Intramural Training Programs at NIH/NICHD

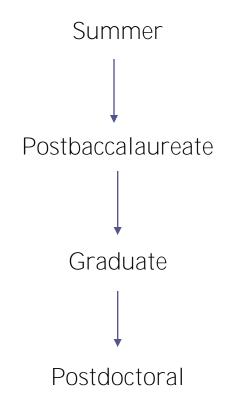


Eunice Kennedy Shriver National Institute of Child Health and Human Development

Office of Education Dr. Yvette Pittman November 14, 2014

Current Trainees at NIH IRP: who do you expect to see here?

- High school and college students
- Recent college graduates
- Graduate/Medical students
- Postdoctoral and clinical fellows



https://www.training.nih.gov/programs

Summer Internship Program in Biomedical Research

https://www.training.nih.gov/programs/sip

- Spend eight to ten weeks conducting biomedical research with NH investigators, students generally arriving at NIH in May or June
- The application for summer 2015 will be available in mid-November to March 1
- Sponsors a wide range of summer activities, including lectures featuring distinguished NIH investigators, career and professional workshops/webinars, and Summer Poster Day
- Before students begin, take a look at the Applying Successfully Video

NICHD: 25% of our summer slots are set aside for students traditionally underrepresented in science

Postbac Program (for recent college graduates) https://www.training.nih.gov/programs/postbac_irta

- A biomedical research program that enables recent college graduates who are planning to apply to graduate or professional (medical/dental/pharmacy) school to spend one or two years in full-time research with NIH investigators.
- A wide range of career and professional development activities: oral and poster presentation workshops, Graduate & Professional School Fair, and Postbac Poster Day
- Advice to Applicants Online Resources: Videocast "Applying to the NIH Postbac Program"

Graduate Partnership Program

https://www.training.nih.gov/programs/gpp

- Designed to bring PhD students to the NIH Intramural Research program for their dissertation research
- Participants enjoy the academic environment of a university, the extensive research resources of the NIH
- Some of the NIH-University Partnerships:
 - Brown University Neuroscience
 - Georgetown University Biomedical Sciences
 - Johns Hopkins Cell, Molecular, Developmental Biology & Biophysics
 - University of Oxford / University of Cambridge (England)
- Can create an individual partnership with a MOU between the university and NIH

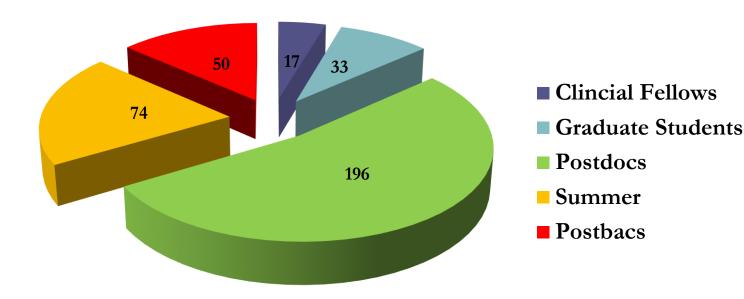
NIH Postdoctoral Training

https://www.training.nih.gov/programs/postdoc_irp

- Provides the opportunity for recent doctoral degree recipients to enhance their research skills in the resource-rich National Institutes of Health (NIH) environment
- Trainees can pursue basic, translational, and clinical research free from the demands of obtaining grants and teaching, although opportunities to do both are available.

NICHD-Division of Intramural Research

• Comprises 70 principal investigators and over 300 postbaccalaureate, clinical, and postdoctoral fellows and graduate students



NICHD Division of Intramural Research

Constantine A. Stratakis, MD, D(Med)Sci, Scientific Director Chris J. McBain, PhD, Deputy Scientific Director Forbes D. Porter, MD, PhD, Clinical Director

Cell Biology and Metabolism Program (CBMP)	Program in Cellular Regulation and Metabolism (PCRM)	Program on Developmental Endocrinology and Genetics (PDEGEN)	Program In Developmental Neuroscience (PDN)	Program on Genomics of Differentiation (PGD)	Molecular Medicine Program (MMP)	Program in Reproductive and Adult Endocrinology (PRAE)
Juan S. Bonifacino Program Head Gisela Storz Deputy Program Head Anirban Banerjee Mary Lilly Jennifer Lippincott-Schwartz	Alan G. Hinnebusch Program Head Henry Levin Deputy Program Head Mary Dasso Thomas Dever Chi-Hon Lee	Forbes Porter Program Head Greti Aguilera Jeffrey Baron Janice Chou Maria Dufau David Klein Anii Mukherjee Ida Owens Constantine Stratakis Jack Yanovski Joan Han - ACI Angela Delaney - ACI	Chris J. McBain Program Head Tamás Balla Dax Hoffman Y. Peng Loh Stanko Stojilkovic Mark Stopfer	Brant Weinstein Program Head Karl Pfelfer Deputy Program Head Sohyun Ahn Harold Burgess Michael Cashel	Tracey Rouault Program Head Stephen Kaler Program in Physical Biology (PPB)	Alan DeCherney Program Head Lynnette Nieman Deputy Program Head Karel Pacak Erin Wolff - ACI
Matthias Machner Program on Pediatric Imaging and Tissue Sciences	Mihaela Serpe Yun-Bo Shi Program In Perinatal			Ajay Chitnis David Clark Robert Crouch Igor Dawid Melvin DePamphilis Bruce Howard	Joshua Zimmerberg Program Head Sergey Bezrukov Robert Bonner	
(PPITS) Peter J. Basser Program Head Amir Gandjbakhche	Research and Obstetrics (PPRO) Roberto Romero Program Head			Judith Kassis James Kennison Judith Levin Paul Love Todd Macfarlan Richard Maraia Keiler Omete	Leonid Chernomordik Leonid Margolis Ralph Nossal Donald Rau	
				Keiko Ozato Thomas Sargent		

Administration			Laboratories		Office of the Scientific Director						
Administrative Management Branch (AMB)	Liaison & Training	Office of the Clinical Director (OCD)	Section on Child and Family Research (SCFR)	Section on Molecular Neurobiology (SMN)	Section on Nervous System Development and Plasticity (SNSDP)	Section on Physical Biochemistry (SPB)	Bone and Extracellular Matrix Branch (BEMB)	Laboratory of Cellular and Molecular Neurophysiology	Laboratory of Clinical Genomics (LCG)	Laboratory of Comparative Ethology (LCE)	Laboratory of Genomic Integrity (LGI)
Francie Kitzmiller Deputy Director Rebecca Preston &	Brenda Hanning Deputy Director	Forbes Porter Deputy Director Meg Kell Associate Director	Marc Bornstein Head	Andres Buonanno Head	R. Douglas Fields Head	Sergey Leikin Head	Joan C. Marini Branch Chief	(LCMN) Mark Mayer Head	Owen Rennert Head	Stephen Suomi Head	Roger Woodgate Head
Valerie Leftwood		1		1				1			1

Core Facilities		Research Animai Management Branch	Office of Education: Fellowship Training Programs						
Biomedical Mass	Biomedical Mass Peter Backlund	(RAMB)			1	1	1		
Spectrometry Facility Molecular Genetics Lab	Forbes Porter	Joseph Schech	Office of Education (OE)	Pediatric Endocrinology	Internal Medicine/ Endocrinology	Pediatric Genetics	Maternal-Fetal Medicine	REI Fellows	
Microscopy and Imaging	James Russell	Head	Brenda Hanning	Constantine Stratakis	Lynnette Nieman	Constantine Stratakis	Roberto Romero	James Segars	
Computer Support Services Zebrafish Core			Director	Director	Associate Director	Director	Director	Director	
FACS (TBA)		Yvette Pittman Associate Director	Maya Lodish Deputy Director	• • •					

Deputy Branch Chiefs

NICHD Core Facilities: Resources to DIR!

Mass Spectrometry:

- High-end mass-spectrometric services to scientists
- Proteomics
- Biomarker discovery
- Protein characterization
- Detection of post-translational modifications

Zebrafish Core:

- Consultation
- Access to equipment and reagents
- Service in the area of zebrafish genetics

Molecular Genomics Laboratory:

- Deep sequencing
- Project data analysis

Microscopy and Imaging:

- Light microscopy
- Electron microscopy services
- Microscopy Class, annually

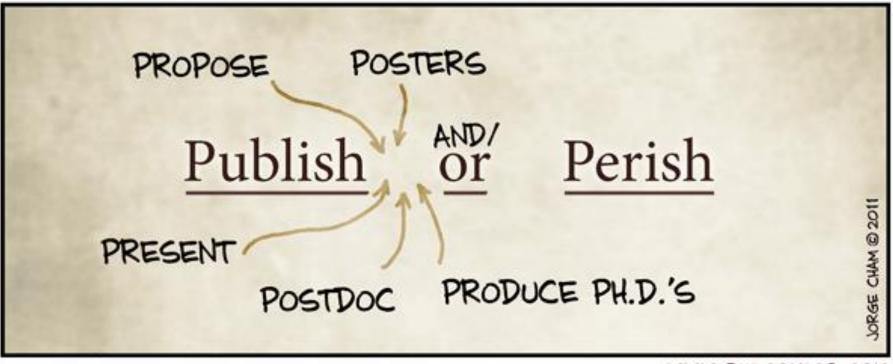
Computer Support Services:

- Clinical informatics
- Bioinformatics
- Biovisualization
- Web services
- Core IT support

https://science.nichd.nih.gov/con fluence/display/bioviz/Welcome

http://annualreport.nichd.nih.gov/index.html

Ps for Success!



WWW. PHDCOMICS. COM

Success in Science: Your training commitments

- Science, Publications
- Oral Communication
- Written Communication
- Teaching and Mentoring
- Leadership

- Career Exploration
- Grantsmanship
- Job Searching
- Team Science
- Transferrable Skills

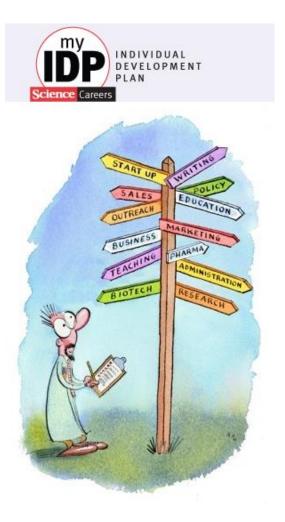
Think about the ENTIRE PACKAGE and try to find the holes in your CV/resume to make yourself more competitive in the job market.

NICHD-DIR Office of Education

Key programs/activities:

- Public speaking workshops (giving one-hour talks and "elevator pitches")
- Job interviewing
- Writing and editorial services
- Annual one-day grant writing workshop
- Study section education
- Career presentations and counseling
- CV, resume, cover letter review
- College teaching workshop series associated with the University of Maryland
- Annual "Becoming an Effective Scientist" postbac course

Career Planning Tool

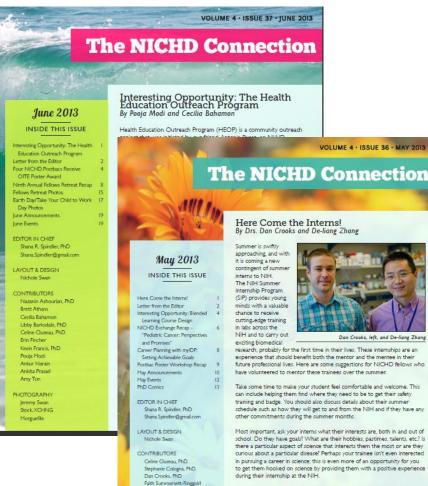


myIDP provides:

- •Exercises to help you examine your skills, interests, and values
- •A list of 20 scientific career paths with a prediction of which ones best fit your skills and interests
- •A tool for setting strategic goals for the coming year, with optional reminders to keep you on track
- •Articles and resources to guide you through the process

NICHD-DIR Fellows Newsletter

- NICHD Connection, a monthly newsletter run and written by fellows, continues its focus on mentoring, career, and academic programs
- A way to reach out to our NICHD intramural community



De-liang Zhang, PhD

PHOTOGRAPHY

Jeremy Swan Stock,XCHNG

Morguefile

The detail-oriented nature of science can be overwhelming to young trainees. Therefore, it is important to point out that the journey is more important than the destination. In other words, the ability of a trainee to

(continued on page 3)

Grant Opportunities for Intramural Fellows

- PRAT (NIGMS)
- F32 (NIH Postdoc Fellowship)
- K99/R00-NIH Pathway to Independence Award
- Intramural AIDS (OITE)

- NICHD Fellows Intramural Grants Supplement (FIGS)
- FARE (Fellows Award for Research Excellence)
 - <u>https://www.training.nih.gov/felcom/fare</u>

Opportunities to Present Locally

- NICHD Fellows Retreat: <u>http://retreat.nichd.nih.gov/</u>
- NIH Scientific Interest Groups: http://www.nih.gov/sigs/sigs.html
- Journal Clubs, Lab Meetings, and Research Program Seminars

NICHD Developing Talent Scholars Program:

Committed to train, support, and sustain a diverse cohort of individuals traditionally underrepresented in science

Objectives:

- To provide a superlative research and mentoring experience scholars
- To tailor an academic and professional skills development program to the needs of the individual trainee
- To foster networking skills and collaboration across NICHD and NIH
- To guide the scholar, on a continuing basis, in his or her continued professional development through an alumni liaison program



Name: Dezmond Taylor-Douglas Title: Third year MD/PhD student, Howard University College of Medicine NICHD Advisor: Jack Yanovski, MD, PhD

NICHD Fellows Recruitment Incentive Award (FRIA)

- <u>Objective</u>: to encourage DIR investigators to appoint postdoctoral fellows to their laboratories who come from underrepresented backgrounds in science
- PI awardees will exhibit superior mentoring ability, and commitment to the career development and academic progress of their fellows
- The PI will work with the fellow to identify a secondary mentor outside of the laboratory and meet at least four times per year to discuss the fellow's individualized training plan and research progress

For Trainees Outside The NIH

https://www.training.nih.gov/for trainees outside the nih

The Office of Intramural Training & Education (OITE)'s workshops and science skills tutorials are now available online to trainees across the United States and around the world.

Videocasts on designing and delivering successful oral and poster presentations, using LinkedIn effectively, grant writing, CV and resumes, networking, and more

Webinars and guidelines covering a variety of science skills: keeping a lab notebook, attending your first scientific meeting, preparing for your professional school interview, Medical School Application Schedule for Admission in August 2015.

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