Training Opportunities within the Intramural Program of the National Institutes of Health

W. Douglas Figg
National Cancer Institute
National Institutes of Health
Bethesda, MD USA
27 Institutes/Centers make-up the NIH
National Institutes of Health

- Annual investments: 
  - >$31 billion

- Competitive extramural grants account for more than 85% of NIH budget

- $3.5 billion of this funding is exclusively for intramural projects
National Institutes of Health

Main campus is in Bethesda, MD on 300 acres in 75 buildings
National Institutes of Health

Other locations include Baltimore, MD, Frederick, MD, Research Triangle Park, NC, Hamilton, MT, Framingham, MA, Phoenix, AZ, Detroit, MI
National Institutes of Health

Approx. 1,200 PIs, >5,000 fellows and >15,000 support staff
The Mark O. Hatfield Clinical Research Center opened in 2005. The facility houses inpatient units (240 beds), day hospitals, and research labs and connects to the original Warren Grant Magnuson Clinical Center. Together, the Magnuson and Hatfield buildings form the NIH Clinical Center.
The NIH Clinical Center

“There’s no other hospital like it”
The NIH Clinical Center

>100,000 ambulatory visits and >6,000 admissions per year
NIH Clinical Center
“A Laboratory for Clinical Research”

- We do not bill 3rd party payors
- Every patient is enrolled in a research protocol; > 1,600 active protocols
- Patient travel/housing is provided for clinical visits
- 1,255 credentialed physicians
- Inpatient wards and outpatient clinics are close to a PIs research laboratory
Portfolio of Clinical Research & Training Opportunities at the NIH
Portfolio of Clinical Research & Training Opportunities at the NIH

- Summer Internship Program (SIP)
- Graduate Partnership Program
- CTR Course for PhD Students
- Postdoc Programs
- Assistant Clinical Investigator
- Residency Elective Rotations
- GME Programs/Clinical Fellows
- Sabbatical in Clinical Research Management

- High School: Age 16
- College Undergrad: BS Degree
- Graduate, Medical, Dental, or Veterinary School: PhD, MD, DDS, DVM
- Postdoctoral Training
- Mid-Career/Senior Professional
Summer Internship Program

- 2015 – 7,000 applications for about 1,000 positions
- Limited to US citizens or permanent residents
- Must be enrolled in high school, accredited college/university as an undergraduate, graduate or professional student
- 8 weeks minimum
Portfolio of Clinical Research & Training Opportunities at the NIH
Postbac Fellowship Program

- Hired by PIs within the institutes/centers
- Typically 1-2 years, but could be up to 5 years
- Must be a recent college graduate
- Must be a US citizen or permanent resident
- Must intend to apply to graduate or professional school
Portfolio of Clinical Research & Training Opportunities at the NIH
Medical Research Scholars Program
What Is MRSP?

- A comprehensive, year-long, residential research enrichment program for ~ 45 medical, dental or veterinary students
- Co-sponsored by the NIH and private partners (via Foundation for the NIH)
- Nationally competitive, application-driven
- Scholars work with a mentor on a basic, clinical, or translational project matching research interests and career goals
Portfolio of Clinical Research & Training Opportunities at the NIH
Clinical Electives Program
Elective Clinical Rotations

- Medical, dental or pharmacy students
- Students apply for clinical rotation slots
  - 4 to 12 weeks duration
- Participate directly in the practice of translational medicine at Clinical Center
- MDs can apply for a Clinical Pharmacology Rotation
- PharmD – two options – Clinical with the NIH CC’s Pharmacy Department or Research Pharmacy with myself in the NCI
Elective Clinical Rotations

- Likewise, we offer elective rotations for medical residents
Portfolio of Clinical Research & Training Opportunities at the NIH
Graduate Medical Education
ACGME Accredited GME Programs

- Allergy/Immunology
- Anatomic Pathology
- Cytopathology
- Critical Care Medicine
- Endocrinology and Metabolism
- Hematology
- Hematopathology
- Hospice/Palliative Care
- Infectious Diseases
- Medical Oncology
- Medical Genetics
- Medical Biochemical Genetics
- Neurosurgery
- Pediatric Endocrinology
- Psychiatry
- Rheumatology
- Transfusion Medicine
- Vascular Neurology
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Non-ACGME Accredited Programs

- Neurorehabilitation
- Ophthalmic Genetics
- Surgical Neurology
- Surgical Oncology
- Urological Oncology
- Uveitis and Ocular Immunology
Jointly Sponsored ACGME-Accredited Training Programs

- Clinical Neurosciences-Neurophysiology (National Capital Consortium)
- Gastroenterology (University of Maryland)
- Pediatric Hematology-Oncology (Johns Hopkins)
- Pediatrics- Medical Genetics (Children’s National Medical Center)
- Radiation Oncology (National Capital Consortium)
Portfolio of Clinical Research & Training Opportunities at the NIH
Graduate Partnerships Programs

Bioinformatics
Biophysics
Epidemiology
Immunology
Cell and Molecular Biology
Neuroscience
Health Sciences
Structural Biology
Molecular Pathology
Pharmacology
Biobehavioral Research
Developmental Biology
Graduate Partnerships Programs

Boston University
Brown University
George Washington Univ
Georgetown University
Johns Hopkins Univ
Karolinska Institutet
Univ College London
University of Maryland
University of Montana
University of Oxford
University of Cambridge
Univ of Pennsylvania
Non-GPP MOUs allow other Students from other Universities to complete their Dissertation Research
Most MST Programs (MD, PhD) allow Dissertation Research to be Completed at the NIH
Portfolio of Clinical Research & Training Opportunities at the NIH
Post-Doctoral Research Fellowships

- Approximately 4,000 in training at any given time
- Hired by PIs within the institutes/centers
- Typically 2 to 5 years, but could be up to 8 years
- Come from across the US and world
- Must hold a doctoral degree and have no more than 5 years prior post-doctoral training
Post-Doctoral Research Fellowships

- Two opportunities in Clinical Pharmacology
  - Within my laboratory at the NCI
  - Within the NIH CC’s Pharmacy Department
NIH Curriculum in Clinical Research

Introduction to the Principles & Practice of Clinical Research
Course introduced in 1995

Principles of Clinical Pharmacology
Course began in 1998

Ethical and Regulatory Aspects of Human Subjects Research
Course began in 1999

Summer Clinical and Translational Research
Course for PhD. Students
What’s Special about the NIH?
What’s Special about the NIH?
Resources and Commitment to Research
Ability to Surround Yourself with Smart People
Questions