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

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27 Institutes/Centers make-up the NIH





- 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



Main campus is in Bethesda, MD on 300 acres in 75 buildings





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





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

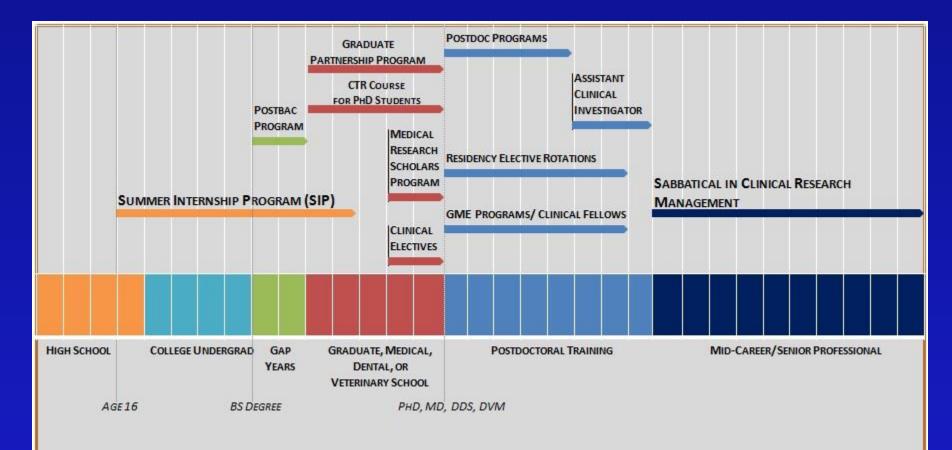


NIH Clinical Center "A Laboratory for Clinical Research"

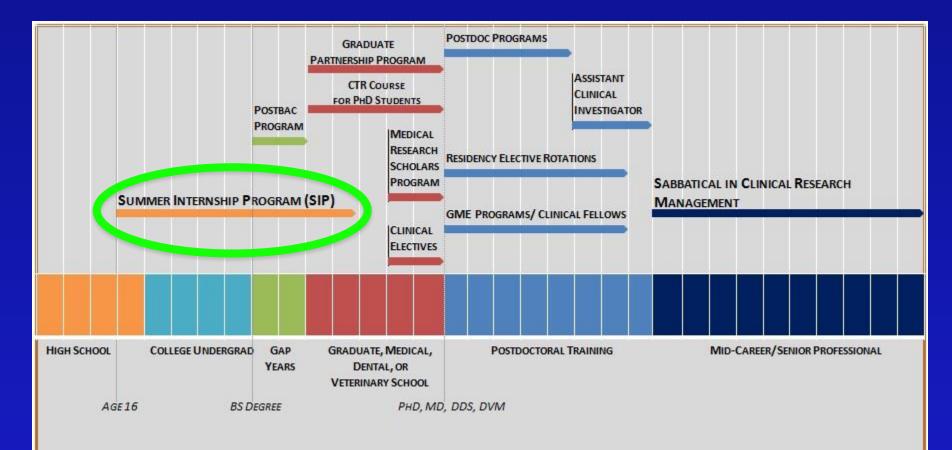


- We do not bill 3rd party payors
- Every patient is enrolled in a research protocol; > 1,600 active protocols
- Patient travel/housing is
 provided for clinical visits
- 1,255 credentialed physicians
- Inpatient wards and outpatient clinics are close to a PIs research laboratory

Portfolio of Clinical Research &Training Opportunities at the NIH



Portfolio of Clinical Research &Training Opportunities at the NIH

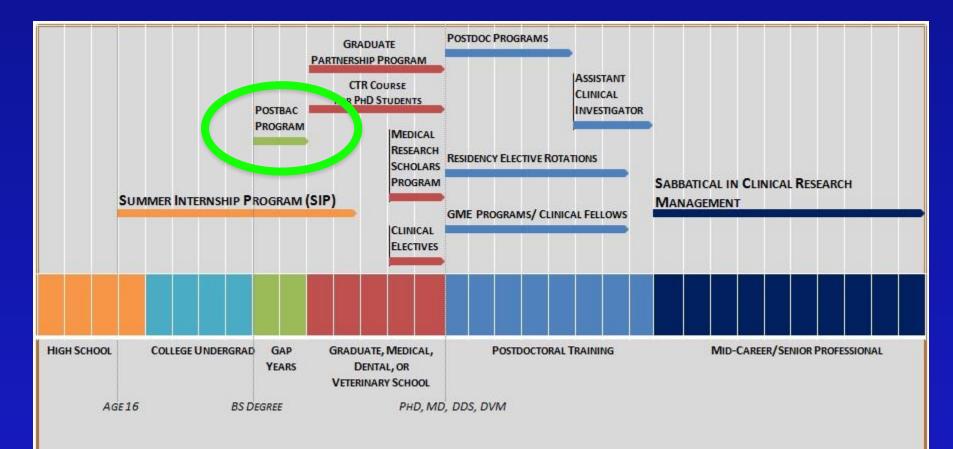


Summer Internship Program



- 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

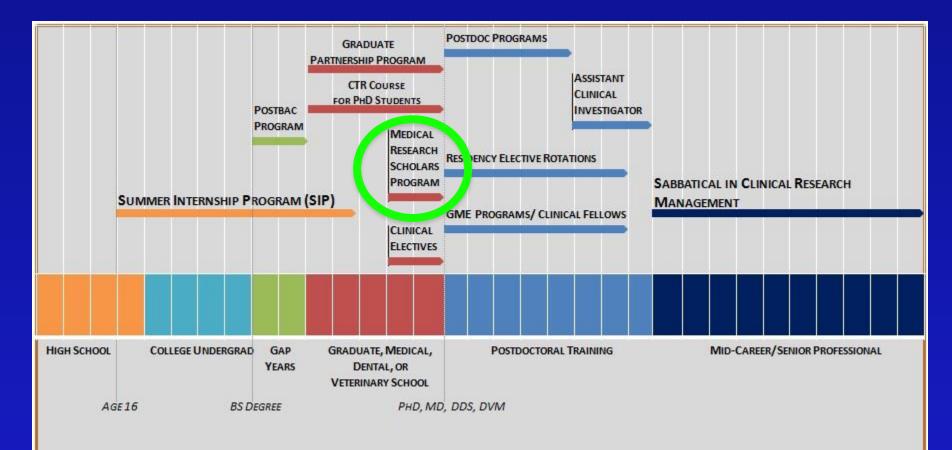


Postbac Fellowship Program



- 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



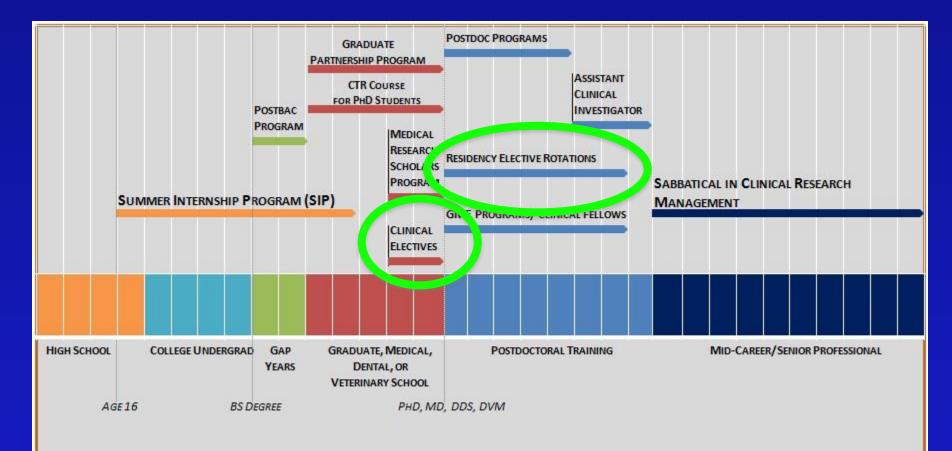
Medical Research Scholars Program



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



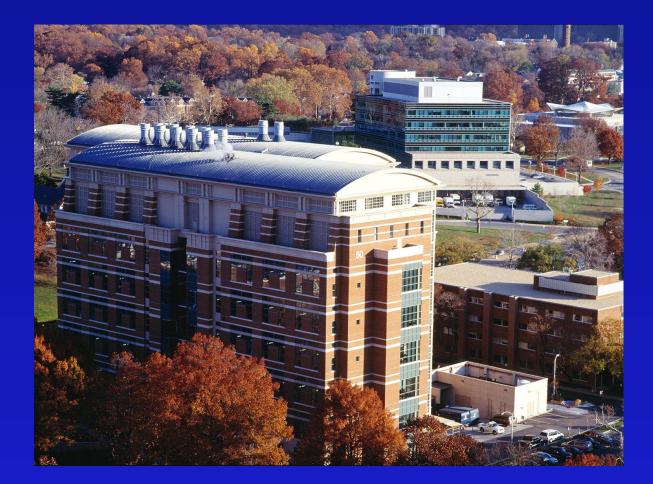
Elective Clinical Rotations

- Medical, dental or pharmacy students
- Students apply for clinical rotation slots

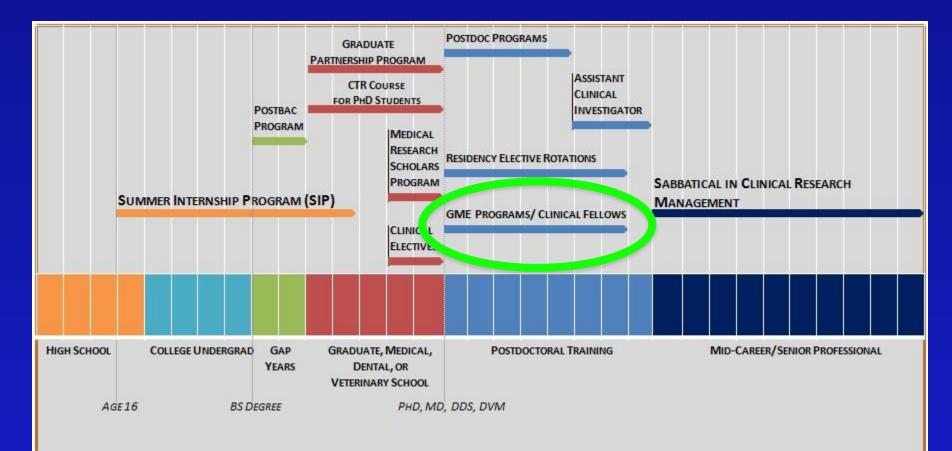
4 to 12 weeks duration

- 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



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Graduate Medical Education



ACGME Accredited GME Programs

- Allergy/Immunology
- Anatomic Pathology
- Cytopathology
- **Critical Care Medicine**
- Endocrinology and **Metabolism**
- Hematology
- Hematopathology
- Infectious Diseases

- Medical Oncology
- **Medical Genetics**
- Medical Biochemical Genetics
- Neurosurgery
- Pediatric Endocrinology
- Psychiatry
- Rheumatology
- Hospice/Palliative Care Transfusion Medicine
 - Vascular Neurology

Non-ACGME Accredited Programs

- Alcoholism
- Autonomic Disorders
- Cardiac/Cardio Imaging
- Child Psychiatry
- Clinical Chemistry
- Clinical Trial Methodolgy
- Cognitive Neuro
- Reproductive Endocrin
- Deafness Disorders
- Endocrine Clinical

- Epilepsy
- Hepatology
- HIV and AIDS Malig
- Human Genetics
- Image-Guided Cardiovas
- Movement Disorders
- Nephrology Clin Research
- Neurogenetics
- Neuroimmunology
- Neuro-Oncology

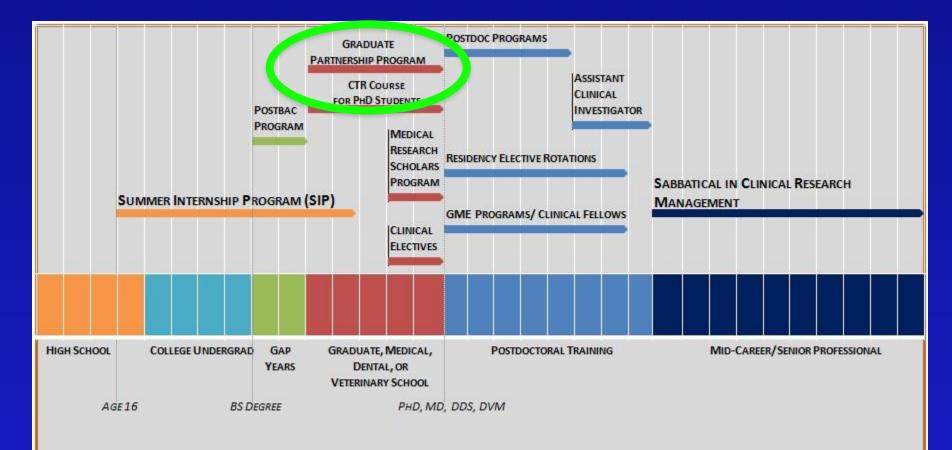
Non-ACGME Accredited Programs

- 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

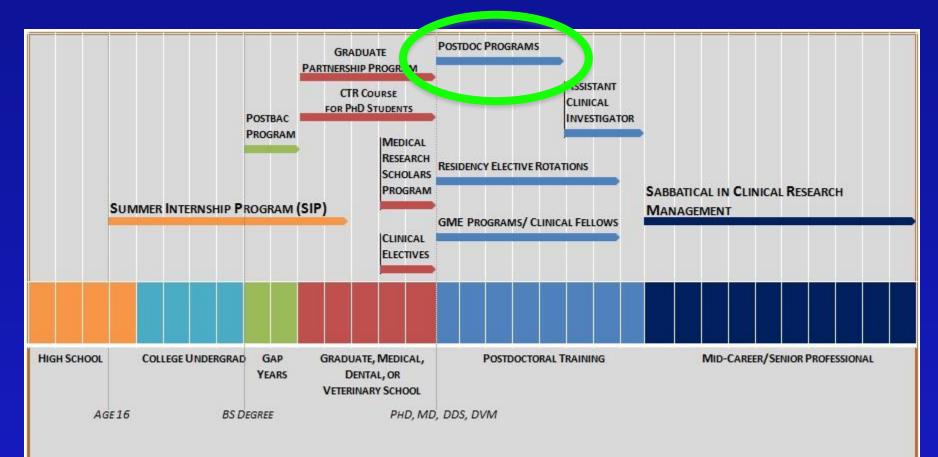
Non-GPP MOUs allow other Students from other Universities to complete their Dissertation Research



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

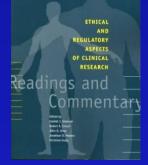


Introduction to the Principles & Practice of Clinical Research Course introduced in 1995

> 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



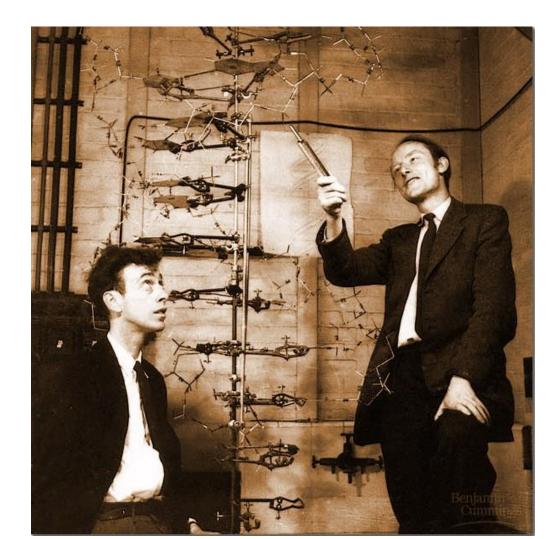
What's Special about the NIH?



What's Special about the NIH? Resources and Commitment to Research



Ability to Surround Yourself with Smart People





Questions

