NIH INTRAMURAL TRAINING OPPORTUNITIES

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The National Institutes of Health

“The Nation’s biomedical research institution”

- An Agency of the Department of Health and Human Services
- Composed of 27 Institutes and Centers (IC)
- Two major divisions – extramural and intramural

www.nih.gov
The Intramural Research Program
(www.irp.nih.gov)

- Major research 23 NIH Institutes or Centers; campuses in MD, NC, MT, MA, AZ and MI

- Houses the NIH Clinical Center, a hospital dedicated exclusively to biomedical research

- Basic, translational and clinical research with very broad STEM discipline representation

- Many short- and long-term training opportunities

Office of Intramural Training and Education:
https://www.training.nih.gov/
Trans-NIH Training Opportunities
NIH Intramural SIP
https://www.training.nih.gov/programs/sip

- Eight+ week research experience at all levels
  - High School
  - College (including the CCSEP)
  - Medical/Dental
  - Graduate (MS, MPH, PhD, PharmD, PsyD, etc)

- Opportunities on all NIH campuses; paid and volunteer opportunities available

- Many workshops, journal clubs, and educational opportunities

- Science Skills Bootcamp for first-time researchers

- Pre-graduate/pre-professional and career advising

- End-of-summer poster session
The Undergraduate Scholarship Program (UGSP)

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

- Provides up to $20,000/yr to cover educational expenses for undergraduates who meet specific eligibility criteria:
  - U.S. citizen or permanent resident
  - GPA ≥ 3.3
  - Extreme financial need
  - Major in a field relevant to biomedical research

- All UGSP Scholars
  - Participate in SIP the year following the scholarship year
  - must work in the NIH IRP for one year in return for each scholarship year
NIH Intramural Postbac Programs

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

- Paid internships in an NIH intramural research group
  - Across many disciplines
  - One or two years
- Can work on any NIH campus
- Two programs, depending on when you graduated from college:
  - Within two years of graduation: Postbac IRTA Program
  - After two years: Technical IRTA Program
- All NIH postbacs are eligible to participate in the NIH Academy
The Graduate Partnerships Program (GPP)

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

- Students complete all or part of their dissertation research at the NIH
- PhD is granted by home university
- As short as 6 months or as long as several years
For More Senior Students
NIH Postdoc Basics

- Eligibility: < 5 years of relevant research experience since receipt of the doctoral degree
  - Intramural Research Training Award
  - Visiting Fellow (J1 visa)
- Appointment for up to 5 years
- First year stipend: $44,000 - $50,400
- $10,000 supplements for some specialties (chemistry, engineering, math)
- Health insurance provided, individual or family
- Ability to apply for K99/R00 and K22 grants
Finding Postdoc Positions at NIH

- Search listing of current postdoc openings on OITE Web site
- Email NIH scientists directly
  - Search the NIH ANNUAL REPORTS
  - Find contact information in NED
- Contact IC Training Directors to learn about opportunities in ICs of interest
Why is NIH so appealing?

- **Outstanding Research**
  - Collaborative and interactive community
  - Science education - at all levels
  - Global health partnerships – in many discipline

- **Greatly diverse and supportive environment**
  - NIH-SACNAS (Hispanics and Native Americans in Science) Chapter, LGBT Community, Felcom, VFC, Parenting Group, etc.

- **Outstanding Training and Career Advancement Resources**
  - Institutes and Centers Training Programs
  - Office of Intramural & Training Education Programs
OITE Programs

- Science Communication Courses
- Basic Writing and Writing papers workshop
- Science Communication Courses
- Grant Writing Workshops
- Scientists Teaching Science Certificate Program
- Translational Science Training Program
- Leadership and Management Programs: give more details in a separate slide
- Going to Graduate School/Going to Professional School Series
- Annual NIH Career Symposium
- Annual Graduate & Professional School Fair
- Annual Community College Day at NIH
- Summer Intern/Postbac/Graduate Student Poster Days
Finding Research Mentors

- Search the NIH INTRAMURAL INVESTIGATOR DATABASE (NIH ANNUAL REPORTS) at https://www.training.nih.gov/programs

- Search by scientific discipline at http://irp.nih.gov/our-research/principal-investigators

- Contact NIH Intramural Training Directors for IC-specific information https://www.training.nih.gov/ic_contacts

- Read the information on finding mentors at https://www.training.nih.gov/mentoring_guidelines
Emailing PIs

- Briefly introduce yourself
- Discuss your prior research experience
- Explain why you are interested in their lab and briefly discuss your career goals
- Let them know you have applied to the summer and/or postbac program
- Make it easy for them – attach your CV
- No bulk emails – no generic emails – no poorly written emails
I am currently a senior at the University of XX, majoring in chemistry with hopes of pursuing a PhD. For the past two summers, I worked for Dr. Esteemed Researcher at the Mayo Clinic in Rochester, MN. I am extremely interested in strengthening my research abilities especially in genetics through a post-baccalaureate program at NIH. Dr. Researcher suggested I contact you.

During my time in Dr. Researcher’s lab, I examined the onset of the learned response to nicotine using a novel conditioned place preference paradigm mutant mice. I was able to help design this assay and use my creativity and innovation to make the assay more robust and effective. I was most excited when working on the experimental design. Additionally, I learned many new molecular biology techniques and strengthened my data analysis skills. Most of all, I developed an even greater passion for research, especially in genetics.

I am passionate about working on research that will impact the way we treat diseases such as your work studying cellular developmental processes in zebrafish that may lead to a better understanding of autoimmune diseases and cancer. If given the opportunity, I believe I possess the qualities that will allow me to be an integrative and productive member in your lab.

I have applied to the NIH IRTA Program, and I have attached my resume for your review. If there is any other information I can provide, please contact me by phone at 555-555-5555 or by email at myemail@mail.usi.edu. I look forward to hearing from you. Thank you for your time and consideration.
Hello! My name is Applicant Student and I am a senior at Big Name U. Throughout my six years in the science, math, computer science programs, I have come to increasingly appreciate and respect the field of research. I believe that an internship in your laboratory would be the best place for me to pursue my interests.

I was a shy child, sensitive to the thoughts of others and the thoughts going on in my mind. Many a time, I found myself reflecting, trying to understand these thoughts. What makes us conscious of ourselves? How is personality shaped? How does the brain work and how does its functioning explain our thoughts and feelings? Recently, I have attributed my “ruminations” to an interest in psychology, and I have started reading some psychology articles in Scientific MIND and Psychology Today.

In addition to reading psychology articles, I have also partaken in rigorous scientific analysis and experiments. Most recently I was able to partake in various experiments including PCR, DNA sequencing, purification of plasmid DNA, DNA restriction analysis, colony transformation of E. Coli with plasmid DNA, and bacterial culture technique in my last summer internship. I have also enjoyed taking computer science and programming, which opened me to a whole new way of thinking. I wish to integrate my science training to the field of psychology, helping us understand the link between mind and matter.

Thank you for reading this letter and I look forward to hearing from you!
We will review some of the NIH Training Opportunities for Underrepresented Populations BUT keep in mind that those programs offer a VERY LIMITED number of positions. You should ALWAYS apply to the general programs, because you have the qualifications!
Some of the NIH Training Opportunities for Underrepresented Populations

National Institute for Allergy and Infectious Diseases (NIAID)

Intramural NIAID Research Opportunities (INRO) connects talented students from populations underrepresented in the biomedical sciences with training opportunities in immunology and infectious and allergic diseases at NIAID.

https://www.niaid.nih.gov/labsandresources/labs/training/inro/Pages/default.aspx
Some of the NIH Training Opportunities for Underrepresented Populations

National Institute of General Medical Sciences

MARC Undergraduate Student Training in Academic Research (U-STAR) Awards (T34) provide support for undergraduate students who are underrepresented in the biomedical and behavioral sciences to improve their preparation for high-caliber graduate training at the PhD. Level. [http://www.nigms.nih.gov/Training/MARC/Pages/USTARAwards.aspx](http://www.nigms.nih.gov/Training/MARC/Pages/USTARAwards.aspx)
Some of the NIH Training Opportunities for Underrepresented Populations

National Eye Institute (NEI)
The Diversity In Vision Research & Ophthalmology (DIVRO).

NEI seeks to increase the number of African-American, Latino, and Native American scientists in vision research by promoting career development opportunities for science students interested in pursuing a career in research.

http://www.nei.nih.gov/training/diversity_in_research.asp
Some of the NIH Training Opportunities for Underrepresented Populations

National Cancer Institute (NCI)

NCI recognizes the importance of identifying, training, and mentoring talented researchers from populations underrepresented in science and individuals from disadvantaged backgrounds.

All interns are provided with travel support and a monthly stipend plus a 90 day housing subsidy.

https://icrc.nci.nih.gov/icrc/
Some of the NIH Training Opportunities for Underrepresented Populations

National Institute of Drug Abuse (NIDA)

Intramural Research Training Award (IRTA) Positions for under-represented post-bac, graduate students, and post-doctoral fellows: NIDA SD Fellowship for Diversity in Research.

http://irp.drugabuse.gov/docapp.php
Some of the NIH Training Opportunities for Underrepresented Populations

U.S.–Mexico Drug Abuse Prevention Research Fellowship
The NIDA US-Mexico Drug Abuse Prevention Research Fellowship provides a unique opportunity for Mexican researchers to obtain postdoctoral training with a NIDA-supported U.S. mentor.

http://www.drugabuse.gov/international/us-mexico-drug-abuse-prevention-research-fellowship
NIH Intramural Database

NIH Intramural Research Reports Search Results

Searching for "toxicology" in all NIH Institutes/Centers for the year 2013

36 Annual Reports found

1. AA000213 (2013) Assessment, Treatment, and Pharmacological Interventions in Alcoholic Patients

   David T. George, MD

   The following projects have been or are currently being conducted by CATE. 1) Modulation of central glutamate by acamprosate A prevalent theory states that progressive emergence of a hyperglutamatergic state is key to the pathophysiology of alcoholism, and is associated both with emotional dys...

   http://intramural.nih.gov/search/searchview.jsf?pid=070780
Elements of Career Planning

Know Self

School/Job

School/Job search

Prepare materials
Gain credentials
Try it on

Know Options
Elements of Career Planning

- Know Self
- Know Options
- Gain credentials
- Try it on
- Job search
- Job

Know Self ↔ Know Options
Tips for Success

- Do your homework when looking for research mentors.
- Be sure of your:
  - Level of confidence and commitment
  - Academic preparation
  - Hands-on skills
  - Professional skills
- Get to know the NIH and all of the resources available:
  - OITE moving guide
  - OITE and IC orientations
  - Trainee career development and advising
- Make a plan for your scientific and professional success; get help following it.
The NIH Cares About You!

- **www.nih.gov** (and IC links) for health information for you, your family and your community
- **www.training.nih.gov** for OITE career and professional development workshops, videocasted workshops, and our career blog
- Connect with me on Linked-In
- Watch previous OITE career workshops and read our career blog at [http://oitecareersblog.wordpress.com/](http://oitecareersblog.wordpress.com/)
- Email me at [Elena.Hernandez-Ramon@nih.gov](mailto:Elena.Hernandez-Ramon@nih.gov)
Useful Web Sites

- www.nih.gov for main NIH web site and links to IC webpages
- For more on the IRP: www.irp.nih.gov
- Training at NIH (OITE):  www.training.nih.gov
- Videocasts and other online career resources: https://www.training.nih.gov/nih_resources
- Job opportunities at NIH and in the IRP: http://www.jobs.nih.gov/
Use your all your networks!!

- Family and friends
- College/University
- LinkedIn
- Professional Societies: SOT, HOT!!