

NATIONAL INSTITUTES OF HEALTH

Clinical Research Training Program for Medical and Dental Students

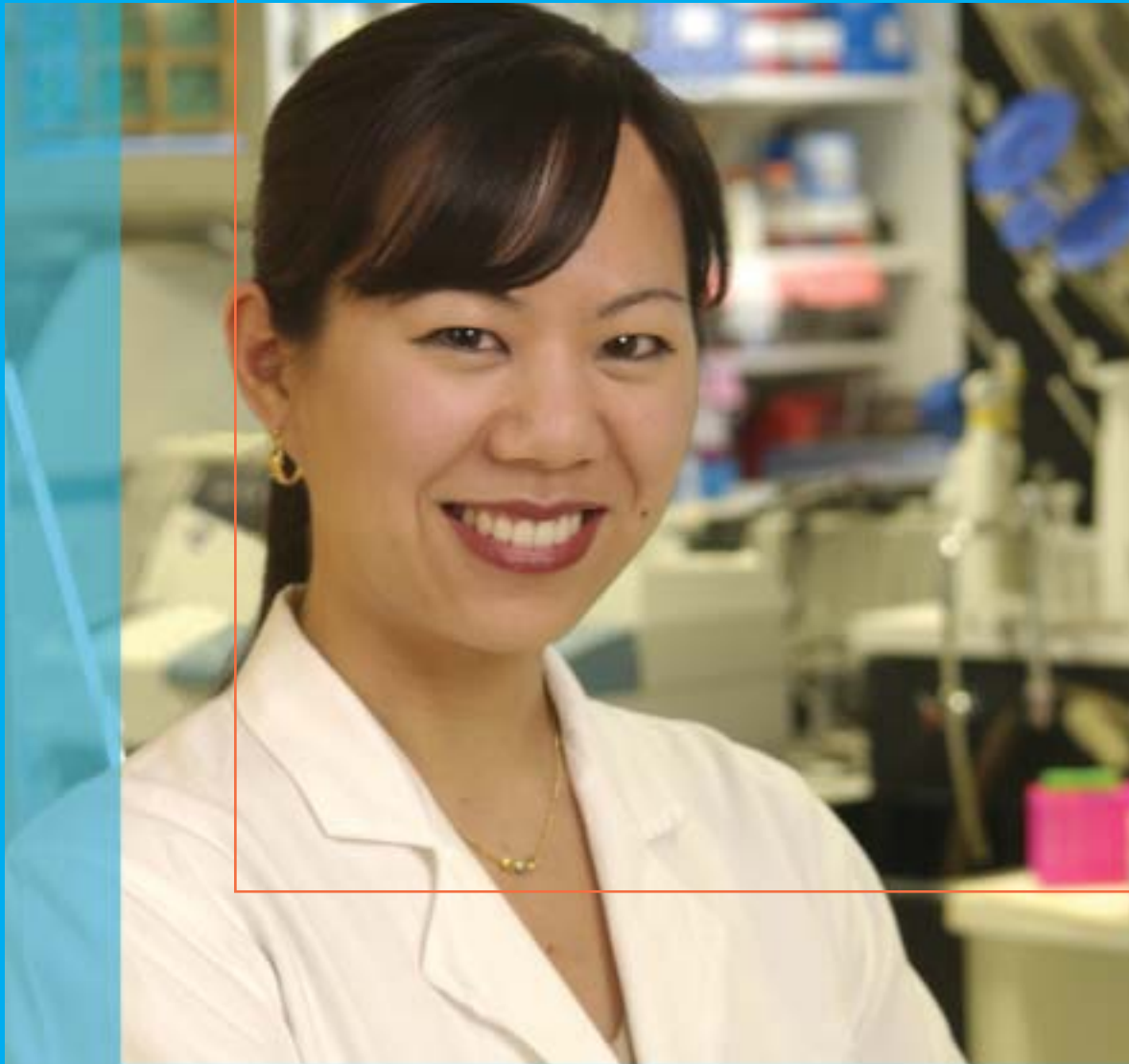


A PUBLIC-PRIVATE PARTNERSHIP

SUPPORTED JOINTLY BY THE NIH AND A GRANT

TO THE FOUNDATION FOR THE NIH FROM

PFIZER PHARMACEUTICALS GROUP



“I cannot imagine a better place to pose a question at a patient’s bedside and then to search for the answer in the laboratory.”

ANGELA CHANG

David Geffen School of Medicine, University of California, Los Angeles

“AS WE REENGINEER THE CLINICAL RESEARCH ENTERPRISE AT THE NIH, I LOOK TO THE MEDICAL STUDENTS IN A PROGRAM LIKE THE CRTP TO BECOME THE LEADERS WHO WILL RESHAPE AND ENERGIZE OUR NATIONAL VISION FOR CLINICAL RESEARCH IN THE FUTURE.”

ELIAS A. ZERHOUNI, M.D.

Director, National Institutes of Health

On the cover: CESAR CASTRO, *University of California, San Francisco, School of Medicine* and PORCIA BRADFORD, *Duke University School of Medicine*

An environment where you can ask challenging medical questions . . . and get the answers.

The Clinical Research Training Program (CRTP) is a year-long program designed to attract the most creative, research-oriented medical and dental students to the intramural campus of the National Institutes of Health in Bethesda, Maryland. Participants, known as fellows, spend a year engaged in a mentored clinical or translational research project in an area that matches their personal interests and goals.

An individualized program is developed for fellows, who attend clinics, see patients on the wards, and work with a principal investigator in our laboratories on selected clinical research projects. Fellows learn about translational research, that first step from the bench to the bedside and back to the bench; they attend lectures on clinical research; and they participate in an interactive, group learning experience with the members of the class and leading NIH physicians and scientists.

Fellows can remain at NIH for a second year, depending on support of the sponsoring NIH institute, availability of funds, and permission from the student's home institution.

THE NIH CAMPUS

The intramural campus of the National Institutes of Health is situated on 317 acres in Bethesda, Maryland, on the outskirts of Washington, DC. Over 50 buildings are dedicated to the biomedical research enterprise. The NIH Clinical Center is a 240-bed tertiary care hospital—the largest in the world devoted exclusively to the care of patients on active clinical research protocols and home to inpatient units, day hospitals, and research laboratories. The Clinical Center provides the ideal environment for advancing clinical science as well as providing compassionate and healing patient-care. There are over 1,200 active research protocols at any given time.

THE ACADEMIC PROGRAM

The emphasis of the academic components of CRTP, in addition to the mentored clinical research experience in clinics and laboratories, is on interactive, small-group learning. Fellows collaborate closely with one another and with leading clinical investigators on the intramural NIH campus.

SELECTION OF A MENTOR

Prior to a fellow's arrival on campus, the Director of the CRTP helps refine research interests and narrow the range of topics that an individual may pursue over the course of this year-long program. The director assigns each fellow a tutor, who is a senior physician-scientist on campus. The tutor works with the fellow, upon his or her arrival, to identify suitable mentors and laboratories within the fellow's chosen area of interest. Fellows then meet with possible mentors, make a selection in consultation with the tutor and program director, and plan an individualized research program combining clinical protocols and relevant laboratory studies. Students and mentors meet regularly to chart progress, plot investigational strategies, and discuss careers in biomedical research.



"EVEN MORE THAN THE CHANCE TO WORK IN ANY LAB AT THE NIH, OR THE YEAR SPENT IN A GREAT CITY, THE HIGHEST POINT OF MY YEAR HAS BEEN THE OTHER CRTP FELLOWS.

WITHOUT A DOUBT I HAVE LEARNED MORE FROM MY FRIENDS IN THIS PROGRAM ABOUT SCIENCE AND MEDICINE THAN I EVER ANTICIPATED. I KNOW THAT I WILL BE IN CLOSE CONTACT WITH THESE PEOPLE THROUGHOUT MY CAREER, AS I WILL CERTAINLY CONTINUE TO BENEFIT FROM THEIR EXPERTISE AND ADVICE, AND HOPEFULLY, I CAN DO THE SAME FOR THEM."

SARAH MATTESON
Medical College of Georgia

Learning—and living— clinical research.

SEMINAR AND JOURNAL CLUB SERIES

Twice a month, CRTP fellows meet with the director of the program, mentors, and tutors for small-group sessions. The textbook-based discussion covers didactic topics related to principles of clinical research. Fellows lead this seminar and journal club, focusing on manuscripts from the contemporary medical literature, which emphasize these principles. These evening gatherings, over an informal meal, are the heart of the CRTP program: they create an opportunity for lively discussion and pursuit of a single topic in great depth. Fellows find that these sessions create a good balance with the more formal, didactic components of the program. CRTP fellows may also join the students in the Howard Hughes Medical Institute (HHMI) scholars program for their regular lecture series. Talks given by HHMI and NIH investigators are followed by dinner and informal discussions on the speaker's educational background, career path, and particular research interests.

INTRODUCTION TO THE PRINCIPLES AND PRACTICE OF CLINICAL RESEARCH (IPPCR) COURSE

Each IPPCR lecture is offered for one hour, two evenings a week, over a four-month period. Established in 1995, the course introduces a multitude of ethical, legal, scientific, regulatory, and biostatistical issues in clinical research. CRTP fellows attend the lectures, which complement the discussion at the seminar and journal club sessions.

Objectives of IPPCR are: ■ To familiarize fellows with the basic epidemiologic methods involved in clinical research ■ To discuss the principles involved in the ethics of clinical research, the legal issues involved in clinical research, and the regulations involved in human subjects research, including the role of Internal Review Boards (IRBs) in clinical research ■ To familiarize fellows with the principles and issues involved in monitoring patient-oriented research, including regulatory requirements and quality assurance ■ To discuss the infrastructure required in performing clinical research and have an understanding of the steps involved in developing and funding research studies

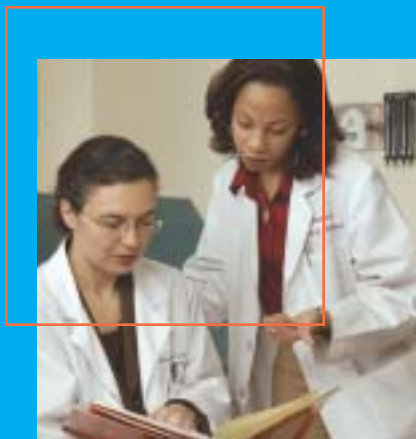
YEAR-END PRESENTATIONS

In May of each year, CRTP fellows give formal oral presentations on their clinical research in a special three-day event for tutors, mentors, and medical and scientific members of the NIH community. In addition, CRTP fellows present their clinical research in poster format following a Wednesday Afternoon Lecture—the premier educational series on campus.

ADDITIONAL TRAINING

CRTP fellows can partake of the NIH's lively intellectual community, as well: The Wednesday Afternoon Lecture Series draws top scientists and Nobel Prize winners to campus from around the world. Clinical Center Grand Rounds address a broad range of clinical research topics by intramural scientists each week. Fellows may also attend meetings and activities of NIH inter-institute interest groups, assemblies of scientists with common research interests. These groups are divided into broad, process-oriented parent groups and smaller, more focused groups centered on particular research models, subjects, or techniques.

Formal courses are offered on campus by the Foundation for Advanced Education in the Sciences, and a number of CRTP fellows attend these classes, most of which are offered in the evenings. Examples include courses in statistics, biotechnology, and immunology. The NIH Clinical Center has additional training opportunities, as well: Principles of Clinical Pharmacology covers what researchers need to know about the clinical pharmacologic aspects of drug development and use. The Ethical and Regulatory Aspects of Clinical Research course is an overview of ethical and regulatory issues in clinical research, designed to provide attendees with the skills to analyze ethical issues confronted in clinical research, and to enable researchers to design protocols that conform to prevailing ethical standards.



"IN CRTP JOURNAL CLUBS I DEVELOPED MY ABILITY TO EVALUATE CLINICAL RESEARCH LITERATURE CRITICALLY. I'VE LEARNED HOW TO DESIGN MY OWN STUDIES, TO ENSURE THEY ARE RIGOROUS AND MEANINGFUL."

NATALIE DAILEY (right)
Harvard Medical School
and
DR. RAPHAELA
GOLDBACH-MANSKY

"ONE OF MY PROUDEST ACHIEVEMENTS AT NIH HAS BEEN HELPING CRTP GET ITS START AND WATCHING IT GROW. THIS PROGRAM HAS FULFILLED THE GOAL OF A GROUP OF CLINICIAN-SCIENTISTS WHO SAW THE NECESSITY OF CREATING THIS OPPORTUNITY FOR MEDICAL STUDENTS TO BECOME INVOLVED IN CLINICAL RESEARCH EARLY IN THEIR CAREERS."

MICHAEL M. GOTTESMAN, M.D.
*Deputy Director for Intramural
Research, NIH*



“Although I knew I would have an amazing experience at the NIH, my time here has truly exceeded anything I could have imagined. Intellectually, this has been the most stimulating year of my life. I would strongly recommend that every medical student consider this great opportunity.”

HARI NADIMINTI
University of Miami School of Medicine



“I was able to see basic science research translated on the wards each week during rounds. It was simply amazing. . . .”

PORCIA BRADFORD
Duke University School of Medicine



"THE LABORATORIES AT NIH ARE COLLE-GIAL AND SUPPORTIVE ENVIRONMENTS: OUR MENTORS AT NIH ARE LEADERS IN THEIR FIELDS AND YET DOWN-TO-EARTH."

CHRISTIAN HUNTER, PH.D. (right)
Loma Linda University School of Medicine
and **DR. MARK GLADWIN**

"I CAN THINK OF NO BETTER INVEST-
MENT THAN TRAINING MEDICAL
STUDENTS IN THE PRINCIPLES AND
PRACTICE OF CLINICAL RESEARCH. WE
HAVE DEDICATED CLINICIAN-SCIENTISTS
AS MENTORS TO OUR CRTP FELLOWS,
INDIVIDUALS WHO ARE MAKING
GROUNDBREAKING DISCOVERIES AND
MOVING SCIENTIFIC KNOWLEDGE FROM
THE BENCH TO THE BEDSIDE."

JOHN I. GALLIN, M.D.
Director, NIH Clinical Center



THE WASHINGTON MONUMENT
Washington, DC

Mentors to lead you where you want to go.

ELIGIBILITY

1. This program is intended for medical and dental students. Candidates must currently be enrolled in a medical school accredited by the Liaison Committee on Medical Education (LCME) or a dental school that is accredited by the Commission on Dental Accreditation.
2. Candidates in M.D./Ph.D. programs are eligible to apply.
3. Candidates must have completed a year of clinical rotations prior to starting the program.
4. Candidates must be U.S. citizens or permanent residents.

APPLICATION PROCESS

Applications for CRTP are submitted on-line through the NIH Office of Intramural Training and Education website, which is www.training.nih.gov/crtp. Applications are submitted in early fall for a January 15th deadline. Requirements are:

- A cover letter, including a description of research interests and goals (although prior research experience is not a requirement of CRTP, enthusiasm for and commitment to the objectives of clinical research are highly desirable)
- A curriculum vitae
- Three letters of recommendation, including one from the Office of the Dean authorizing a student's participation in CRTP
- Medical or dental school grades

The web site also features the research projects of former CRTP participants, alumni listings, and Frequently Asked Questions.

SELECTION PROCESS

Following a review of all applications, the Board of Tutors for CRTP selects a number of students to be interviewed. Interviews are usually held in March. Decisions are normally communicated to successful candidates within two to three weeks of the interviews. The program begins on July 1 or August 1, depending on the students' rotation schedules at their home schools. CRTP class size was expanded in 2004 to accommodate up to 30 student-fellows per year.

ACCOMMODATIONS

CRTP is a residential program, and all participants are expected to live in our facilities. Fellows live adjacent to campus in furnished apartments in Bethesda. Two-bedroom, two-bath apartments are leased for fellows, with a few one-bedroom apartments for couples. Buildings are within walking distance of the center of campus.

THE DC AREA

"Work is hard. Distractions are plentiful. And time is short." – ADAM HOCHSCHILD

"He who cannot rest, cannot work. . . ." – HARRY EMERSON FOSDICK

The national capitol area offers much in the way of entertainment and relaxation. You can spend free time visiting the museums of the Smithsonian Institute, attending performances at the Kennedy Center, exploring battlefields of the American Civil War, cycling or hiking along the C&O Canal's towpath, sailing the Chesapeake Bay, or sitting in on Senate hearings. Bethesda itself is home to some 300 restaurants. The location of the NIH on the Metro subway line means that you can be downtown in 20 to 30 minutes.

CLINICAL RESEARCH TRAINING PROGRAM **Benefits**

Stipend (12 months, taxable)	\$27,100
One FAES course per semester, tuition and books paid	\$800 maximum for the year
Book allowance	\$250
Paid health insurance	
Conference travel	\$1,300
Computer allowance	\$1,200
Reasonable travel and relocation expenses	
Prearranged, furnished accommodation in two-bedroom, two-bath apartments adjacent to campus; one-bedroom apartments for couples (Mandatory residential program)	(rental rates vary)
Clinical Research Seminar and Journal Club dinners	
Lectures and dinners with Howard Hughes Medical Institute Scholars	
Annual visit to research laboratories of Pfizer Pharmaceuticals Group (subject to confirmation)	

CLINICAL RESEARCH TRAINING PROGRAM **Fellows and Alumni**

2004–2005

Robert D. Allison

Florida State University College of Medicine

Priya Batra

Duke University School of Medicine

Ebony A. Boyce

Duke University School of Medicine

Scott W. Canna

George Washington University School of
Medicine and Health Sciences

Mailan M. Cao

David Geffen School of Medicine, UCLA

Carolee M. Cutler

University of Utah School of Medicine

Arpi Doshi

University of Michigan Medical School

Prateek C. Gandiga

UMDNJ-Robert Wood Johnson Medical School

Nabeel Hamoui

Duke University School of Medicine

Rebecca E. Hommer

University of Pennsylvania School of Medicine

Samer H. Jaber

Vanderbilt University School of Medicine

Edward W. Jung

Brown Medical School

Stefan S. Kachala

UMDNJ-Robert Wood Johnson Medical School

Chris E. Keh

University of Illinois College of Medicine

Richard D. Kim

University of California, San Francisco School of Medicine

Arash Koochek

University of Vermont College of Medicine

Meghan S. Liel

Duke University School of Medicine

Elaina E. Lin

Johns Hopkins University School of Medicine

Brieanne V. Midura

George Washington University School of Medicine and Health
Sciences

Douglas B. Mogul

Albert Einstein College of Medicine of Yeshiva University

Stacy D. O'Connor

Mount Sinai School of Medicine of New York University

Sinae T. Park

Columbia University College of Physicians and Surgeons

Candace Y. Parker

Bowman Gray School of Medicine

Tien Peng

Johns Hopkins University School of Medicine

Julie M. Rosenthal

University of Pennsylvania School of Medicine

Dave A. Roy

University of Alabama School of Medicine

Oscar K. Serrano

Stanford University School of Medicine

Erica D. Taylor

Duke University School of Medicine

Rohan C. Wijewickrama

Bowman Gray School of Medicine

Susan Yuditskaya

University of Pittsburgh School of Medicine

2003–2004

Porcia T. Bradford

4th Year, Duke University School of Medicine

Cesar M. Castro

4th Year, University of California, San Francisco
School of Medicine

Angela A. Chang

4th Year, David Geffen School of Medicine, UCLA

Natalie J. Dailey

4th Year, Harvard Medical School

Joshua S. Easter

4th Year, Duke University School of Medicine

Tristan Gorrindo

4th Year, Vanderbilt University School of Medicine

Christian J. Hunter, Ph. D.

4th Year, Loma Linda University School of Medicine

Doris G. Leung

4th Year, Duke University School of Medicine

Sarah K. Matteson

4th Year, Medical College of Georgia

Hari Nadiminti

4th Year, University of Miami School of Medicine

Mark A. Naftanel

4th Year, Duke University School of Medicine

Lauren M. Nentwich

4th Year, Harvard Medical School

Anne-Caroline M. Norman

1st Year, Duke University, The Fuqua School of Business

Timothy W. Vogel

4th Year, Columbia University College of
Physicians and Surgeons

Dana J. Wallace

4th Year, Duke University School of Medicine

2002–2003

Paul A. Berry, M.D.

Texas A&M College of Medicine-Scott and White Memorial Hospital (Plastic Surgery);
M.D., Washington University School of Medicine

Deb A. Bhowmick, M.D.

University of Pennsylvania Health System
(Neurological Surgery);
M.D., Baylor College of Medicine

Daniel J. Canter, M.D.

University of Pennsylvania Health System (Urology);
M.D., George Washington University School of
Medicine and Health Sciences

Marc L. Cohen, M.D.

University of Pennsylvania Health System (Internal Medicine);
M.D., University of Pennsylvania School of Medicine

Kristin M. Dittmar, M.D.

University of California at Los Angeles Medical Center
(Diagnostic Radiology);
M.D., University of South Florida College of Medicine

Claire E. Farel, M.D.

Brigham and Women's Hospital (Internal Medicine);
M.D., University of North Carolina at Chapel Hill
School of Medicine

Colleen Harkins, M.D.

University of Utah Medical Center (Pediatrics);
M.D., University of Pennsylvania School of Medicine

Yelena L. Kogan, M.D.

University of Virginia Medical Center (Internal Medicine);
M.D., Duke University School of Medicine

Michelle W. Lau, M.D.

Washington University/Barnes-Jewish Hospital
(Internal Medicine);
M.D., Duke University School of Medicine

Lynn T. Matthews, M.D.

Brigham and Women's Hospital (Internal Medicine);
M.D., University of Miami School of Medicine

Alex Natanzon, M.D.

Mount Sinai School of Medicine (Internal Medicine);
M.D., Mount Sinai School of Medicine of New York University

Jeremy J. Parris, M.D.

Medical University of South Carolina Medical Center
(General Surgery);
M.D., Emory University School of Medicine

Jonathan J. Paul, M.D.

University of Chicago Hospitals (Internal Medicine);
M.D., Emory University School of Medicine

Tiffany M. Powell, M.D.

Brigham and Women's Hospital (Internal Medicine);
M.D., Duke University School of Medicine

Jeffrey M. Venstom, M.D.

Johns Hopkins Hospital (Internal Medicine);
M.D., Vanderbilt University School of Medicine

Scott D. Wait, M.D.

Barrow Neurological Institute of St. Joseph's Hospital and
Medical Center (Neurological Surgery);
M.D., East Carolina University School of Medicine

2001–2002

Essmaeel H. Abdel-Dayem, M.D.

Massachusetts General Hospital/
Harvard Medical School (Radiology);
M.D., Yale University School of Medicine

Kara B. Anthony, M.D.

University of Pennsylvania Health System (Internal Medicine);
M.D., Duke University School of Medicine

Katharine E. Black, M.D.

Brigham and Women's Hospital (Internal Medicine);
M.D., Harvard Medical School

Anna I. Cheh, M.D.

Beth Israel Deaconess Medical Center/Harvard Medical School
(Emergency Medicine);
M.D., David Geffen School of Medicine, UCLA

Laura E. Crotty, M.D.

Massachusetts General Hospital/Harvard Medical School
(Internal Medicine);
M.D., Duke University School of Medicine

Andrew M. Goldfine, M.D.

New York Presbyterian Hospital-Cornell Campus (Neurology);
M.D., UMDNJ-Robert Wood Johnson Medical School

Sarah E. Greer, M.D.

Dartmouth-Hitchcock Medical Center (General Surgery);
M.D., Dartmouth Medical School

Christina R. Hermos, M.D.

University of California, San Francisco
Medical Center (Pediatrics);
M.D., University of Massachusetts Medical School

Karen E. Hoffman, M.D.

Preliminary year, Internal Medicine at Georgetown University;
Brigham and Women's Hospital and Massachusetts General
Hospital (Partners) (Radiation Oncology);
M.D., Duke University School of Medicine

Wilson J. Liao, M.D.

University of California, San Francisco
Medical Center (Dermatology);
M.D., Harvard Medical School

Amy C. Lu, M.D., M.P.H.

Massachusetts General Hospital/
Harvard Medical School (Anesthesiology);
M.D., University of California, San Francisco School of Medicine

Jennifer A. Markowitz, M.D.

Boston Children's Hospital (Pediatrics/Pediatric Neurology);
M.D., University of Pennsylvania School of Medicine

Heidi M. Schambra, M.D.

Brigham and Women's Hospital and Massachusetts General
Hospital (Partners) (Neurology);
M.D., Emory University School of Medicine

Aimee C. Yu, M.D., Ph.D.

Mayo Clinic (Internal Medicine);
M.D., University of Illinois at Urbana-Champaign
College of Medicine

CLINICAL RESEARCH TRAINING PROGRAM **Academic Program**

CLINICAL RESEARCH SEMINAR AND JOURNAL CLUB

Clinical Research Seminar and Journal Club meets selected Wednesdays from 5:00 pm to 7:00 pm. Fellows present a chapter from a textbook entitled *Designing Clinical Research* in a seminar format. Tutors and mentors also participate in this interactive, small-group discussion.

"Choosing the Study Subjects: Specification, Sampling, and Recruitment"

"Planning the Measurements: Precision and Accuracy"

"Getting Ready to Estimate Sample Size: Hypotheses and Underlying Principles"

"Estimating Sample Size and Power: The Nitty-gritty"

"Designing an Observational Study: Cohort Studies"

"Designing an Observational Study: Cross-sectional and Case-control Studies"

"Enhancing Causal Inference in Observational Studies"

"Designing an Experiment: Clinical Trials I"

"Designing an Experiment: Clinical Trials II"

"Designing Studies of Medical Tests"

"Research Using Existing Data: Secondary Data Analysis, Ancillary Studies, and Systematic Reviews"

"Addressing Ethical Issues"

"Designing Questionnaires and Data Collection Instruments"

"Data Management"

"Implementing the Study: Pretesting, Quality Control, and Protocol Revisions"

"Community and International Studies"

"Writing and Funding a Research Proposal"

SCIENTIFIC PRESENTATIONS

Annual oral presentations at NIH end-of-year forum

Poster presentations to Pfizer Pharmaceuticals Group

Poster presentations as part of Wednesday Afternoon Lecture Series

C RTP FELLOWS' RESEARCH TOPICS, 2003-2004

- "Identifying Renal Cell Carcinoma Antigens Recognized by T-Cells"*
- "Investigation of Antiangiogenic Inhibitors via Molecular Imaging and High Throughput Gene Expression Analysis"*
- "Phase I Study of Concomitant Therapy with Proteasome Inhibitor PS-341 and Radiation in Patients with Recurrent or Metastatic Squamous Cell Carcinoma of the Head and Neck"*
- "Natural History and Treatment of Neonatal Onset Multi-system Inflammatory Disease"*
- "Regulation of Emotion in Pediatric Patients"*
- "Phenomenology of Bipolar Disorder in Children"*
- "A Novel Physiologic Function for Hemoglobin as a Nitrite Reductase and a Regulator of Hypoxic Vasodilation: Implications for Treatment of Neonatal and Sickle-Cell Related Pulmonary Hypertension"*
- "Microarray Analysis of Gene Expression in the Frontal Cortex of Patients with Frontotemporal Dementia"*
- "Timing of Voluntary Movement in Schizophrenia and Tourette Syndrome"*
- "Brain Activation during Tics Using Functional MRI"*
- "Chemokine Receptor Expression in Malignant Melanoma Skin Metastases"*
- "Evaluation of Copaxone in the Treatment of Diabetes Mellitus in Mouse Models"*
- "Therapeutic Approaches to the Islet-induced Instant Blood Mediated Inflammatory Reaction in a Mouse Model"*
- "Diffusion Weighted Imaging in Acute Stroke"*
- "Safety and Efficacy of Orlistat in African-American and Caucasian Children and Adolescents with Obesity-related Comorbid Conditions"*
- "Histogenesis and Tumorigenesis of VHL Associated Endolymphatic Sac Tumors"*
- "Proteomic Characterization of Gliomas, Pituitary Tumors, and the Developing Brain"*
- "Role of BCL-2 Expression in Prognosis of Primary Intraocular Lymphoma"*

CLINICAL RESEARCH TRAINING PROGRAM Letter from the Director

Dear Medical and Dental Students:

Since its inception in 1997, the Clinical Research Training Program (CRTP) has continued to grow and evolve, and we have introduced many exciting modifications. Most exciting is that in 2004 CRTP doubled in size—growing from 15 to 30 fellows, thanks to the support of our NIH Director, Dr. Elias Zerhouni and the NIH Roadmap initiative. The Roadmap is an innovative approach to accelerate fundamental biomedical discovery and translate that knowledge into effective prevention strategies and new treatments. The initiatives funded under the NIH Roadmap address critical roadblocks and knowledge gaps that constrain rapid progress in biomedical research and synergize the work of many NIH Institutes and Centers, representing a unique effort of the NIH as a whole. More promising medical and dental students will now be able to benefit from the opportunity to learn about clinical research here in Bethesda. Importantly, we will retain all of the features that have made CRTP strong, including a class size that will allow us to learn together and to get to know one another very well.

Since becoming the program's director in 2000, I have restructured a format for our seminar and journal club series, which uses a core text in clinical research, along with supplemental information from the contemporary medical literature. Specifically, CRTP fellows lead a discussion of an assigned chapter utilizing slides, handouts, and other teaching aids. Clinical research principles are emphasized. The CRTP fellows also select one or two current journal articles, and they are used in an interactive session to illustrate the research principles in a practical manner.

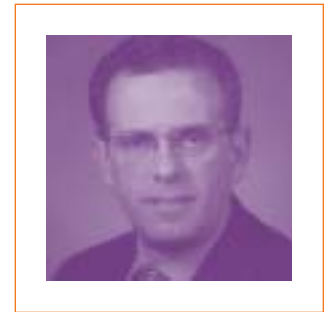
Another of the new components of CRTP is clinical teaching rounds, which takes advantage of the rich patient population at the NIH. These rounds are typically held every other week. During this teaching exercise, a patient's medical history is presented; the group examines the patient, with emphasis placed on pertinent physical findings; and the principal investigator of the clinical research protocol in which the patient is enrolled talks to the group about the patient's underlying disease as well as the details of the protocol. Using this format, the CRTP fellows get to interact with patients who can also provide their own perspectives on clinical research, based on their involvement in a clinical trial. The clinical teaching rounds are held in the NIH Clinical Center. In late 2004, the new NIH hospital, called the Mark O. Hatfield Clinical Research Center, will open and become home to new inpatient units, day hospitals, and research laboratories.

These new program features have been introduced with the support and encouragement of the fellows themselves. Your year at the NIH, regardless of which research projects you pursue, will provide you with a deep understanding of the principles and practice of—and people involved in—clinical research. This is an experience not replicated elsewhere. The CRTP fellows, tutors, staff, and I look forward to meeting you during the interviews for this program, and to working with you during your year at the NIH. I have observed the camaraderie that develops among our fellows, the enduring friendships that have grown out of their participation in CRTP, and invite you to consider becoming a part of this very special clinical research experience.

Sincerely,



Frederick P. Ognibene, M.D.
Director, CRTP



Your year at the NIH, regardless of which research projects you pursue, will provide you with a deep understanding of the principles and practice of—and people involved in—clinical research.





MEDICAL EDUCATION PROGRAM
OFFICE OF INTRAMURAL TRAINING AND EDUCATION
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THE NATIONAL INSTITUTES OF HEALTH IS DEDICATED TO BUILDING A DIVERSE
COMMUNITY IN ITS TRAINING AND EMPLOYMENT PROGRAMS.