

National Advisory Child Health and Human Development Council

September 12, 2022

OPEN SESSION

Chris J. McBain, PhD
Acting Scientific Director

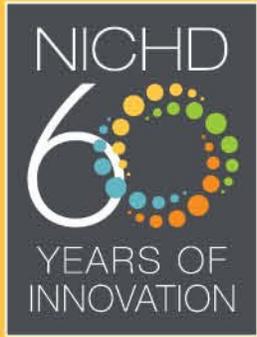


Eunice Kennedy Shriver National Institute
of Child Health and Human Development



Outline

- NICHD Intramural Program Overview
- Budget & Personnel Updates
- Office of Education Updates
- Howard University Partnership



NICHD Intramural Program Overview

NICHD Intramural Program

- The NICHD Intramural Research Program (IRP) includes two Divisions:
 - Division of Intramural Research (Basic, Clinical, and Translational)
 - Division of Intramural Population Health Research (Epidemiological)



Who we are: NICHD DIR in numbers

- Total personnel of ~707 employees
 - 63 PIs (53 Tenured; 8 Tenure-Track; 2 Assistant Clinical Investigators)
 - 54 Staff Scientists
 - 271 trainees (graduate, postbac, postdoctoral and clinical fellows)
- 12 scientifically based affinity groups (from developmental & cell biology to physics, neurosciences, endocrinology & mol. genetics, pre/perinatal care, reproduction & infertility)
- 69 Clinical Protocols
- Accredited medical training programs:
 - Pediatric Endocrinology
 - Adult Endocrinology
 - Pediatric and Adolescent Gynecology
 - Reproductive Endocrinology and Infertility
 - Medical Genetics (with NHGRI)
 - Perinatal Research and Obstetrics (Wayne State Univ/PRB)



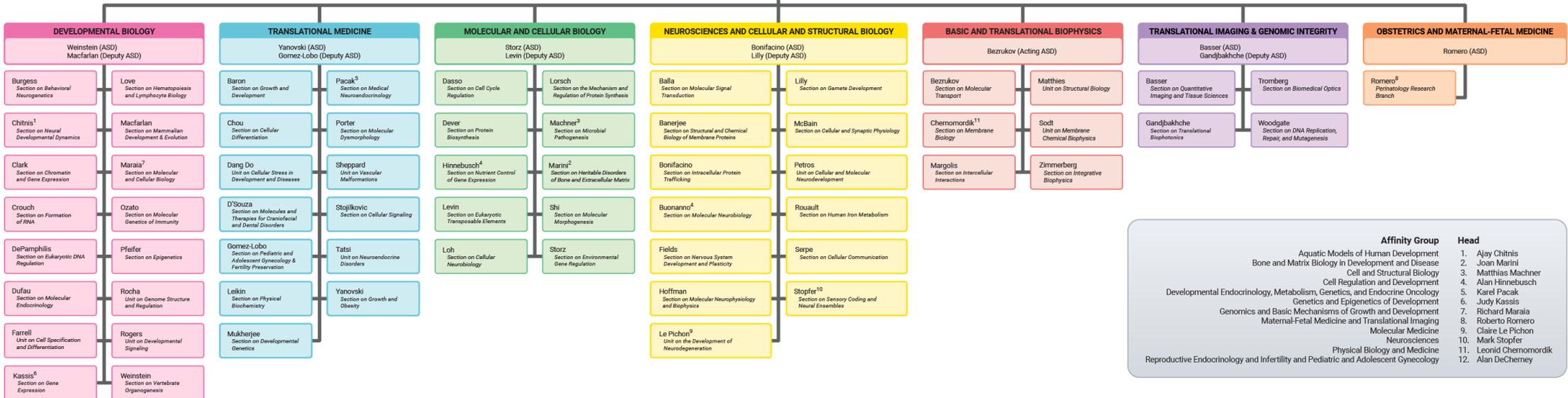
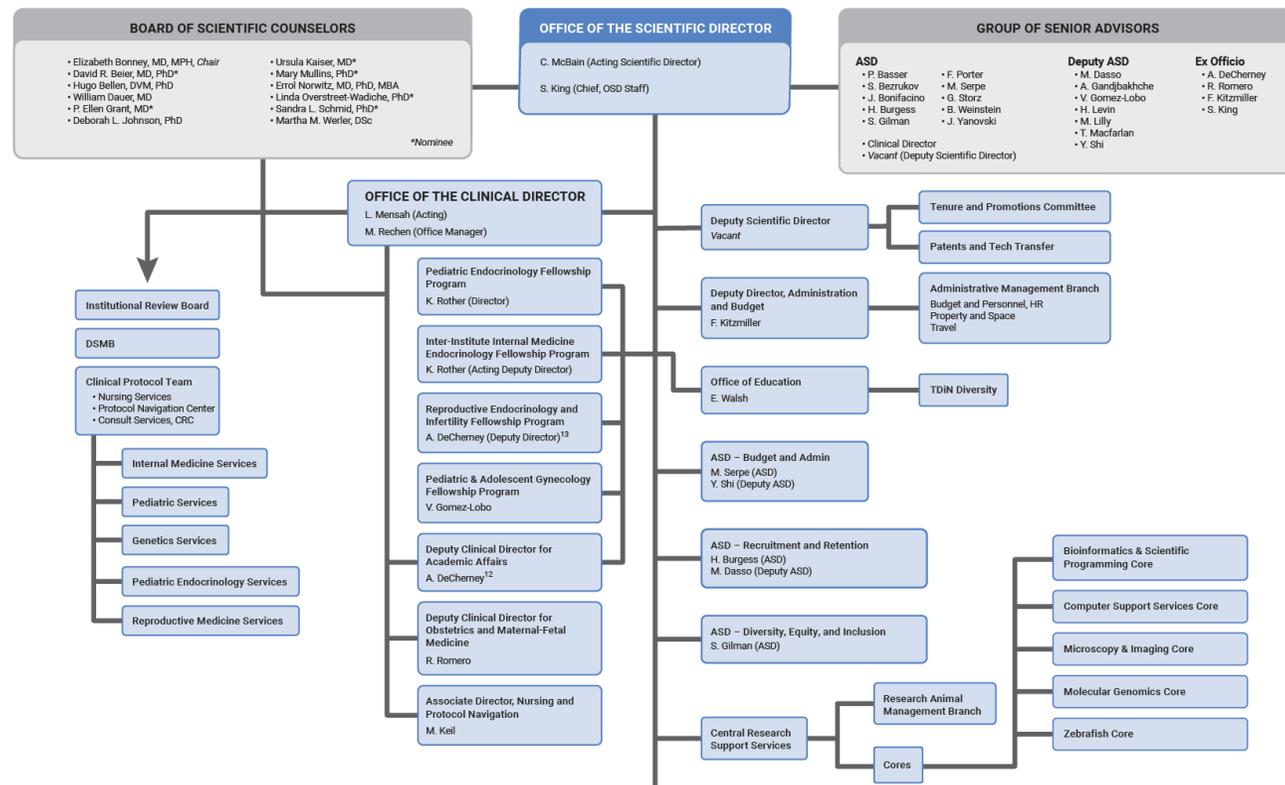
NICHD Division of Intramural Research

- Two-Tiered Structure
 - Investigators self-assembled into 12 scientific **Affinity Groups**, fostering communication around a scientific area or theme.
 - Administratively organized into functional groups loosely based around buildings. **Associate Scientific Directors** (ASD) oversee the scientific management and shared resources of their building but do not oversee individual lab budgets.
- Both Affinity Groups and Associate Scientific Directors play a role in mentoring Tenure-Track Investigators
- The Scientific Director works directly with each PI on their budget and resource needs
- Additional ASDs manage administrative portfolios such as Budget and Administration and Recruitment and Retention.
- Two new ASD positions were created in 2022: ASD for Translational Research and ASD for Equity, Diversity, Inclusion, and Accessibility.



Division of Intramural Research

Updated April 2022



Affinity Group

- Aquatic Models of Human Development
- Bone and Matrix Biology in Development and Disease
- Cell and Structural Biology
- Cell Regulation and Development
- Developmental Endocrinology, Metabolism, Genetics, and Endocrine Oncology
- Genetics and Epigenetics of Development
- Genomics and Basic Mechanisms of Growth and Development
- Maternal-Fetal Medicine and Translational Imaging
- Molecular Medicine
- Neurosciences
- Physical Biology and Medicine
- Reproductive Endocrinology and Infertility and Pediatric and Adolescent Gynecology

Head

- Ajay Chitnis
- Joan Marini
- Matthias Machner
- Alan Hinnebusch
- Karel Pacak
- Judy Kassis
- Richard Maraia
- Roberto Romero
- Claire Le Pichon
- Mark Stopfer
- Leonid Chernomordik
- Alan DeCherney



Affinity Group Membership

Aquatic Models of Human Development

Chitnis, Ajay [Head]

Burgess, Harry
Feldman, Ben (Core)
Rogers, Katherine
Weinstein, Brant

Bone & Matrix Biology in Development & Disease

Marini, Joan [Head]

D'Souza, Rena (NIDCR)
Leikin, Sergey

Cell Regulation & Development

Hinnebusch, Alan [Head]

Dasso, Mary
Dever, Tom
Dufau, Maria
Farrell, Jeff
Levin, Henry
Lorsch, Jon (NIGMS)
Serpe, Ela
Shi, Yun-Bo

Cell & Structural Biology

Machner, Matthias [Head]

Banerjee, Anirban
Buonanno, Andres
Bonifacino, Juan
Lilly, Mary
Storz, Gigi

Developmental Endocrinology, Metabolism, Genetics, & Endocrine Oncology

Pacak, Karel [Head]

Baron, Jeff
Chou, Janice
Dang Do, An (ACI)
Merke, Deborah (CC)
Mukherjee, Anil
Porter, Denny
Sheppard, Sarah
Stojilkovic, Stanko
Tatsi, Christina (ACI)
Yanovski, Jack

Genetics & Epigenetics of Development

Kassis, Judy [Head]

Love, Paul
Macfarlan, Todd
Ozato, Keiko
Pfeifer, Karl
Rocha, Pedro

Genomics & Basic Mechanisms of Growth & Development

Maraia, Richard [Head]

Clark, David
Crouch, Bob
Depamphilis, Mel
Woodgate, Roger

Molecular Medicine

Le Pichon, Claire [Head]

Rouault, Tracey

Maternal-Fetal Medicine & Translational Imaging

Basser, Peter [Head]

Fields, Doug
Gandjbakhche, Amir
Margolis, Leonid
Romero, Roberto
Tromberg, Bruce (NIBIB)

Neurosciences

Stopfer, Mark [Head]

Balla, Tamas
Hoffman, Dax
Loh, Y Peng
McBain, Chris
Morton, Jamie (DiPHR)
Petros, Tim

Physical Biology & Medicine

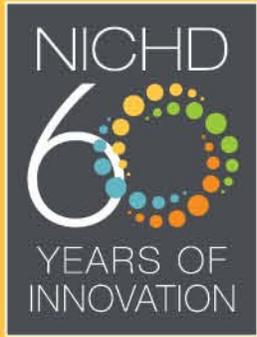
Chernomordik, Leonid [Head]

Bezrukov, Sergey
Matthies, Doreen
Sackett, Dan (SS)
Sodt, Alex
Zimmerberg, Josh

Reproductive Endocrinology & Infertility and Pediatric & Adolescent Gynecology

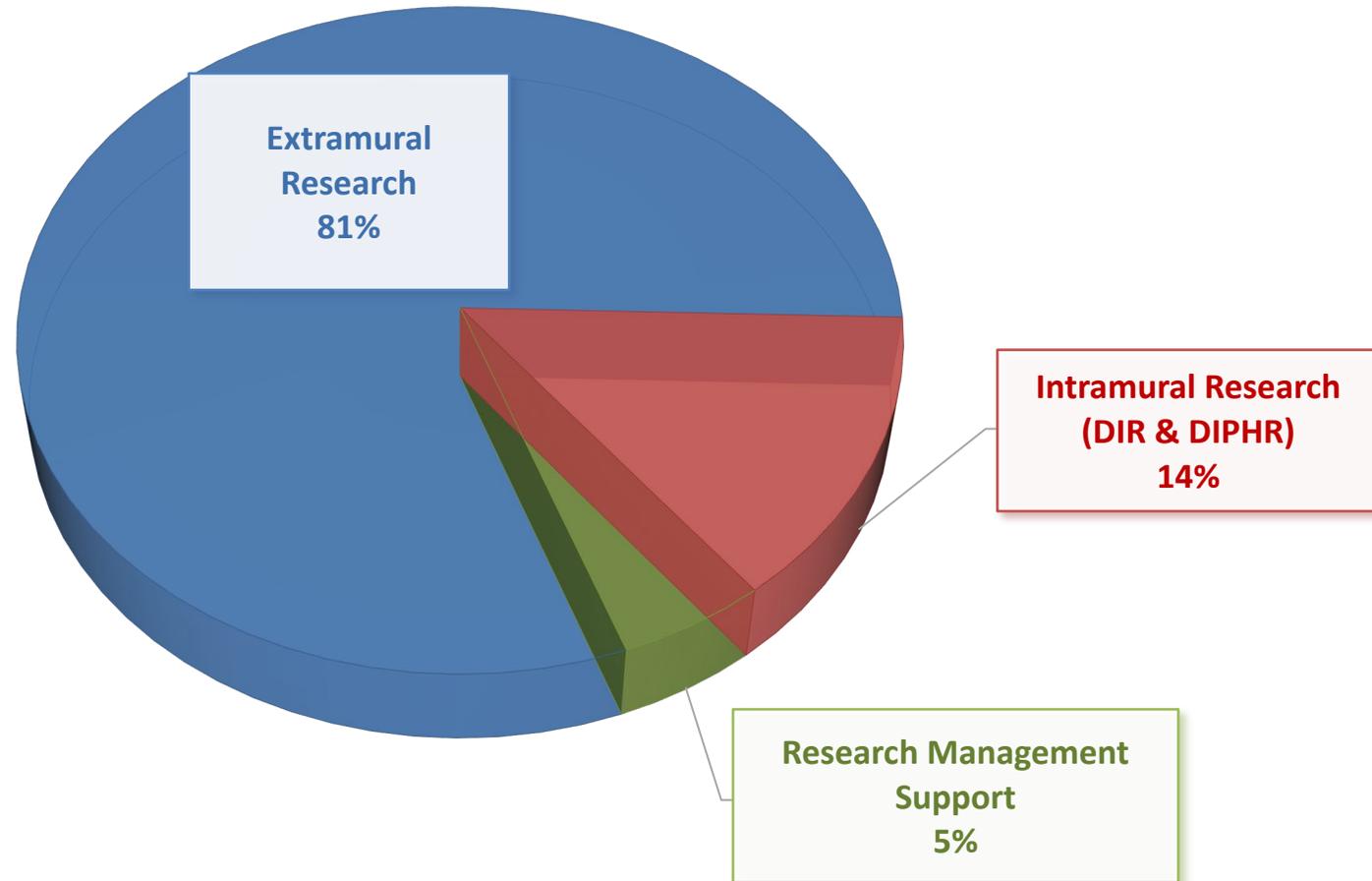
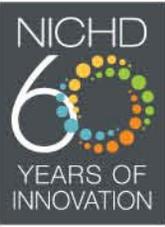
Decherney, Alan [Head]

Gomez-Lobo, Veronica

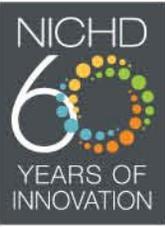


Budget & Personnel

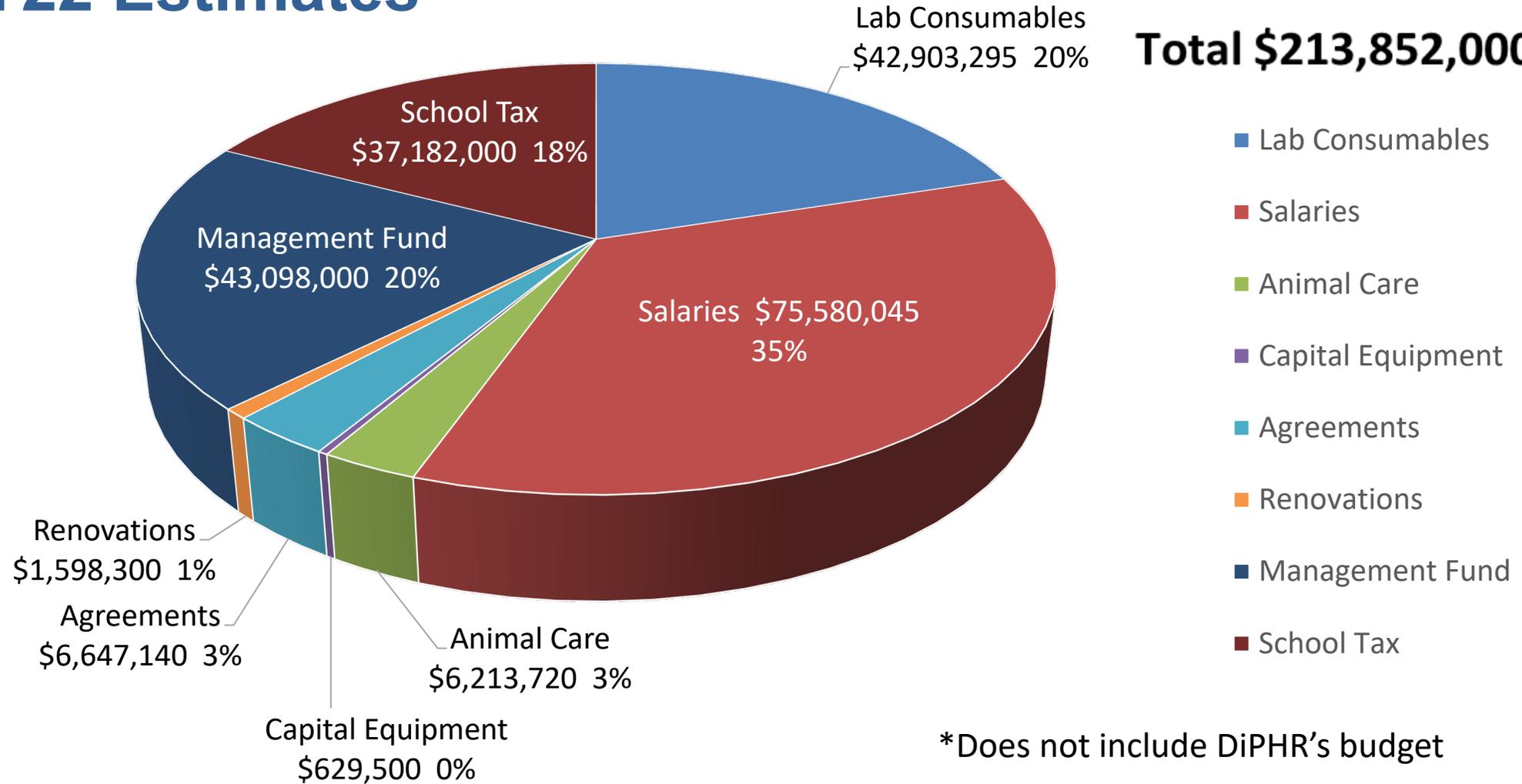
NICHD Intramural Program FY2022 Allocations



NICHD DIR Budget FY22 Estimates



Total \$213,852,000



*Does not include DiPHR's budget



Budget: FY21 & FY22 Challenges

FY21

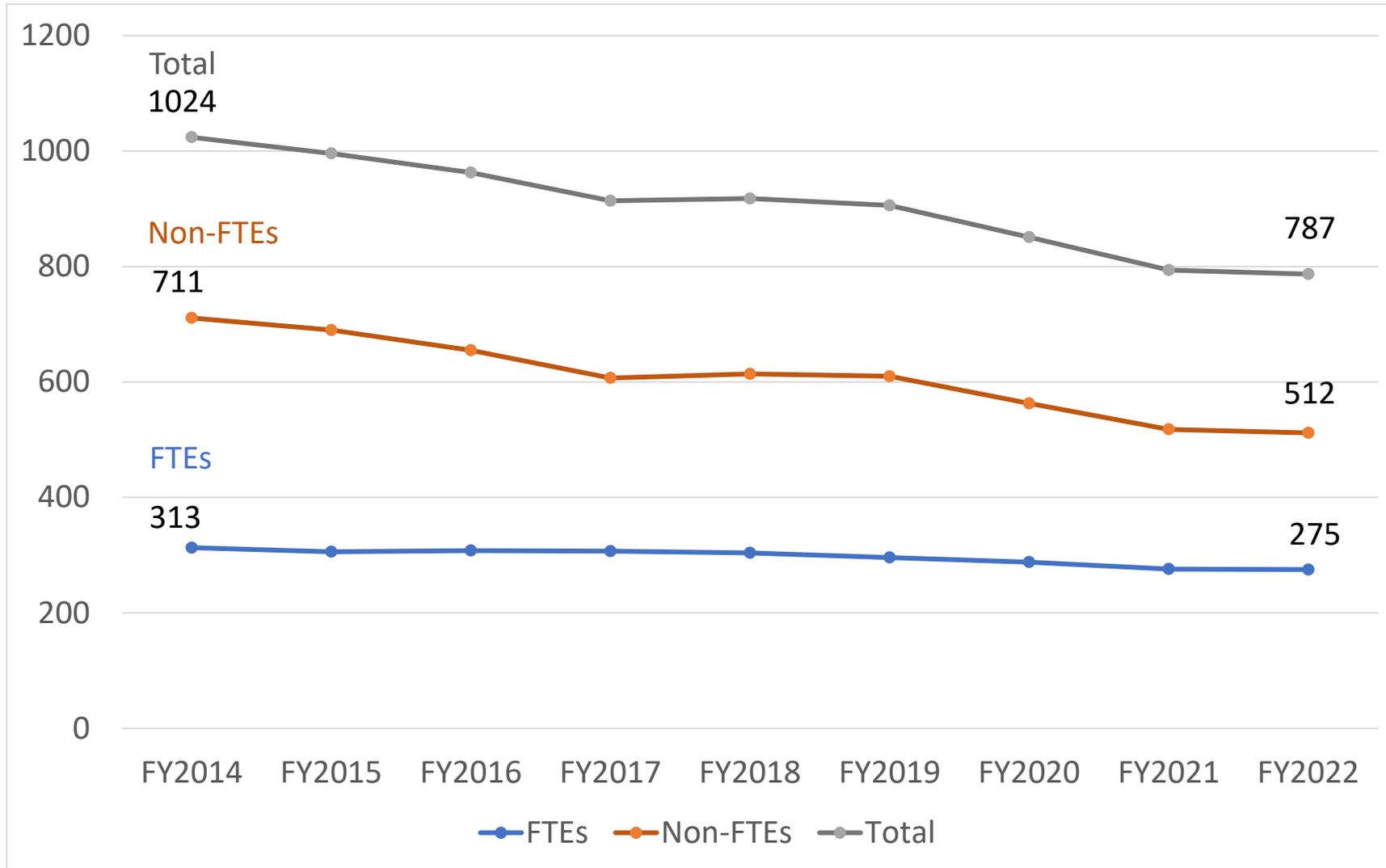
- The Management Fund and School Tax taps increased by 4.5% or \$3.3M
- Personnel costs increased by more than \$4.8M
- Cost savings measures included:
 - A 10% cut was put on all laboratory consumables budgets (\$1.2M)
 - Fellow stipend vacancy recovery - leaving 1 vacancy per PI (\$1.7M)
 - Prorated/delayed tenure-track recruitments (\$1.6M)
 - Deferred ACI recruitments to FY22 (\$564K)
 - Other savings (\$1.2M)

FY22

- While the DIR's budget increased to \$213,852,000, growing fixed costs created a deficiency
- Faculty recruitments have been put on hold
- Opportunities such as the NICHD Scientific Director's Awards were cancelled for FY22-23
- Further budget reductions were applied to labs based on site visit scores, averaged across the last two cycles
 - 29 positions were affected (\$1.2M) and consumables were relinquished (\$1.2M)

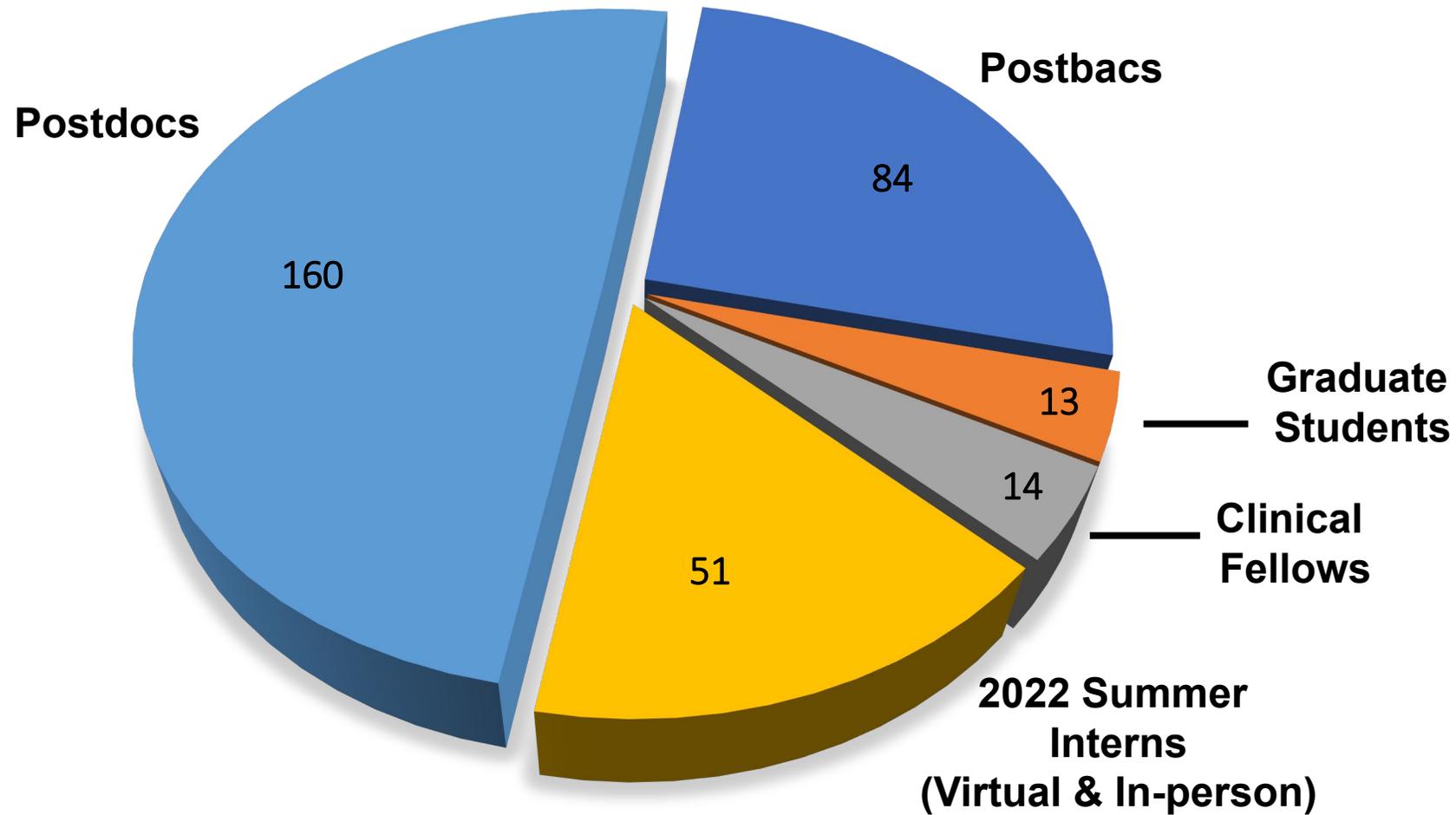


DIR Personnel Trends

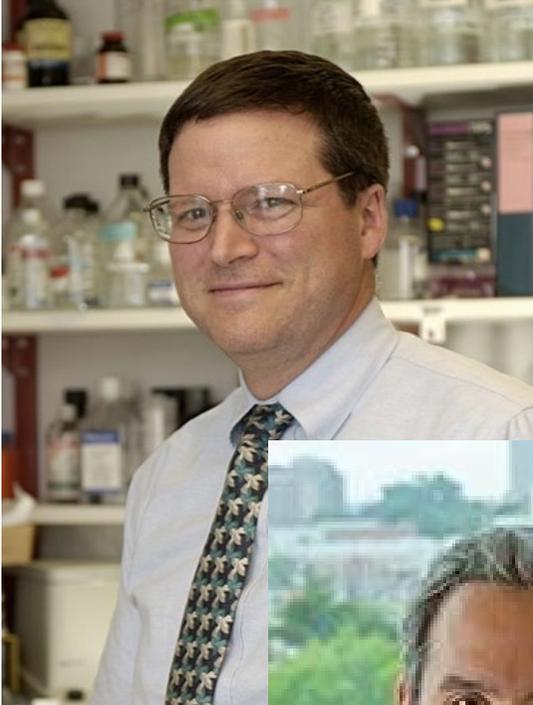


NICHD Intramural Trainee Numbers

As of April 2022, 322 current total



New Associate Scientific Directors



Forbes Porter, MD, PhD

ASD for Translational Research



Stephen Gilman, ScD

ASD for Equity, Diversity, Inclusion, and Accessibility



New Associate Scientific Directors

Harry Burgess, PhD

ASD for Recruitment and Retention



Mary Dasso, PhD

Deputy ASD for Recruitment and Retention





Staff Changes

Una Grewal, PhD, MPH

December 3, 2021: Director, Division of Population Health Research (DiPHR)

Served as acting director 2020-2021 and deputy director of DiPHR 2013-2020

Dr. Grewal is a perinatal epidemiologist whose primary research focuses on fetal growth and pregnancy outcomes, especially in relation to maternal nutrition.

Staff Changes



Laverne Mensah, MD, FACOG, FACS, FASCO

May 31, 2022: Acting Clinical Director

Served as NICHD's first Deputy Clinical Director December 2020-March 2022

Board certified in Obstetrics and Gynecology

Dr. Mensah has expertise in program development, implementation, and evaluation as well as unique operational and regulatory clinical research experience.

Staff Changes: Animal Program



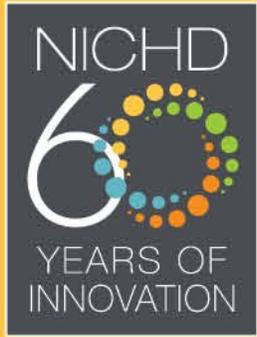
Robin Kastenmayer, DVM, PhD

Stepped down as Animal Program
Director and Senior Veterinarian

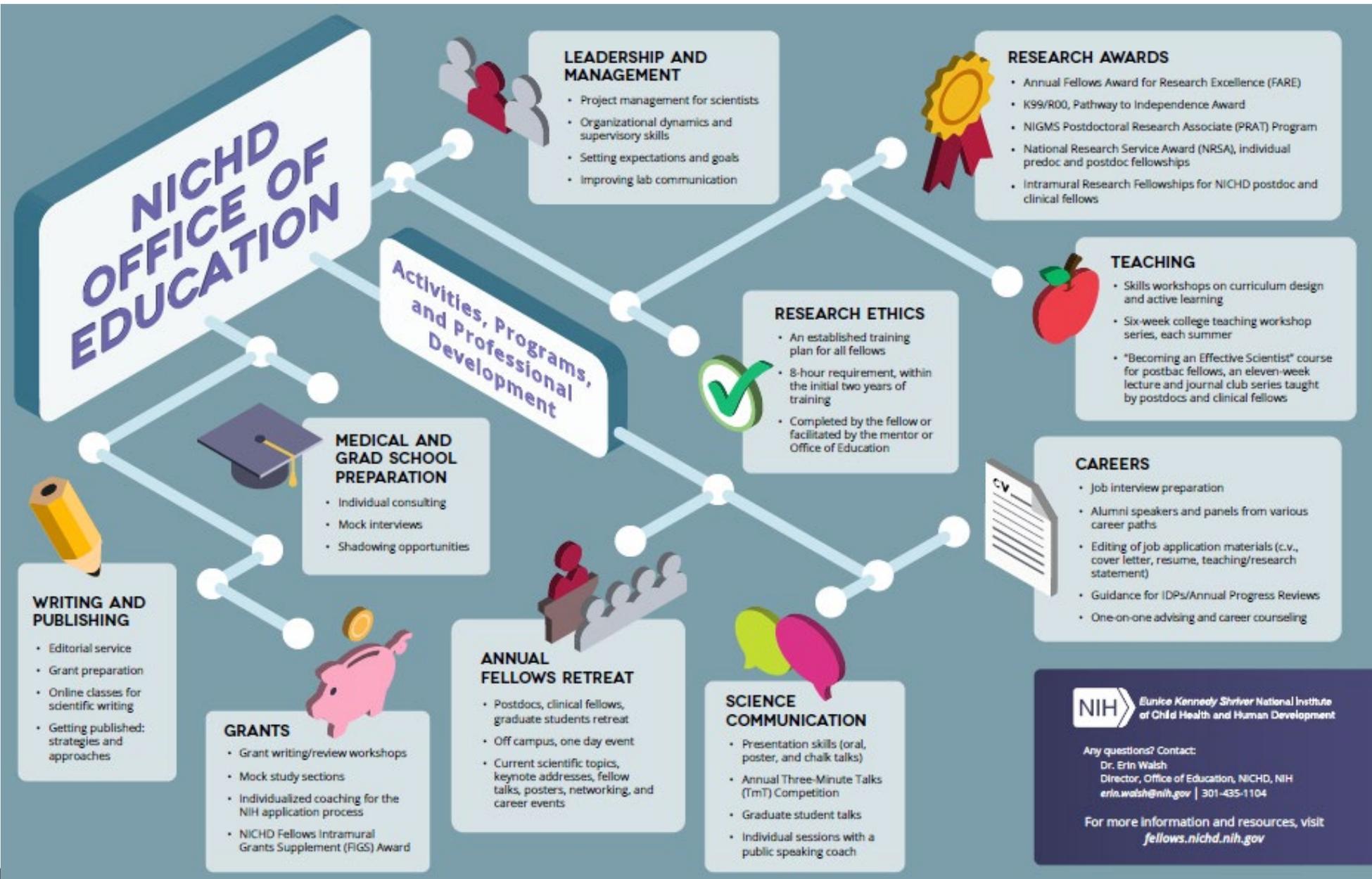


Rachael Labitt, DVM, MS

May 1, 2022: Appointed Acting Animal
Program Director and Senior
Veterinarian



Education Updates



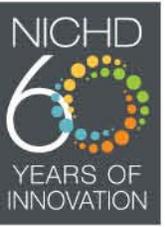
NIH Eunice Kennedy Shriver National Institute of Child Health and Human Development

Any questions? Contact:
Dr. Erin Walsh
Director, Office of Education, NICHD, NIH
erin.walsh@nih.gov | 301-435-1104

For more information and resources, visit
fellows.nichd.nih.gov



Office of Education: Key Activities



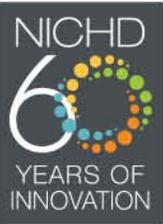
Public Speaking & Teaching: job talks, individual coaching, elevator speeches, syllabus & curriculum development with Univ. of Maryland (college teaching workshop summer series); graduate student talks (GST) during the PI monthly meetings

Grantsmanship & Publishing: annual grants workshop (full day); guidance with NIH submissions (K99, K22, PRAT), mock study section workshop, three-week grant writing course

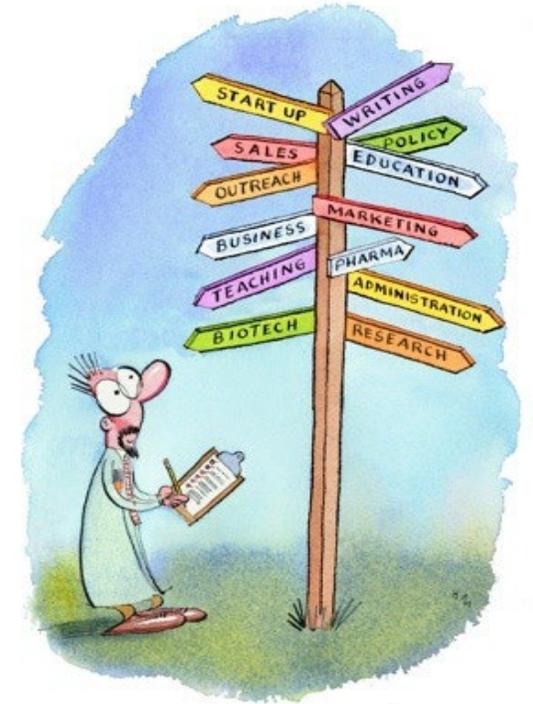
Careers: job interview preparation, networking, editing of job application materials, individualized guidance of IDPs/Annual Progress Reviews, exploration sessions for various career paths, preparing for industry success

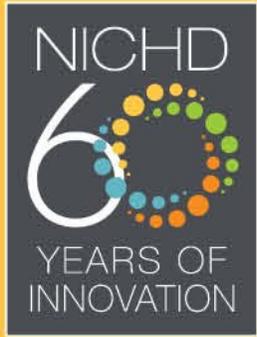


Office of Education: Key Activities



- Individual training & career counseling appointments with [all](#) postdocs (Ongoing since July 2021)
- Postbac Seminar Series: Career Exploration, Professional Development, & Graduate/Medical School Application Prep (New Cycle Began November 2021)
- Industry Jobs Webinar Series (December 2021-February 2022)
- Ad hoc Industry Job Consulting Sessions
- Annual Grant Writing Workshop (May 16-18)
- Three-minute Talks Science Communication Competition (June 30)
- 17th Annual NICHD Fellows Retreat (September 2022)
- NICHD Intramural Research Fellowships awarded to 4 fellows in its 5th cycle
- Currently developing an IDP and annual progress report system for NICHD postbac fellows
- Developing a new NICHD Trainee Exit Survey





Howard University Partnership Updates

NIH – Howard University: Master Affiliation Agreement

- This agreement was entered into by Howard University and the National Institutes of Health (NIH) Clinical Center (CC) and NIH Intramural Research Program (IRP) in March of 2019
- The intent of this agreement is to facilitate a model network for research collaborations and training
- Other institutions involved are University of Maryland and Virginia Commonwealth University





College of Arts and Sciences: Biology Honors Program Secondary Research Mentor

- PIs provide students the opportunity for a 2-year period of advanced mentored instruction and training to develop and execute their Honors research thesis and project. It is coordinated with Summer Internship Program to have continuity from the academic year
- Four students continued from first cycle that began in 2021 and a new cycle of 6 students began this spring who were paired with mentors in DIR and DIPHR



College of Medicine: OB/GYN Clerkship Research Mentors

- PIs serve as research mentors to third- or fourth-year medical students for their independent research projects
- 1 pairing was confirmed in the fall of 2021





Howard University Hospital/College of Medicine: OB/GYN Residency Research Mentors/Lecturers

- Dr. Jessica Gleason (postdoc) and Dr. Roberto Romero gave lectures in February to the OB/GYN residents during their didactic sessions



Career Planning and Professional Development Seminar Series: Exploring the MD, PhD, and MD-PhD Paths - Spring Semester Course

- 6-week seminar series launched in 2021
- Co-lead by Dr. Triesta Fowler (NICHD Office of Education – Director of Communications and Outreach) and Dr. Yvette Pittman (NINDS Office of Education Director)
- For undergraduates in the department of biology with an interest in research/medicine to give them exposure to medical and research careers and provide guidance on how to proceed with medical/graduate school admissions processes



Zykevisse Gamble

- ❖ **Current college level?**
Senior Human performance major,
Chemistry minor
- ❖ **Things learned?**
Proper interview skills, opportunities
within the NIH, and enhancements to my
resume!
- ❖ **Plans after graduation?**
NIH research or Graduate school
- ❖ **Terminal degree desired?**
MD/PhD



Ahlna Archibald

Senior, May 2022 Graduation, Biology Major, Chemistry Minor

- ★ NIH IRTA Post-Baccalaureate: National Cancer Institute with
Dr. Ashish Lal
- ★ MD or MD-PhD
- ★ Field of Medicine: Primary Care and Family Medicine
- ★ Field of Research: Cancer and Health Disparity Research
- ★ Career Goals:
 - Work directly with underserved patient populations.
 - Conduct research on issues affecting my patient
populations and run clinical trials

ahlna.archibald@gmail.com

Students were asked to do presentations on their career trajectory
based on lessons learned from the series

AN OVERVIEW OF MY CAREER TRAJECTORY BY

Christie Cambridge



UNDERGRADUATE

College Level:
Sophomore

Graduation year :
2024

MEDICAL SCHOOL

Ideally I would like to
matriculate into an
MD/PhD program
following completion of
my bachelors degree

RESIDENCY

Following medical
school I will match
into a surgical
residency program.

SURGERY

Target Career
Positions :

- Attending surgeon

COMMUNITY

I would like to create a
program for secondary
school students in my
home country, providing
them with early

EDGE CAREER



JaeLynn Taylor | Junior, Graduating May 2023 | Biology & Health Education Double Major

Goal Degree: MD/MPH

Concentration in Health Care and Prevention or Health Behavior and Health Education

What's Next?

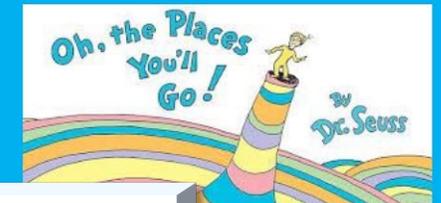
The Road to Med School!



What happens after Med school?

The world is my oyster!

- Clinical Practice as an OB/GYN
- Health Educator
- Public Health Official



Career Seminar Series: Final Project Career Plan Presentation



QUESTIONS?



Precision mouse models of childhood ALS caused by excess sphingolipid synthesis

Claire Le Pichon, PhD

Tenure-Track Investigator and Head, Unit on the Development of Neurodegeneration