DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL INSTITUTES OF HEALTH
NATIONAL CENTER FOR RESEARCH RESOURCES

NATIONAL ADVISORY RESEARCH RESOURCES COUNCIL
MINUTES OF MEETING
MAY 15, 2003

The National Advisory Research Resources Council convened for its 124th session at 8:30 a.m. on Thursday, May 15, 2003 in Conference Room 10, Building 31 on the main campus of the National Institutes of Health (NIH), Bethesda, MD. Dr. Judith L. Vaitukaitis, Director, National Center for Research Resources (NCRR), presided as Chair. The meeting was open to the public until 2:00 p.m., at which time it was closed to the public for the review, discussion, and evaluation of grant applications as provided in Sections 552b(c)(4) and 552b(c)(6), Title 5, U.S. Code, and Section 10(d) of Public Law 92-463.

COUNCIL MEMBERS PRESENT

Dr. Robert J. Beall
Dr. Wah Chiu
Dr. Randall E. Dalton
Dr. Robert J. Desnick
Dr. Mark H. Ellisman
Dr. James G. Fox
Dr. Joan S. Hunt
Dr. Gwen A. Jacobs
Dr. Thomas G. McGuire
Dr. William R. Morton
Dr. Monte Westerfield
Dr. Machi F. Dilworth
Liaison Member, NSF
Dr. Roland F. Hirsch
Liaison Member, DOE

COUNCIL MEMBERS ABSENT

Dr. Stephen W. Barthold
Ms. Catherine D. Bertram
Dr. Catherine C. Fenselau
Dr. Eon Nigel Harris
Dr. John E. Maupin, Jr.
Dr. Diana S. Natalicio
Dr. Paul G. Ramsey
Colonel (Dr.) Peter Demitry
Ex Officio Member, DOD
Dr. William W. King
Ex Officio Member, VA

SPECIAL INVITED GUESTS FOR OPEN SESSION

Dr. John K. Critser, Director, Gilbreath-McLorn Center for Comparative Medicine, College of Veterinary Medicine, University of Missouri
Dr. Trisha Davis, Professor, Department of Biochemistry, University of Washington
Dr. Adrian Sandra Dobs, Professor of Medicine, Endocrinology and Metabolism, Johns Hopkins University School of Medicine
Dr. Della Hann, Acting Director, Office of Reports and Analysis/Office of Extramural Research, National Institutes of Health
Ms. Lora Kutkat, Health Science Policy Analyst, Office of Science Policy and Planning,

Office of the Director, National Institutes of Health
Ms. Theresa O'Lonergan, President, Research Subject Advocates, Society of Research Subject Advocates, Denver, CO
Dr. Michael Rout, Associate Professor, Laboratory of Cellular and Structural Biology, The Rockefeller University
Dr. Lana Skirboll, Associate Director, Office of Science Policy, Office of Director, National Institutes of Health

STAFF OF OTHER NIH COMPONENTS

Dr. Camilla Day, CSR/NIH
Dr. Margaret Snyder, OER/OD/NIH

OTHERS PRESENT

Ms. Vicki Contie, Equals Three Communications, Bethesda, MD
Ms. Joanne Hawana, *The Blue Sheet*, Chevy Chase, MD
Mr. Stephen Heinig, Senior Staff Associate, Division of Biomedical and Health Sciences Research, Association of American Medical Colleges, Washington, DC
Mr. Steven Stocker, Equals Three Communications, Bethesda, MD

OPEN SESSION

I. Call to Order: Dr. Judith Vaitukaitis, Director, NCRR

Dr. Vaitukaitis welcomed Council members and guests to the 124th meeting of the National Advisory Research Resources Council. She announced that the following Council members would not be present: Dr. Stephen Barthold, Ms. Catherine Bertram, Dr. Catherine Fenselau, Dr. Eon Nigel Harris, Dr. William King, Dr. John Maupin, Dr. Diana Natalicio, and Dr. Paul Ramsey. Also unable to attend was Colonel (Dr.) Peter Demitry, who has been appointed as the new DoD ex-officio member for Council, replacing Lt. Col. Alfred Graziano, who retired in May 2002. Four new members of the Council were introduced. They are: Dr. Robert Beall, President and Chief Executive Officer of the Cystic Fibrosis Foundation, Bethesda, MD; Dr. Wah Chiu, Alvin Romansky Professor of Biochemistry, Department of Biochemistry and Cell Biology, Baylor College of Medicine, Houston, TX; Dr. Joan Hunt, Professor, Department of Anatomy and Cell Biology, University of Kansas Medical Center, Kansas City, KS; and Dr. Thomas G. McGuire, Professor, Department of Health Care Policy, Harvard Medical School, Boston, MA.

II. Consideration of Minutes: Dr. Judith Vaitukaitis, Director, NCRR

The minutes of the Council meeting held on January 23, 2003, were approved as written.

III. Future Meeting Dates: Dr. Judith Vaitukaitis, Director, NCRR

The next Council meeting will be held on September 10-11, 2003, at the Crystal-Gateway Marriott in Crystal City, VA. The meeting will last two days, and it will be combined with the meeting to update NCRR's Strategic Plan.

IV. Personnel Update: Dr. Judith Vaitukaitis, Director, NCRR

NIH Personnel

On February 10, 2003, Dr. Elias Zerhouni, Director of NIH, announced the appointment of Dr. Raynard S. Kington as the new Deputy Director of NIH. Dr. Kington assumes the position held previously by Dr. Ruth L. Kirschstein, who now serves as a senior advisor to the NIH Director. Dr. Kington previously served as the Director of the NIH Office of Behavioral and Social Sciences Research. He was also the acting director of the National Institute on Alcohol Abuse and Alcoholism during the first ten months of last year. Dr. Kington joined NIH from the Centers for Disease Control and Prevention (CDC) as Director of the Division of Health and Examination Statistics in the CDC's National Center for Health Statistics.

On April 15, 2003, Dr. Nora D. Volko began her appointment as the new Director of the National Institute on Drug Abuse (NIDA). She replaces Dr. Glen Hanson, who had been serving as acting director since December 2001. Dr. Volko came to NIH from the Brookhaven National Laboratory, where she had served as the Associate Director for Life Sciences and Director of Nuclear Medicine, as well as Director of the NIDA/DOE Regional Neuroimaging Center. As a scientist, she has been supported by grants from NIDA and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the Department of Energy. She is a member of the Institute of Medicine in the National Academy of Sciences and was named Innovator of the Year in 2000 by U.S. News and World Report.

Dr. Zerhouni also appointed John T. Burklow as the Associate Director for Communication and Public Liaison for NIH within the Office of the Director. He joined the Office of Communication and Public Liaison (OCPL) as Deputy Director in October 1999 and has served as acting Associate Director for Communication since April 2002. Prior to joining OCPL, he served as Deputy Director of the National Cancer Institute's Office of Cancer Communications.

Dr. Zerhouni appointed Mr. Donald Poppke as Associate Director of the Office of Budget for NIH. He formerly served as the executive officer of the National Library of Medicine before coming to the Office of the Director as acting Associate Director of the Office of Budget in the spring of 2002. He first joined NIH in 1974 as a biologist for the National Institute of Dental Research. During his tenure, he has served in several management positions across NIH.

NCRR Personnel

Dr. Camille King, a Scientific Review Administrator in the Office of Review, resigned from Federal service in April 2003.

Dr. Eva Petrakova joined the NCRR staff as a Scientific Review Administrator in the Office of Review. Dr. Petrakova was previously employed by the Food and Drug Administration as a visiting scientist.

Dr. Marc Regas joined the NCRR staff as a Scientific Review Administrator in the Office of Review. Dr. Regas was previously employed by the Environmental Protection Agency as a research scientist.

Ms. Pat Wiggins, program advisor to the Office of Administrative Management, retired in April 2003–after 40 years of service at NIH. Ms. Wiggins had provided human resources support to NCRR since 1973.

V. Legislative and Budget Updates: Dr. Judith Vaitukaitis, Director, NCRR

Dr. Vaitukaitis reported that President Bush signed the Fiscal Year (FY) 2003 Appropriation on February 20, 2003. The Appropriation for NIH this fiscal year is $27.2 billion, a 15.9 percent increase over the previous fiscal year. NCRR's budget was increased by 15.6 percent to $1.139 billion.

This funding level includes an $81 million increase over the FY 2003 President's budget, revised to reflect the transfer of $25 million in bioengineering grants that were transferred to the National Institute of Biomedical Imaging and Bioengineering. This level also incorporates a $400,000 reduction for program evaluation, and a 0.65 percent–or $7 million–general reduction.

VI. NCRR's Strategic Plan for 2004-2008: Dr. Judith Vaitukaitis, Director, NCRR

Every five years, NCRR develops a Strategic Plan to anticipate the research resource needs of the NIH-supported biomedical community. To prepare the Strategic Plan for 2004-2008, NCRR is asking scientists around the country to identify emerging scientific trends and make recommendations concerning research resources and technologies that will be needed in the future. The information provided by researchers will then serve as a framework for discussions at the Council meeting to be held on September 10-11, 2003, which will serve as the planning forum.

NCRR anticipates having at least 80 invited guests, including Council members, for this purpose. Dr. Frank Prendergast and Dr. Robert Carey have agreed to co-chair the portion of the Council meeting devoted to updating the Strategic Plan. Dr. Prendergast is from the Mayo Clinic, and Dr. Carey is from the University of Virginia.

VII. Update on the Health Insurance Portability and Accountability Act: Ms. Lora Kutkat, Health Science Policy Analyst, Office of Science Policy, NIH and Dr. Della Hann, Acting Director, Office of Reports and Analysis/Office of Extramural Research, NIH

The Department of Health and Human Services (DHHS) issued the Standards for Privacy of Individually Identifiable Health Information (the Privacy Rule) under the Health Insurance Portability and Accountability Act (HIPAA) of 1996 to provide the first comprehensive Federal protection for the privacy of personal health information.

The Privacy Rule introduces new standards for protecting the privacy of individuals' identifiable health information held by a covered entity or its business associates. For covered entities, the Privacy Rule sets minimum standards for how Protected Health Information (PHI) may be used and disclosed and how individuals can have control of their health information, including for research purposes. For independent researchers who are not subject to the Privacy Rule, the Rule may affect access to such information.

Ms. Kutkat explained that the Privacy Rule was not intended to impede research. Rather, it provides ways to access vital information needed for research in a manner that protects the privacy of the research subject. The Privacy Rule describes methods to de-identify health information such that it is no longer PHI or governed by the Rule. If de-identified health information cannot be used for research, covered entities can obtain the individual's written permission for the research in an authorization document describing the research uses and disclosures of PHI and the rights of the research subject. When obtaining the authorization form is not practicable, an Institutional Review Board (IRB) or Privacy Board could waive or alter the authorization requirement. The Privacy Rule also provides alternatives to obtaining an authorization or a waiver or an alteration of this requirement, such as limited data sets or with representations provided for certain research activities. The Privacy Rule also contains a provision that "grandfathers" research that is ongoing before the compliance date (April 14, 2003) to facilitate compliance with the Rule.

Many researchers are accustomed to complying with Federal and State regulations that protect participants from research risks; some of these regulations even require, as applicable, a researcher to describe privacy and confidentiality protections in an informed consent. While the Privacy Rule may add to these privacy protections, researchers should be aware of the importance of protecting research subjects from foreseeable research risks, including risks to privacy. Knowing how and why the Privacy Rule protects the privacy of identifiable health information is an important step in understanding how covered entities implement the Rule's standards.

VIII. Update on the NIH Roadmap: Dr. Lana Skirboll, Associate Director, Office of Science Policy, Office of the Director, NIH

Last summer, Dr. Zerhouni set up a number of discussion groups with extramural scientists, as well as the NIH senior staff, to identify future directions for the NIH research enterprise. The outcome of the meetings is the "NIH Roadmap." Dr. Zerhouni believed that NIH needed to undertake this strategic process due to the acceleration in the pace of discoveries in the life sciences, the need for more rapid translational processes, and the urgent need for novel approaches. The Roadmap is divided into three major themes: the new pathways to discovery, research training of the future, and re-engineering of the clinical research enterprise.

In this discussion, Dr. Skirboll focused primarily on the third theme–the clinical research enterprise–and described three goals: 1) national clinical research networks that create data and information that can move rapidly into the community, yield data on outcomes and quality care, provide a sustained efficient infrastructure to allow rapid initiation of large clinical trials, and provide current information to patients, families, and advocacy groups; 2) a translational research infrastructure that facilitates the integrated, smooth, safe, and efficient transition from bench to bedside–and back; and 3) an integrated, multidisciplinary, diverse workforce that can meet current and future clinical research needs, and supports a fully articulated clinical research discipline.

Currently, 15 working groups, chaired by an Institute or Center Director, are devising matrices that address goals, methods for achieving the goals, and the funding needed to carry out the goals. These matrices will be presented at an upcoming retreat with Dr. Zerhouni and the Institute and Center Directors.

IX. Proteomics Approaches to Understanding Protein Complexes: Douglas M. Sheeley, Health Scientist Administrator, Division of Biomedical Technology, NCRR

Dr. Sheeley described proteomics as an emerging multidisciplinary field of study, directed at defining the functional organization of organisms, cells, and organelles at the molecular level. Despite significant advances, proteomics technology and methods are still largely inadequate for support of biomedical research. The Division of Biomedical Technology (DBT) at NCRR has a strong interest in promoting and supporting the development of these technologies and methods. Many existing DBT Research Resource Centers have worked at the forefront in both development of novel approaches and the solution of proteomics problems of significant biomedical relevance. While there is still considerable work to be done in building these capabilities, NCRR should look still further beyond primary identification of these protein interactions toward development of tools for full characterization of protein complexes.

X. Integrated Technologies Reveal the Functions of Protein Complexes in Yeast: Dr. Trisha Davis, Professor, Department of Biochemistry, University of Washington

Dr. Davis discussed some of the research being conducted by the NCRR-funded Yeast Resource Center–a consortium of five groups that collaborates with researchers from 26 states and 12 countries. The research presented was an effort to create new methods to

identify proteins. Investigators found that standard techniques were either highly informative but too slow, or very quick but lacking in detail. So, they developed a system that would deliver enough information to be useful and would have a faster turnaround time. The researchers started by looking for "open reading frames" (the primary tool for locating protein-coding exons) for which the corresponding proteins could not be identified by standard bioinformatic techniques. By using a combination of several techniques, it was possible to apply the appropriate techniques to each protein of interest to obtain data about the protein in an efficient manner.

The team also developed several new methods to overcome problems in protein purification and analyses. Ultimately they were able to identify previously unknown proteins, determine the location of proteins within cells, characterize associations with other proteins, and predict the structure and sequence of the target proteins. The work of the Yeast Resource Center demonstrates the benefits of researchers with diverse specialties collaborating to solve difficult problems in biomedical research.

XI. Nuclear Pore Complexes–The Hole Picture: Dr. Michael Rout, Associate Professor, Laboratory of Cellular and Structural Biology, The Rockefeller University

Dr. Rout described how nucleocytoplasmic transport occurs through the nuclear pore complex (NPC). NPCs are macromolecular structures embedded within the nuclear envelope. Composed of nucleoporins (nups), NPCs represent the stationary phase of traffic between the cytoplasm and the nucleus. The mobile phase consists of cargoes bearing signal sequences, and soluble transport factors. Dr. Rout's group studies NPCs in the model eukaryote Saccharomyces (yeast) in collaboration with Dr. Brian Chait's group in the NCRR-funded National Resource for Mass Spectrometric Analysis of Macromolecules, also at Rockefeller University.

By cataloguing the NPC components in yeast and plotting the position of these proteins in the NPC, the researchers were able to propose a mechanism for nuclear transport. They determined the protein interactions that maintain the structure of the NPC and mediate nucleocytoplasmic transport. To this end, they have been developing new techniques for the subcellular fractionation, immunopurification, and detailed characterization of Protein A tagged nup complexes. They use modeling algorithms on the resulting data to map the structure of the NPC at macromolecular resolution. By correlating such maps with in vivo kinetics, researchers would be able to follow the translocation of transport factors across the NPC at the molecular level. These approaches also show great promise as a novel method for studying large, flexible, or transient macromolecular complexes.

XII. Report from the Workshop of Structural Proteomics of Biological Complexes: Dr. Wah Chiu, Alvin Romansky Professor of Biochemistry, Baylor College of Medicine

The National Center for Macromolecular Imaging (NCMI) hosted an NCRR-sponsored Workshop on Structural Proteomics of Biological Complexes on April 7-8, 2003, at the Natcher Building of NIH. The participants included 25 leading scientists and 20 program

officers from various institutes within NIH, the National Science Foundation (NSF), and the Department of Energy (DOE). The goals of this workshop were to review and identify the research opportunities in studying complex multi-component assemblies and their biomedical relevance.

The format of the workshop included presentations from the scientists to address why it is timely to study large complexes, to identify appropriate model organisms, and to review the current state of technologies, including affinity purification, mass spectrometry, two-hybrid screening, systematic genetic analysis, x-ray crystallography, electron cryomicroscopy, light microscopy, and computational biology. In addition, the participants discussed desirable and achievable goals, the resources to expand this area of investigation, and the possible funding mechanisms for such an initiative. Resources critical to advancing this initiative include databases, instrumentation, supercomputers, skilled personnel, training, and collaborative projects. Possible funding mechanisms proposed by the workshop participants include planning grants, pilot studies, glue grants, program project grants, center grants, and various training approaches. The proteomics workshop participants' presentations are archived at http://ncmi.bcm.tmc.edu/ncmi/structural.

XIII. Update on the Research Subject Advocate (RSA) Program: Ms. Theresa O'Lonergan, RSA at the Pediatric GCRC at the University of Colorado in Denver and President of the Society of Research Subject Advocates

In early 2001, NCRR began funding the position of the Research Subject Advocate (RSA) at each of the General Clinical Research Centers (GCRCs). Ms. O'Lonergan provided a description of the position and an update on the program's progress. The RSA assists GCRC investigators, nurses, and staff in the safe and ethical conduct of GCRC studies and represents the interests of research participants on GCRCs. Most RSAs are physicians; however, some are nurses, pharmacists, or biomedical ethicists.

According to Ms. O'Lonergan, tasks performed by RSAs vary with the GCRC. One of the activities undertaken by the RSAs in their first year was to assist investigators in establishing and reviewing data and safety monitoring (DSM) plans for all studies being conducted on GCRCs. Many RSAs have redeveloped policies and procedures that enable investigators to incorporate appropriate DSM plans. A survey conducted recently by Ms. O'Lonergan demonstrates that RSAs are succeeding in their goal of helping clinical investigators to comply with data and safety monitoring requirements. According to the survey, 9 out of 10 RSAs have assisted in the development of DSM plans at their institutions, and since the RSA program began, the number of such plans has increased threefold. Also, since the program began, the number of DSM boards has similarly increased by three. These monitoring boards are required for any protocol that places participants at significant risk. In many cases, RSAs have been instrumental in establishing the required DSM boards.

Ms. O'Lonergan suggested that information technology could greatly facilitate many of the tasks in which RSAs are engaged. With a standardized approach supported by informatics, RSAs could better track adverse events, protocol compliance, and patient consent. A committee of RSAs from across the GCRCs is exploring appropriate options.

CLOSED SESSION

This portion of the Council meeting was closed to the public in accordance with the determination that it was concerned with matters exempt from mandatory disclosure under Sections 552b(c)(4) and 552b(c)(6), Title 5, U.S. Code and Section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2).

Council members discussed procedures and policies regarding voting and confidentiality of application materials, Committee discussions, and recommendations. Members absented themselves from the meeting during discussion of and voting on applications from their own institutions, or other applications in which there was a potential conflict of interest, real or apparent. Members were asked to sign a statement to that effect.

XIV. Application Review

Council considered 179 applications in the total amount of $83,880,161.

ADJOURNMENT

The Council adjourned at 3:30 p.m. on May 15, 2003.

CERTIFICATION

We hereby certify that, to the best of our knowledge, the foregoing minutes and supplements are accurate and complete.

_____ _____

Judith L. Vaitukaitis, M.D. Date
Chair, National Advisory Research Resources Council
and
Director, National Center for Research Resources, NIH

_____ _____

Louise E. Ramm, Ph.D. Date
Executive Secretary, National Advisory Research Resources Council
and
Deputy Director, National Center for Research Resources, NIH

These minutes will be formally considered by the Council at its next meeting; corrections or notations will be incorporated into the minutes of that meeting.

Attachment:
Council Roster

NOTE: Open Session materials are available from the Executive Secretary or the Committee Management Office, NCRR.