastine, DTIC and cis-platinum (DDP) in treatment of advanced or recurrent metastatic malignant melanoma
1982	NMCSD-066	Emergency use of investigational drug VM-26 monooctanoin in case of a single patient
1982	NMCSD-079	Evaluation of light scanning as a new modality for screening women for breast cancer
1982	NMCSD-083	Intermittent high dose cytarabine for treatment of colorectal adenocarcinoma: A phase II study
1982	NMCSD-084	Stress fracture as the etiology of acute chondromalacia, patella (CMP)
1982	NMCSD-078	Continuous infusion vinblastine with bleomycin and cisplatin for treatment of cancers of upper digestive tract and lung
1982	NMCSD-071	Localized small cell carcinoma of lung - a phase II study of simultaneous chemotherapy and radiotherapy vs. sequential therapy vs. chemotherapy alone
1982	NMCSD-074	Therapy of chronic myelogenous leukemia in blast crisis with 5-azacytidine plus VP-16-213
1982	NMCSD-279	Non-cross resistant chemotherapy and consolidation radiotherapy for small cell carcinoma of the lung
1982	NMCSD-077	Combination chemotherapy with mastectomy or radiotherapy for stage III breast carcinomas

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1982	NMCSD-075	Clinical trial to assess sequential methotrexate + 5-fluorouracil in patients with primary breast cancer and negative axillary nodes whose tumors are negative for estrogen receptors, NSABP B-13
1982	NMCSD-076	Clinical trial to assess tamoxifen in patients with primary breast cancer and negative axillary nodes whose tumors are positive for estrogen receptors, NSABP B-14
1983	NMCSD-259	Abnormal perfusion scan due to intrathoracic stomach and colon
1983	NMCSD-274	Distribution and natural history of stress fractures in U.S. Marine recruits
1983	NMCSD-095	Indium-111 oxide labeled granulocytes for detection of inflammatory process in humans
1983	NMCSD-094	Nonalcoholic liver disease in alcoholics
1983	NMCSD-093	Phase I study of indium-111 labeled murine monoclonal antibody for external photoscanning of melanoma and other tumors
1983	NMCSD-096	Use of isotretinoin in prevention of basal cell carcinoma
1983	NMCSD-091	Effect of verapamil on patients with irritable bowel syndrome (IBS) who have diarrhea with or without abdominal pain
1983	NMCSD-090	Randomized phase II trial of cytosine arabinoside (ara-C) and platinum (CDDP) vs. vinblastine (VLG) and platinum (CDDP) in advanced non-small cell lung carcinoma
1983	NMCSD-088	Therapy of CML in blast crisis with 5-azacytidine plus VP-16-213
1983	NMCSD-087	Emergency use of cis-platinum (DDP), vindesine (DVA), and bleomycin in treatment of esophageal carcinoma
1983	NMCSD-086	Treatment of advanced Hodgkin's disease: A randomized phase III trial comparing MOPP vs. ABVD vs. MOPP alternating with ABVD, CALGB 8251
1983	NMCSD-095	Indium-111 oxide labeled granulocytes for detection of inflammatory process in humans
1983	NMCSD-085	Comparative study of two remission induction regimens of ara-C for acute myelogenous leukemia: A phase III study, CALGB 8321

460 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1983	NMCSD-092	Computed tomography and peritoneal lavage in determining severity of visceral injury after blunt abdominal trauma
1983	NMCSD-089	Combination chemotherapy for metastatic recurrent cancer of breast. A randomized phase III trial comparing CAFVATH vs. VATH alternating with CMFVP
1984	NMCSD-105	Cytosine arabinoside and cisplatin for advanced stage breast cancer
1984	NMCSD-104	Mitomycin-C and cisplatin vs. Adriamycin and cisplatin for malignant mesothelioma, phase II
1984	NMCSD-103	Regional stage III NSCLC chemotherapy and radiation therapy vs. radiation therapy alone
1984	NMCSD-101	Approval of final case report on emergency use of investigational drugs methyl-GAG and ifosphamide
1984	NMCSD-100	Emergency drug use of investigational drug AZQ ICO (name redacted)
1984	NMCSD-106	Cold cardioplegia - effects on phrenic nerve conduction, diaphragm motion, and lung volumes
1984	NMCSD-102	Carboplatin (CBDCA) vs. iproplatin (CHIP) in advanced non-small cancer lung carcinoma, phase II
1984	NMCSD-107	Diagnostic utility of bone scans in sarcoidosis and correlation of bone involvement with disease activity
1984	NMCSD-282	Residual tumor following radiotherapy for locally advanced carcinomas of the uterine cervix. Prognostic significance
1984	NMCSD-097	Protocol for evaluation of radical mastectomy and total mastectomy with and without radiation in the primary treatment of cancer of the female breast, NSABP B-04
1984	NMCSD-273	Should single phase radionuclide bone imaging be used in suspected osteomyelitis?
1984	NMCSD-281	Anxiety and cancer treatment: Response to stressful radiotherapy
1984	NMCSD-283	Radioimmunodetection of melanoma utilizing In-111 96.5 monoclonal antibody: A preliminary report (1985)

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1984	NMCSD-098	Clinical trial to compare L-PAM with L-PAM and 5-FU in management of primary breast cancer in patients who have one or more positive nodes
1984	NMCSD-099	Clinical trial to compare L-PAM and 5-FU vs. L-PAM and 5-FU and methotrexate in management of patients with primary breast cancer who have one or more positive axillary nodes, NSABP B-08
1984	NMCSD-280	Questionable role of computed tomography in preoperative staging of esophageal cancer
1985	NMCSD-117	Treatment of calcinosis circumscripta with probenecid - pilot study
1985	NMCSD-118	One time use of an investigational drug, absolute alcohol, on a single patient in case of (name redacted)
1985	NMCSD-116	Comparison of four methods of measuring extension of lumbar spine
1985	NMCSD-115	Non-emergency use of an investigational procedure in case of (name redacted)
1985	NMCSD-114	Forwarding HSETC information re: Emergency use of VM-26 in case of (name redacted)
1985	NMCSD-109	Three arm clinical trial comparing short intensive Adriamycin-cyclophosphamide with or without interval reinduction chemotherapy (CMF) to conventional chemotherapy (CMF) in positive node patients who are ages 49 or younger, six months, NSABP B-15
1985	NMCSD-110	Three arm clinical trial comparing tamoxifen alone with short intensive Adriamycin-cyclophosphamide + tamoxifen in node positive patients with positive progesterone assays who are aged 50 to 59 or greater than 59 regardless of PR status, NSABP B-16
1985	NMCSD-112	Approval of the final report on emergency use of investigational drug cyanocrylate
1985	NMCSD-111	National intergroup protocol for intermediate thickness melanomas 1.0 to 4.0 mm
1985	NMCSD-108	Adjuvant CDF for pathologic stage II breast cancer: Randomization among intensive CDF for four months vs. standard dose CDR for six months
1985	NMCSD-113	One time emergency use of investigational agent cisplatin/thiosulfatein case of (name redacted)

462 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1985	NMCSD-254	Influence of field size, treatment of modality, commissure involvement, and histology in the treatment of early vocal cord cancer with irradiation
1985	NMCSD-119	Fever and bacteremia following bronchoscopy: Prospective study to determine frequency, source of bacteria, and implications for endocarditis prophylaxis
1986	NMCSD-262	Cytomegalovirus infection, ascending myelitis, and pulmonary embolus (letter)
1986	NMCSD-127	Trimetrexate (NSC 352122) for non-Hodgkin's lymphoma, phase II, CALGB 8651
1986	NMCSD-126	Management strategies on risk after acute myocardial infarction
1986	NMCSD-125	Utility of endoscopy for x-ray negative dysphagia: A prospective analysis
1986	NMCSD-123	Echinomycin for advanced breast cancer: A phase II study
1986	NMCSD-235	T-cell 3 pilot study: POG 8691
1986	NMCSD-238	Phase III comparative study of post-remission intensive ara-C in patients with acute non-lymphocytic leukemia in first remission, CALGB 8525
1986	NMCSD-234	Analysis of proto-oncogene expression in acute nonlymphocytic leukemia, CALGB 8765
1986	NMCSD-236	Evaluation of treatment regimens in acute lymphoid leukemia of childhood: POG 8602
1986	NMCSD-024	NSABP 4 (this is the Navy's substitute for the absence of a title)
1986	NMCSD-124	Combination chemotherapy for remission induction and maintenance for recurrent CLL occurring six months or greater after elective cessation of therapy-Hodgkin's lymphoma and children with occult testicular LL after 3 years continuous complete remission
1986	NMCSD-122	Phase III trial of intensive treatment for adult acute lymphocytic leukemia: A comparison of combination chemotherapy plus alternating mitoxantrone and daunorubicin vs. combination chemotherapy plus daunorubicin
1986	NMCSD-120	Investigation agent status report (ifosphamide, VP-16)
1986	NMCSD-121	Clinical trial to evaluate natural history and treatment of patients with non-invasive intraductal adenocarcinoma, NSABP B-17

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1986	NMCSD-271	Technique for multiplanar reformation and three dimensional analysis of computed tomographic data: Application to adult hip disease
1987	NMCSD-140	Dose range study of recombinant gamma interferon in treatment of NSCLC assessing disease response and serial measurements of immunomodulatory effects, phase II
1987	NMCSD-139	Randomized comparison of m-BACOD and CHOP combination chemotherapy in advanced stage diffuse large cell (histiocytic) and diffuse mixed non-Hodgkin's lymphoma
1987	NMCSD-141	Recombinant beta-interferon in advanced NSCLC: A phase II study
1987	NMCSD-135	Epidemiologic study of the etiologic agents of pneumonia among recruits at Recruit Training Center, San Diego and the utility of rapid diagnosis
1987	NMCSD-138	Carboplatin for malignant mesothelioma, phase II
1987	NMCSD-137	5-Axacytidine to induce differentiation in myelodysplastic syndromes, phase I-II study
1987	NMCSD-136	Pulmonary function test in normal Filipino males
1987	NMCSD-142	Comprehensive therapy to Ewing's sarcoma: Tailored vs standard radiation therapy
1987	NMCSD-134	Dose response trial of megestrol acetate in advanced breast cancer, phase III study, CALGB 8741
1987	NMCSD-237	Etoposide, vinblastine, doxorubican (EVA) as the primary treatment of advanced Hodgkin's disease in relapse from MOPP or MOPP variants, phase II, CALGB 8751
1987	NMCSD-261	Polyorchidism: Evaluation by MR
1987	NMCSD-128	Combination chemotherapy with intensive ACE/PCE and radiation therapy to primary tumor and prophylactic whole-brain radiation therapy with or without warfarin in limited small cell carcinoma of lung, phase III, CALGB 8534
1987	NMCSD-129	Epidemiology of acute leukemias in adults with special reference to cytogenetically determined subgroups, CALGB 8661
1987	NMCSD-130	Combination chemotherapy for advanced Hodgkin's disease, CALGB 8695

464 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1987	NMCSD-131	Cyclophosphamide vs. cyclophosphamide plus alpha-2 interferon in treatment of follicular, low grade lymphomas, phase III, CALGB 8691
1987	NMCSD-132	Master protocol to study single agent induction chemotherapy vs. standard chemotherapy for stage IV breast carcinoma, phase III, CALGB 8642
1987	NMCSD-133	Recombinant interleukin-2 and b-interferon for relapsed or refractory lymphoma - limited access phase II study, CALGB 8653
1988	NMCSD-166	Effects of terfenadine alone and in combination with ipratropium bromide on pulmonary, cardiovascular and cognitive function in military personnel with mild or moderate asthma
1988	NMCSD-145	Clinical trial to compare adjuvant leucovorin and 5-FU (LU+5-FU) with adjuvant meCCNU, vincristine and 5-FU (MOF) in patients with Dukes' B and C colon cancer, NSABP C-03
1988	NMCSD-149	Management of stress fractures with a pneumatic leg brace
1988	NMCSD-152	PACE and gamma recombinant beta interferon in advanced non-small cell lung cancer, phase II study
1988	NMCSD-151	Treatment of advanced Hodgkin's disease with model C followed by MVPP: Limited access pilot study
1988	NMCSD-150	Utility of urinalysis in screening for occult renal injury in patients with minor trauma
1988	NMCSD-162	Studies of thrombocytopoiesis in patients with myeloproliferative disorders
1988	NMCSD-155	Trial of cystectomy alone vs. neoadjuvant M-VAD + cystectomy in patients with locally advanced bladder cancer
1988	NMCSD-148	Treatment of children with newly diagnosed ANLL using high dose cytosine arabinoside and etoposide + 5-azacytidine for intensification of early therapy
1988	NMCSD-146	Incidence of deep venous thrombosis in major oral and maxillofacial surgical patients
1988	NMCSD-147	Ceftriaxone for outpatient management of suspected occult bacteremia: A multicenter cooperative study
1988	NMCSD-144	PAGE and gamma interferon for extensive small cell carcinoma of lung

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	NMCSD-143	Emergency one time use of rifampin on single patient
1988	NMCSD-277	Protective effects of corticosteroids in contrast material anaphylaxis
1989	NMCSD-160	Unified trial to compare short intensive preoperative systemic Adriamycin cyclophosphamide therapy with similar therapy administered in conventional postoperative fashion, NSABP B-18
1989	NMCSD-165	Protocol for prospective correlative clinical trial of the anti-cancer drug response assay-recurrent breast cancer treated with Adriamycin
1989	NMCSD-161	Clinical trial to determine the worth of tamoxifen and worth of breast radiation in management of patients with node-negative, clinically occult, invasive breast cancer treated by lumpectomy, NSABP B-21
1989	NMCSD-163	Fundarabine phosphate in patients with refractory CLL (National Cancer Institute protocol 189-0018), GRPC Protocol
1989	NMCSD-167	Treatment of acute infectious arthritis in adults: A prospective comparison of drainage methods
1989	NMCSD-164	Abrogation of drug resistance to cisplatin and 5-fluorouracil in patients with metastatic colorectal cancer through the use of diltiazem
1989	NMCSD-157	CHOPE/ABVD for advanced Hodgkin's disease: Limited access phase II study, CALGB 8856
1989	NMCSD-159	Clinical trial to compare sequential methotrexate 5-FU (M-F) with conventional CMF in primary cancer patients with negative nodes and estrogen negative tumors, NSABP B-19
1989	NMCSD-154	Pilot study of cyclophosphamide, doxorubicin, vincristine, prednisone, etoposide (CHOPE) in diffuse lymphomas, CALGB 8852
1989	NMCSD-233	Trial of shortened therapy without maintenance for treatment of localized non-Hodgkin's lymphoma: A phase III study, POG 8719
1989	NMCSD-156	Phase II trial of a 5-drug induction regimen with intensive consolidation in adult lymphoblastic leukemia, CALGB 8811
1989	NMCSD-284	Acute myelofibrosis: Correlation of radiographic, bone scan, and biopsy findings
1989	NHOAK-039	Clinical trial to determine the worth of chemotherapy and tamoxifen over tamoxifen alone in the management of patients with primary invasive breast cancer, negative axillary nodes, and estrogen receptor positive tumors, NSABP B-20

466 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1989	NMCSD-175	Utility of endoscopy for x-ray negative dysphagia: A prospective analysis
1990	NMCSD-265	Clinical manifestations of essential thrombocythemia in young adults
1990	NMCSD-232	Dose response trial of megestrol acetate for treatment of cachexia in patients with advanced lung or colorectal cancer, CALGB 8971
1990	NMCSD-177	Method of diagnosis of cartilaginous and ligamentous knee injuries associated with lower extremity fractures using physical exam, stress radiographs, and magnetic resonance imaging
1990	NMCSD-176	Single-dose cefotetan or cefoxitin vs. multiple dose cefoxitin as prophylaxis in patients undergoing appendectomy for non-perforated appendicitis
1990	NMCSD-168	Phase III comparison of adjuvant chemotherapy with or without endocrine therapy in high-risk, node-negative breast cancer patients, CALGB 8897
1990	NMCSD-169	Phase III chemotherapy of disseminated advanced stage testicular cancer with cisplatin plus etoposide with either bleomycin or ifosfamide, CALGB 8991
1990	NMCSD-170	Conservative treatment of adenocarcinoma of the distal rectum: Local resection plus adjuvant 5-FU/radiation therapy, phase II, CALGB 8984
1990	NMCSD-171	Phase II study of etoposide, vinblastine, doxorubicin (EVA) and subtotal nodal radiation in poor risk, early stage Hodgkin's disease, CALGB 9051
1990	NMCSD-172	PA clinical trial to evaluate the effect of dose intensification and increased cumulative dose postoperative Adriamycin-cyclophosphamide (AC) therapy on disease-free survival, NSABP B-22
1990	NMCSD-174	National Wilms' tumor study, POG 8650
1990	NMCSD-178	Use of magnetic resonance imaging to prospectively evaluate healing ability of scaphoid fractures
1990	NHOAK-040	Clinical trial to assess the relative efficacy of 5-FU + leucovorin, 5-FU + levamisole, and 5-FU, leucovorin + levamisole in patients with Dukes' B and C carcinoma of the colon, NSABP C-04
1991	NMCSD-195	Intergroup postoperative adjuvant interferon alpha-2b in resected high-risk primary and regionally metastatic melanoma, CALGB 9190
1991	NMCSD-188	Phase III comparison of combination chemotherapy (CAF) and chemo-hormonal therapy (CAF + Zolodex or CAF + tamoxifen) in premenopausal women with axillary node positive, receptor positive breast cancer, CALGB 9192

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1991	NMCSD-197	Bone structure analysis: Tibial bone mineral density (BMD) as predictive factor for tibial stress fractures in Navy SEAL trainees
1991	NMCSD-196	Trial of adjuvant chemoradiation after gastric resection for adenocarcinoma, CALGB 9195
1991	NMCSD-194	Phase III study of CAF-leucovorin vs. CAF for visceral crisis breast, CALGB 9140
1991	NMCSD-192	Clinical trial to assess relative efficacy of 5-FU + leucovorin with or without interferon alpha-2a in patients with Dukes' B and C carcinoma of the rectum, NSABP C-05
1991	NMCSD-191	Phase III trial of vinblastine/cisplatin/radiation therapy with or without carboplatin (NSC 241240) for inoperable stage IIIa and stage IIIb non-small cell lung cancer, CALGB 9130
1991	NMCSD-193	Subcutaneously administered recombinant human interleukin-2 and interferon alpha-2a for advanced breast cancer, CALGB 9041
1991	NMCSD-189	Phase III comparison of adjuvant chemoendocrine therapy with CAF and concurrent or delayed tamoxifen to tamoxifen alone in postmenopausal women with involved axillary lymph nodes and positive receptors, CALGB 9194
1991	NMCSD-179	Hyperfractionation radiotherapy and chemotherapy in limited stage small cell lung carcinoma, CALGB 8837
1991	NMCSD-187	Phase III comparison of cyclophosphamide, doxorubicin, and 5-FU CAF and chemotherapy (CAF + Zoladex + tamoxifen) in premenopausal women with axillary node positive, receptor positive breast cancer, CALGB 9193
1991	NMCSD-186	Intensive doxorubicin, surgery, CMF, and radiation therapy for stage III breast cancer - a study of efficacy with pharmacokinetic and antigenic monitoring, CALGB 8944
1991	NMCSD-185	Phase III intergroup trial: A prospective randomized comparison of combined modality therapy for squamous carcinoma of the esophagus: Chemotherapy plus surgery versus surgery alone for patients with local region disease
1991	NMCSD-184	Oral vs intravenous etoposide in combination with intravenous cisplatin in extensive small cell lung cancer: Phase III, CALGB 9033
1991	NMCSD-183	Efficacy of arthroscopic Bankart repair in acute first time anterior shoulder dislocation

468 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1991	NMCSD-182	Underlying metabolic bone disease in femoral neck stress fractures
1991	NMCSD-181	Up-front alternating 6-MP/MTX vs up-front alternating chemotherapy for active lymphocytic leukemia in children (ALinC 15), POG 9000/9005
1991	NMCSD-180	Dose intensification of methotrexate and 6-mercaptopurine for acute lymphocytic leukemia in children (ALinC 15), POG 9000/9005
1991	NMCSD-190	Phase III trial of G-CSF vs. placebo during remission induction and consolidation chemotherapy for adult acute lymphoblastic leukemia
1992	NMCSD-204	Color Doppler ultrasound finding in transitional cell carcinoma of bladder and kidney
1992	NMCSD-207	Comparison of “best local-regional therapy” with or without chemotherapy for stage IIIa (N2) non-small cell lung cancer: A randomized phase III study, CALGB 9134
1992	NMCSD-202	High intensity, brief duration chemotherapy for diffuse small noncleaved cell lymphoma and L-3 subtype of ALL: A pilot study of a multidrug regimen, CALGB 9251
1992	NMCSD-209	Randomized treatment of Jones' fractures
1992	NMCSD-208	Impact of stellate ganglion blockade on diaphragmatic function
1992	NMCSD-206	Phase III protocol for evaluation of 5-FU vs. 5-FU + PALA or 5-FU + oral leucovorin or 5-FU + intravenous leucovorin or 5-FU + rIFN alpha-2a in patients with advanced colorectal cancer, CALGB 9092
1992	NMCSD-205	Phase II study of high-dose cyclophosphamide plus recombinant granulocyte-colony stimulating factor in the treatment of follicular, low grade non-Hodgkin's lymphoma, CALGB 9150
1992	NMCSD-203	Edatrexate (20-ethyl-deaza-aminopterin) for malignant mesothelioma, phase II, CALGB 9131
1992	NMCSD-201	Clinical trial to evaluate effect dose intensification and increased cumulative dose of postoperative adriamycin-cyclophosphamide (AC) therapy with G-CSF on the disease-free survival and survival of patients with primary breast cancer and..., NSABP B-25
1992	NMCSD-200	Cryovalve heart valve allografts

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1992	NMCSD-199	Randomized study comparing standard vs. moderately high megestrol acetate in advanced prostate cancer, CALGB 9181
1992	NMCSD-198	Phase III randomized study of all-trans retinoic acid vs. cytosine arabinoside and daunorubicin as induction therapy for patients with previously untreated acute pomyelocytic leukemia, CALGB 9191
1993	NMCSD-229	Comparison of central venous pressures in superior and inferior vena cavas in children
1993	NMCSD-231	Hematopoietic growth factor vs. prophylactic antibiotic support in advanced non-small cell lung cancer: A prospective double-blind randomized control trial: A phase III study, CALGB 9232
1993	NMCSD-223	Randomized trial of subtotal nodal irradiation vs. doxorubicin plus vinblastine and subtotal nodal irradiation for stage I-IIa Hodgkin's disease, phase III, CALGB 9391
1993	NMCSD-224	Evaluation of biliary tree during laparoscopic cholecystectomy: Ultrasonography vs. intraoperative cholangiography
1993	NMCSD-225	Angiographic antioxidant atherosclerosis trial
1993	NMCSD-226	Phase II study of cyclophosphamide, prednisone, infusional doxorubicin, vincristine, and etoposide (I-CHOPE) in diffuse lymphomas relapsed/refractory to bolus therapy, CALGB 9255
1993	NMCSD-228	Phase II trial of lineage-specific consolidation therapy for adult acute lymphoblastic leukemia (ALL): Anti-B4-blocked ricin (NSC 639185) for B-lineage ALL and high dose cytarabine for non-B-lineage ALL, CALGB 9311
1993	NMCSD-230	Hip arthrodesis: Allergic fungal sinusitis, immunotherapy
1993	NMCSD-222	Treatment of advanced Hodgkin's disease: Randomized phase III trial comparing ABVD vs. MOPP/ABV hybrid, CALGB 8952
1993	NMCSD-217	Phase I study of topotecan and Taxol, CALGB 9362
1993	NMCSD-227	Etoposide, cisplatin, and radiation therapy with or without tamoxifen in limited stage small cell lung cancer: A randomized phase III study, CALGB 9235
1993	NMCSD-210	Recombinant urokinase (r-UK, Abbott-76120) versus operative intervention as initial therapy for acute lower-limb arterial occlusion

470 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Hospital/Medical Center, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1993	NMCSD-220	Dose intensive multi-modality therapy in limited small cell lung cancer, phase II study-limited access, CALGB 9236
1993	NMCSD-218	Phase III study of radiation therapy, levamisole and 5-fluorouracil vs. 5-fluorouracil and levamisole in selected patients with completely resected colon cancer, CALGB 9294
1993	NMCSD-215	Hip arthrodesis: New technique
1993	NMCSD-214	Phase II trial of induction chemotherapy followed by radiation therapy plus concurrent chemotherapy for poor prognosis, locally advanced, previously untreated carcinomas of the anal canal, CALGB 9281
1993	NMCSD-213	Phase II trial of 2-chlorodeoxyadenosine (2-CDA) in B-cell chronic lymphocytic leukemia patients who have previously failed therapy with fludarabine phosphate, CALGB 9211
1993	NMCSD-211	Treatment of AIDS associated non-Hodgkin's lymphoma with cyclophosphamide/ doxorubicin/vincristine/prednisone/etoposide (CHOPE), zidovudine, granulocyte-colony stimulating factor (G-CSF),and erythropoietin (rhEPO), CALGB 9155
1993	NMCSD-221	Feasibility study of adjuvant chemotherapy with dose-intensification cyclophosphamide/doxorubicin (CA) + G-CSF in patients with operable breast cancer and histologically involved axillary lymph nodes, CALGB 9141
1993	NMCSD-219	Topotecan for advanced breast cancer, phase II study, CALGB 9242
1993	NMCSD-216	Phase II study of Taxotere (NSC 628503) in previously treated non-Hodgkin's lymphoma: IWF grades A-H, CALGB 9256
1993	NMCSD-212	Phase II trial of 2-chlorodeoxyadenosine in advanced-stage, previously untreated low-grade lymphomas, CALGB 9153
Unknown	NMCSD-275	Echographic and radionuclide detection of hepatoma
Unknown	NMCSD-290	Groshong catheter: Initial experience and early results of imaging-guided placement
Unknown	NMCSD-289	Renal devitalization using 95 percent ethyl alcohol

NAVY 1975-1994 (CONTINUED)

Naval Medical Clinic, Annapolis, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	NMCLANNAP-02	Radiological evaluation of cervical spine of collegiate football players
1975	NMCLANNAP-10	Functional instability of ankle joint
1976	NMCLANNAP-11	Clinical study of intraocular lens implantation after cataract extractions, primary or secondary
Unknown	NMCLANNAP-04	Study to establish normal range of ankle mobility (talar tilt) during inversion stress

Naval Medical Research Institute, Bethesda, MD

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1978	NMRI-04	Tracer gas kinetic studies for decompression table design
1986	NMRI-03	Nitrogen gas exchange in the human knee

Naval Medical Research Institute, McMurdo Sound, Antarctica

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1983	NMRI-02	Decreased free fraction of thyroid hormones after prolonged Antarctic residence

Naval Medical Research Institute, Port Hueneme, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1983	NMRI-02	Decreased free fraction of thyroid hormones after prolonged Antarctic residence

Naval Medical Research Unit 3, Cairo, Egypt

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1978	NMRU3-09	Efficacy of medical treatment of schistosomol obstructive uropathy as determined by I-131 hippuran renography
1978	NMRU3-01	Calcification of Schistosoma haematobium eggs: Relation of radiologically demonstrable calcification to eggs in tissues and passage of eggs in urine

472 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Medical Research Unit 3, Cairo, Egypt (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1986	NMRU3-26	Schistosomal colonic polyposis: Clinical, radiological, and parasitological study
1986	NMRU3-05	Schistosomal colonic polyposis: Clinical, radiological, and parasitological study

Naval Regional Medical Center Portsmouth, VA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1984	NHPTS-36	Treatment of previously untreated acute lymphoblastic leukemia for pediatric patients with unfavorable prognostic features, CCSG-193

Naval Regional Medical Center, Oakland, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1977	NHOAK-008	Hepatic abnormalities of diabetes mellitus. Abnormalities of radionuclide scan in relation to diabetic control
1978	NHOAK-009	Xenon-127 gas for inhalation
1981	NHOAK-016	Phase I-II study of combination chemotherapy and sequential hemibody radiation therapy in the treatment of high tumor burden multiple myeloma, NCOG 9M91
1981	NHOAK-023	Use of quantitative computed tomography (QCT) in assessing bone mass changes in diabetic patients
1981	NHOAK-012	All sites, phase I & II protocol of heavy charged particle for locally advanced and or recurrent cancers of multiple sites and types, NCOG OR81
1981	NHOAK-010	Indium oxide indium-111 labeled cellular blood components
1981	NHOAK-011	Technetium-99m sulfur colloid of oral use
1982	NHOAK-036	Clinical trial to assess sequential methotrexate + 5-fluorouracil + leucovorin in patients with primary breast cancer and negative axillary nodes whose tumors are negative for estrogen receptors, NSABP B-13
1982	NHOAK-032	Clinical trial to evaluate postoperative immunotherapy and postoperative systemic chemotherapy in the management of resectable colon cancer, NSAP C-01

NAVY 1975-1994 (CONTINUED)

Naval Regional Medical Center, Oakland, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1982	NHOAK-035	Clinical trial to compare PFT with and without Adriamycin in the management of patients with primary breast cancer and positive axillary nodes whose tumors are positive for estrogen receptors, NSABP B-12
1982	NHOAK-034	Clinical trial to assess tamoxifen in patients with primary breast cancer and negative axillary nodes whose tumors are positive for estrogen receptors, NSABP B-14
1982	NHOAK-033	Clinical trial to compare PFT with and without Adriamycin in the management of patients with primary breast cancer and positive axillary nodes whose tumors are negative for estrogen receptors, NSABP B-11
1982	NHOAK-018	Treatment of adult lymphoblastic lymphoma, phase II study using intrathecal methotrexate with whole brain radiotherapy combined with systemic methotrexate, NCOG 13L-80-1
1982	NHOAK-015	Phase III study of radiotherapy plus hydroxyurea and BCNU vs. radiotherapy plus hydroxyurea and procarbazine, BCNU, vincristine (PCV) for the treatment of primary malignant brain tumors, NCOG 6G61
1983	NHOAK-022	Early determination of femoral head vascularity using technetium 99m sulfur colloid and quantitative technique
1984	NHOAK-020	Phase III trial of seven-drug versus three-drug chemotherapy regimens with or without cranial irradiation (PCI) for undifferentiated small cell anaplastic lung cancer, NCOG 20-83-1
1985	NHOAK-037	Three-arm clinical trial comparing tamoxifen alone with L-PAM, 5-FU, and tamoxifen or short intensive Adriamycin-cyclophosphamide and tamoxifen in positive node patients, NSABP B-16
1987	NHOAK-024	99m Tc-HMPAO labeled leukocytes and platelets: Basic and clinical studies
1989	NHOAK-028	Radionuclide imaging of chronic anterior cruciate ligament deficient knees
1989	NHOAK-025	Comparison of thallium scintigraphic images after transesophageal atrial pacing (TAP) and dipyridamole for detection of atherosclerotic coronary artery disease
1989	NHOAK-038	Unified trial to compare short intensive preoperative systemic Adriamycin-cyclophosphamide therapy with similar therapy administered in conventional postoperative fashion, NSABP B-18
1989	NHOAK-039	Clinical trial to determine the worth of chemotherapy and tamoxifen over tamoxifen alone in the management of patients with primary invasive breast cancer, negative axillary nodes, and estrogen receptor positive tumors, NSABP B-20

474 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

Naval Regional Medical Center, Oakland, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1990	NHOAK-040	Clinical trial to assess the relative efficacy of 5-FU + leucovorin, 5-FU + levamisole, and 5-FU, leucovorin + levamisole inpatients with Dukes' B and C carcinoma of the colon, NSABP C-04
1991	NHOAK-019	Phase II study of pelvic and abdominal radiotherapy vs. cisplatin, Adriamycin, and cyclophosphamide, NCOG 50-82-1
1991	NHOAK-029	Prospective comparison of air-contrast barium enema plus procto-sigmoidoscopy with colonoscopy in screening of asymptomatic persons with a history of colorectal cancer in first degree relatives
1991	NHOAK-030	Phase II trial of vinblastine/cisplatin/radiation therapy with or without carboplatin for inoperable stage IIIa and stage IIb non-small cell lung cancer, CALGB 9130
1991	NHOAK-042	Clinical trial comparing short, intensive AC + tamoxifen with conventional CMF + tamoxifen in node-negative breast cancer patients with ER-negative tumors, NSABP B-23
1991	NHOAK-041	Oral versus intravenous etoposide in combination with intravenous cisplatin in extensive small cell lung cancer, phase II, CALGB 9033
1992	NHOAK-027	Radiographic correlation of leg length inequality in patients with total hip arthroplasty (THA)
1993	NHOAK-031	Acromion morphology in the active duty population: Plain roentgenogram analysis
Unknown	NHOAK-014	Randomized phase III study of radiation therapy with or without chemotherapy for remission induced and multidrug chemotherapy program for remission consolidation and maintenance in inoperable squamous cell carcinoma, NCOG 7H61
Unknown	NHOAK-026	Evaluation of subcutaneous gallium citrate injection for malignant abdominal adenopathy

Naval Regional Medical Center, Orlando, FL

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1976	NMCLANNAP-11	Clinical study of intraocular lens implantation after cataract extractions, primary or secondary
1976	NHORL-001	Acute respiratory disease in recruits at Naval Training Center, Orlando, Florida

NAVY 1975-1994 (CONTINUED)

Naval Regional Medical Center, Yokosuka, Japan

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1976	NMCS-001	Clinical evaluation of Ga-76 scanning in diagnosis of anaplastic carcinoma and malignant lymphoma in thyroid gland

Scripps Clinic, San Diego, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1988	NMCS-162	Studies of thrombocytopoiesis in patients with myeloproliferative disorders

Submarine Medical Research Laboratory, New London, CT

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	SMRL-03	Aseptic bone necrosis among US Navy divers: Survey of 934 nonrandomly selected personnel

University of California School of Medicine, La Jolla, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	NMCS-267	Thyroid uptake of I-131: Further comparisons of capsules and liquid preparations
1988	NMCS-277	Protective effects of corticosteroids in contrast material anaphylaxis

University of California, Los Angeles, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1986	NHRC-01	Blood markers of connective tissue response to exercise intensity change

University of California, San Diego, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1975	NMCS-266	Lymphangiographic accuracy in the staging of testicular tumors
1981	NMCS-060	Serial angiographic assessment of effect of risk factor modification in young active duty Navy men

476 Appendix 1—Records Search

NAVY 1975-1994 (CONTINUED)

University of California, San Diego, CA (continued)

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1987	NMCSD-237	Etoposide, vinblastine, doxorubican (EVA) as the primary treatment of advanced Hodgkin's disease in relapse from MOPP or MOPP variants, phase II, CALGB 8751
1989	NMCSD-164	Abrogation of drug resistance to cisplatin and 5-fluorouracil in patients with metastatic colorectal cancer through the use of diltiazem

University of Southern California Medical Center, Los Angeles, CA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1977	NMCSD-248	Persistent carcinoma of the oropharynx and oral cavity retreated by afterloading interstitial 192 Ir implant
1978	NMCSD-247	Iridium-192 afterload implant in the retreatment of head and neck cancers

Virginia Mason Research Center, Seattle, WA

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
Unknown	NMRDC-01	Investigation of hematologic and pathologic response to decompression

Walter Reed Army Hospital/Medical Center, Washington, DC

<u>Start Date</u>	<u>Number</u>	<u>Title</u>
1991	NNMC-063	Combined therapy and restaging in the treatment of stages I and IIa Hodgkin's disease in pediatric patients—a pediatric oncology group phase III study