

National Advisory Child Health and Human Development Council

September 9, 2025

OPEN SESSION

Chris J. McBain, PhD
Scientific Director



Outline

- NICHD Intramural Program Overview
- Budget & Personnel Updates
- Office of Education Updates
- Competitive Funding Opportunities



NICHD Intramural Program Overview

DIR in numbers

- Total personnel of ~700 staff
 - 66 PIs (56 Senior; 9 Tenure-Track; 1 Assistant Clinical Investigator)
 - 46 Staff Scientists
 - 235 trainees (graduate, postbac, postdoc, and clinical fellows)
- Basic and clinical programs are divided into 12 scientifically based affinity groups
- 59 Clinical Protocols
- Accredited Medical Training Programs
 - Pediatric & Adolescent Gynecology
 - Pediatric Endocrinology
 - Reproductive Endocrinology & Infertility

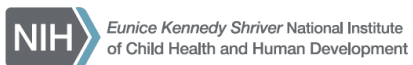


NICHD Intramural Program

Made up of 7 divisions:

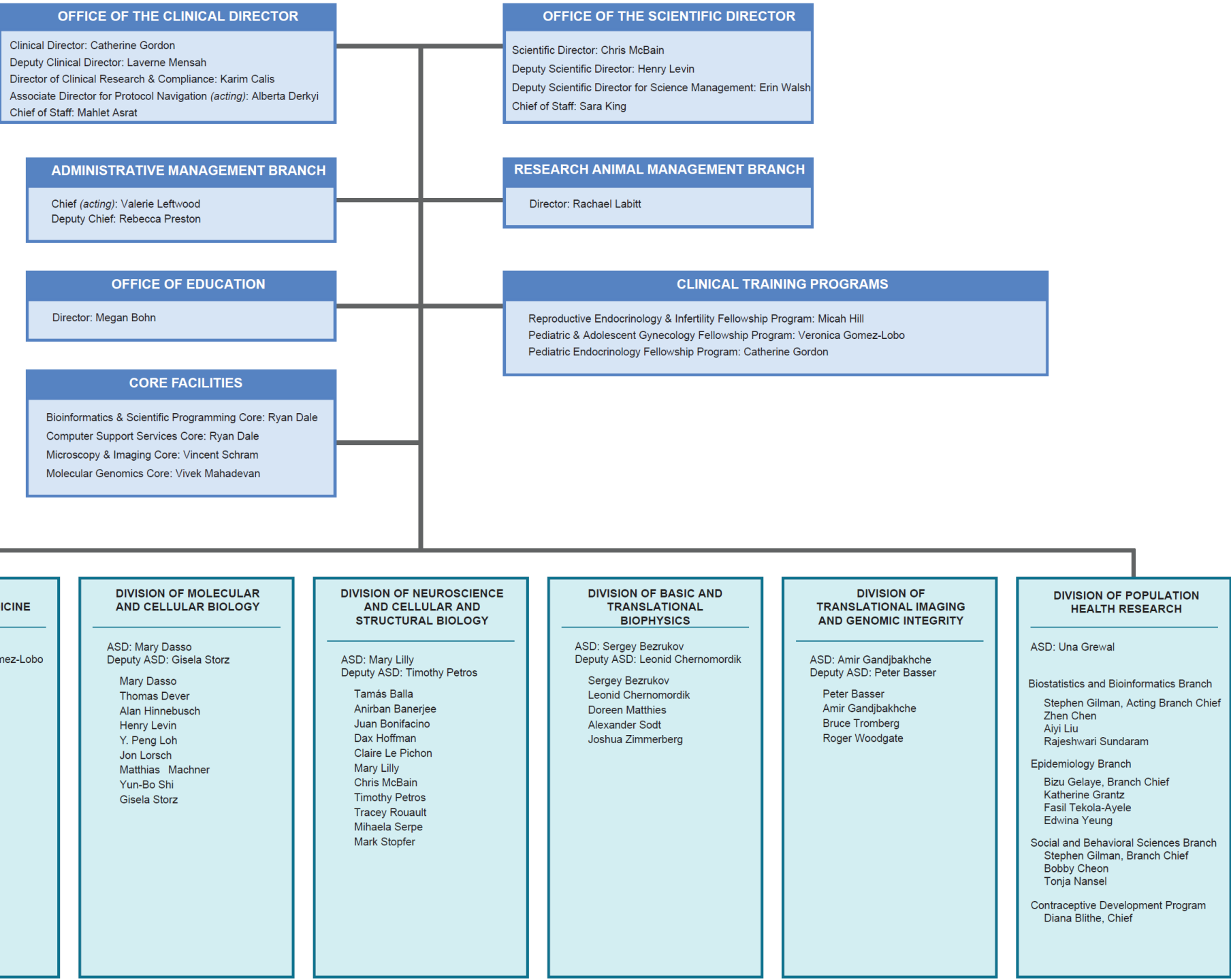
- Division of Developmental Biology
- Division of Translational Medicine
- Division of Molecular and Cellular Biology
- Division of Neurosciences and Cellular and Structural Biology
- Division of Basic and Translational Biophysics
- Division of Translational Imaging and Genomic Integrity
- Division of Population Health Research





NICHD Division of Intramural Research

Updated June 2025



Affinity Group Membership

Aquatic Models of Human Development

Chitnis, Ajay [Head]

Burgess, Harry
Farrell, Jeff
Rogers, Katherine
Sheppard, Sarah (secondary)
Weinstein, Brant

Developmental Endocrinology Metabolism, & Genetics

Baron, Jeff [Head]

Stojilkovic, Stanko [Deputy Head]
Dang Do, An
Gomez-Lobo, Veronica (secondary)
Liu, Aiyi (secondary)
Merke, Deborah (CC)
Porter, Denny
Sheppard, Sarah
Tatsi, Christina (ACI)
Yanovski, Jack

Physical Biology & Medicine

Sodt, Alex [Head]

Bezrukov, Sergey
Chernomordik, Leonid
Matthies, Doreen
Sackett, Dan (SS)
Zimmerberg, Josh

Bone & Matrix Biology in Development & Disease

Leikin, Sergey [Head]

Ferreira, Carlos
Gordon, Catherine (secondary)

Developmental Translational Imaging

Basser, Peter [Head]

Gandjbakhche, Amir
Romero, Roberto
Tromberg, Bruce (NIBIB)

Population Health Research

Gelaye, Bizu [Head]

Blithe, Diana
Chen, Zhen
Cheon, Bobby
Gilman, Stephen
Grantz, Katherine
Grewal, Una
Liu, Aiyi
Nansel, Tonja
Sundaram, Rajeshwari
Tekola-Ayele, Fasil
Yeung, Edwina

Cell & Structural Biology

Machner, Matthias [Head]

Banerjee, Anirban
Bonifacino, Juan
Lilly, Mary
Storz, Gigi
Woodgate, Roger

Genetics & Epigenetics of Development

Rocha, Pedro [Head]

Clark, David
Kassis, Judy (emeritus)
Love, Paul
Macfarlan, Todd
Ozato, Keiko
Pfeifer, Karl
Rosin, Leah

Women's Reproductive Health

Gomez-Lobo, Veronica [Head]

Blithe, Diana (secondary)
Gelaye, Bizu (secondary)
Gordon, Catherine
Grantz, Katherine (secondary)
Grewal, Una (secondary)
Hill, Micah (REI Training Program)

Cell Regulation & Development

Dever, Tom [Head]

Dasso, Mary
Hinnebusch, Alan
Levin, Henry
Lorsch, Jon (NIGMS)
Serpe, Ela
Shi, Yun-Bo

Molecular Medicine

Le Pichon, Claire [Head]

Bonifacino, Juan (secondary)
Philpott, Caroline (NIDDK)
Rouault, Tracey

Neurosciences

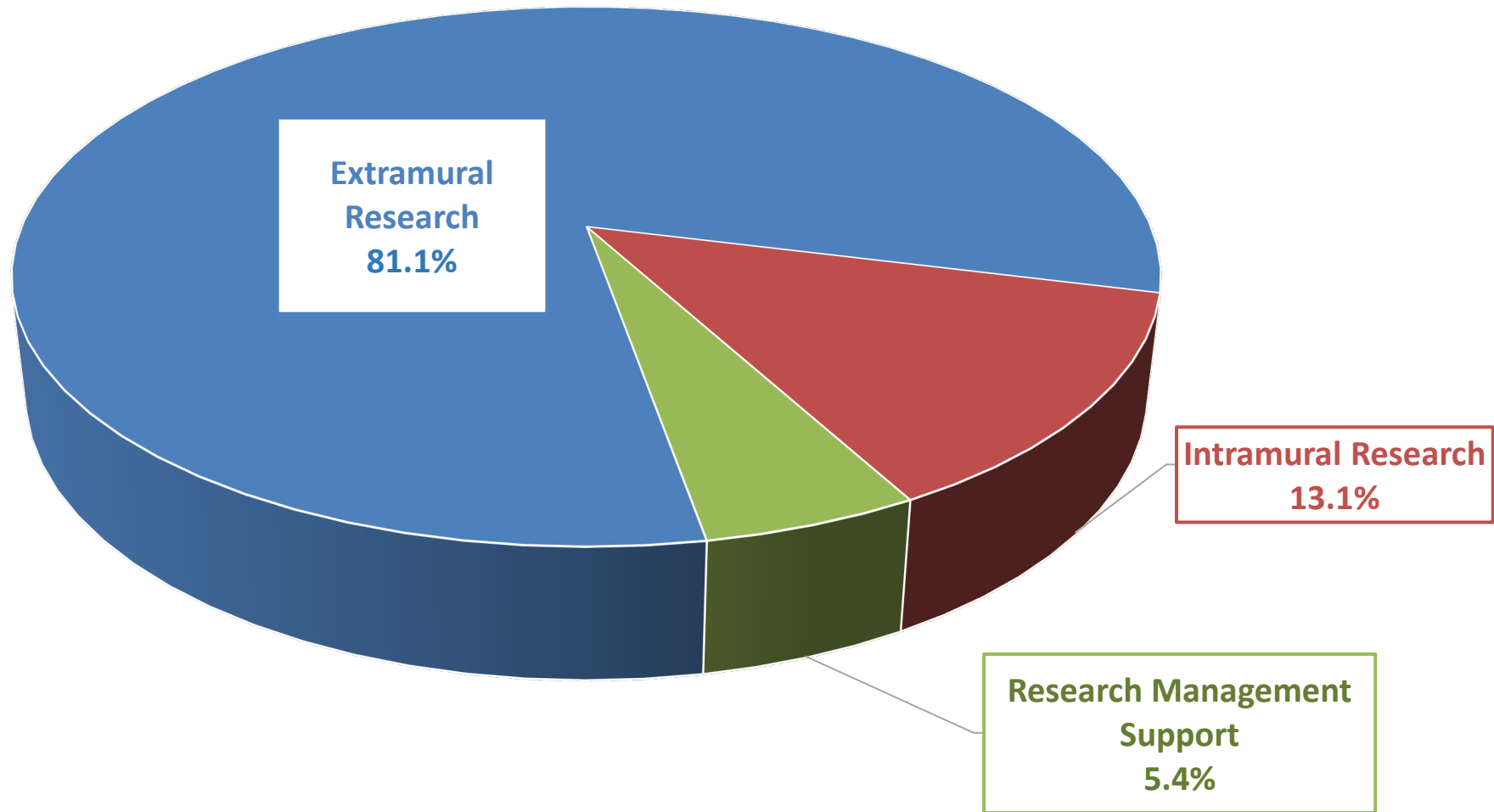
Petros, Tim [Head]

Balla, Tamas
Hoffman, Dax
Klein, David (emeritus)
Le Pichon, Claire (secondary)
Loh, Y Peng
McBain, Chris
Stopfer, Mark



Budget & Personnel

NICHD Intramural Program FY2025 Estimates



NICHD Intramural Budget Trends

(in thousands of dollars)

	FY2022	FY2023	FY 2024	FY 2025 - Estimate
DIR				
Labs & Clinics	\$109,188	\$128,237	\$122,366	\$130,523
Renovations	\$5,185	\$2,011	\$1,382	\$1,500
Assessments	\$80,003	\$80,882	\$85,106	\$86,777
Research & Development	\$0*	\$0*	\$0*	\$5,800
Subtotal	\$194,376	\$211,130	\$208,854	\$224,600
DiPHR				
Operating costs	\$8,814	\$11,076	\$6,966	-
Assessments	\$1,765	\$1,794	\$2,130	-
Research & Development	\$28,100*	\$25,300*	\$23,460*	\$7,300
Subtotal	\$38,579	\$38,170	\$32,556	-
Total	\$232,955	\$249,300	\$241,410	\$231,900

* R&D was not in DIR until FY2025



Retirements



Rena D'Souza, DDS, MS, PhD – January 31, 2025

NIDCR Director

Head, Section on Craniofacial Genetic Disorders



Richard Maraia, MD – February 28, 2025

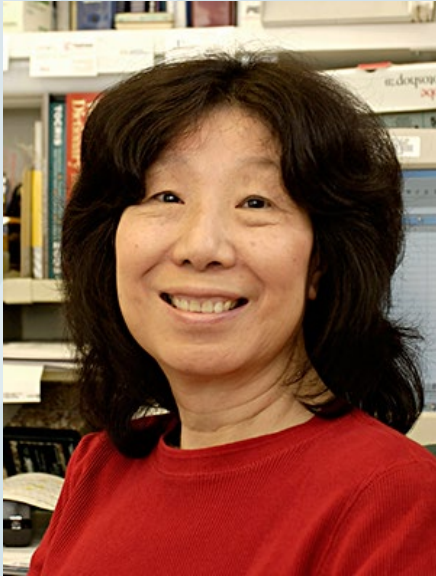
Senior Investigator, Section on Molecular & Cellular Biology

Retirements



Francie Kitzmiller – March 31, 2025
Chief, Administrative Management Branch

Retirements



Janice Chou, PhD - May 31, 2025
*Senior Investigator, Section on Cellular
Differentiation*

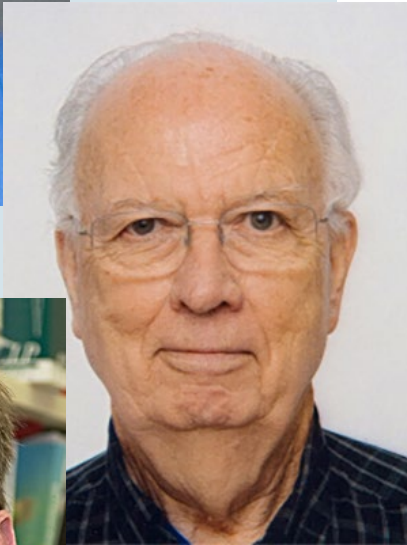


Anil Mukherjee, MD, PhD - May 31, 2025
*Senior Investigator, Section on Developmental
Genetics*

Anticipated Retirements



Jack Yanovski, MD, PhD - September 26, 2025
Senior Investigator, Section on Growth & Obesity



Robert Crouch, PhD - September 30, 2025
Senior Investigator, Section on Formation of RNA



Karl Pfeifer, PhD - fall 2025
Senior Investigator, Section on Epigenetics

NICHD DIR Honors & Awards

Election to the American Association for the Advancement of Science (AAAS):

David Clark, PhD

Henry Levin, PhD

Brant Weinstein, PhD



NICHD DIR Honors & Awards



Henry Levin, PhD

Elected to the American Academy of Microbiology



Peter Bassler, PhD

Elected to the National Academy of Inventors

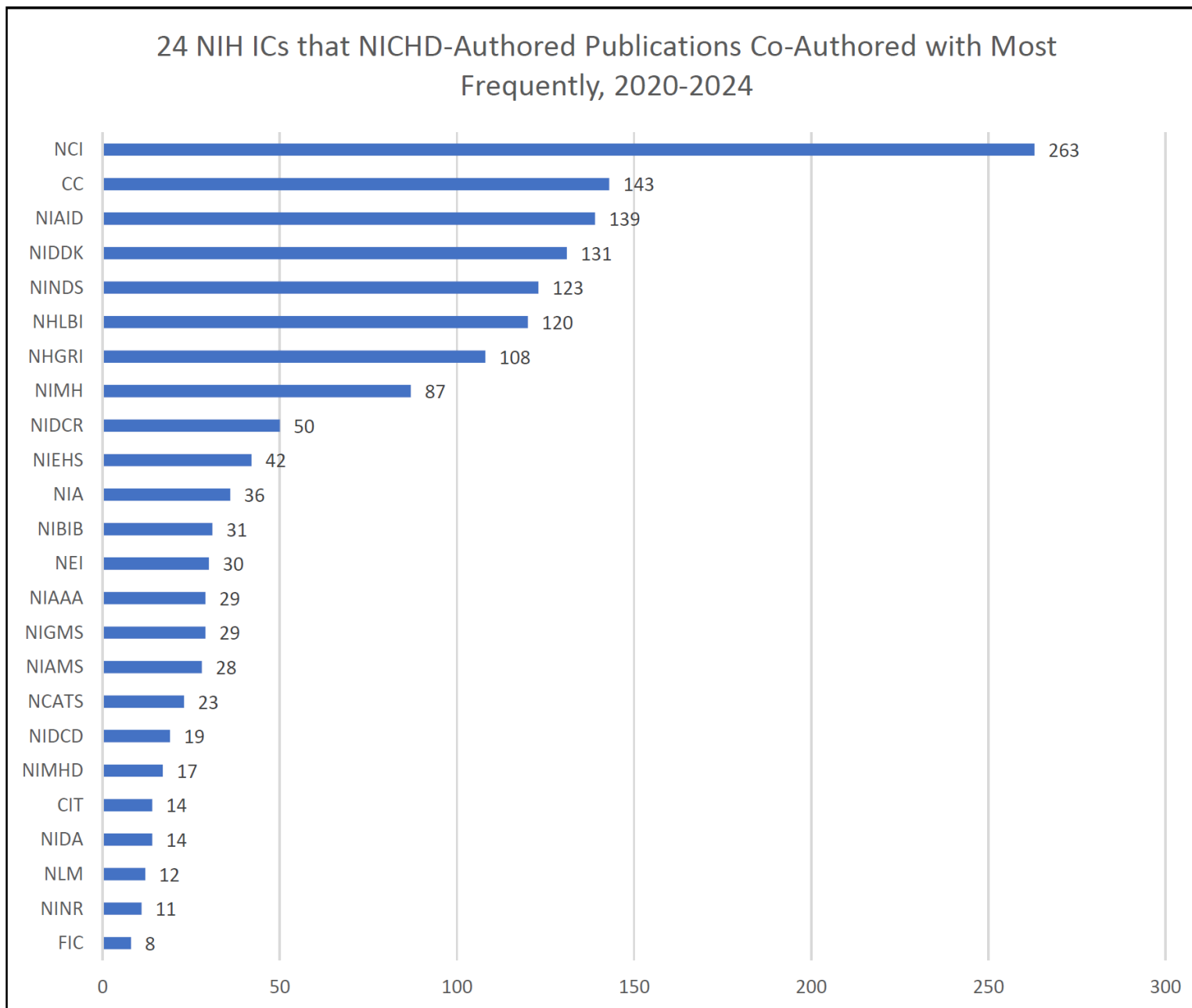


Yun-Bo Shi, PhD

Elected to the North American Society for Comparative Endocrinology

Publications

Out of 3705 NICHD-authored publications published between 2020-2024 available through InCites, 995 publications (26.9%) include collaborations with 24 of the other NIH ICs.



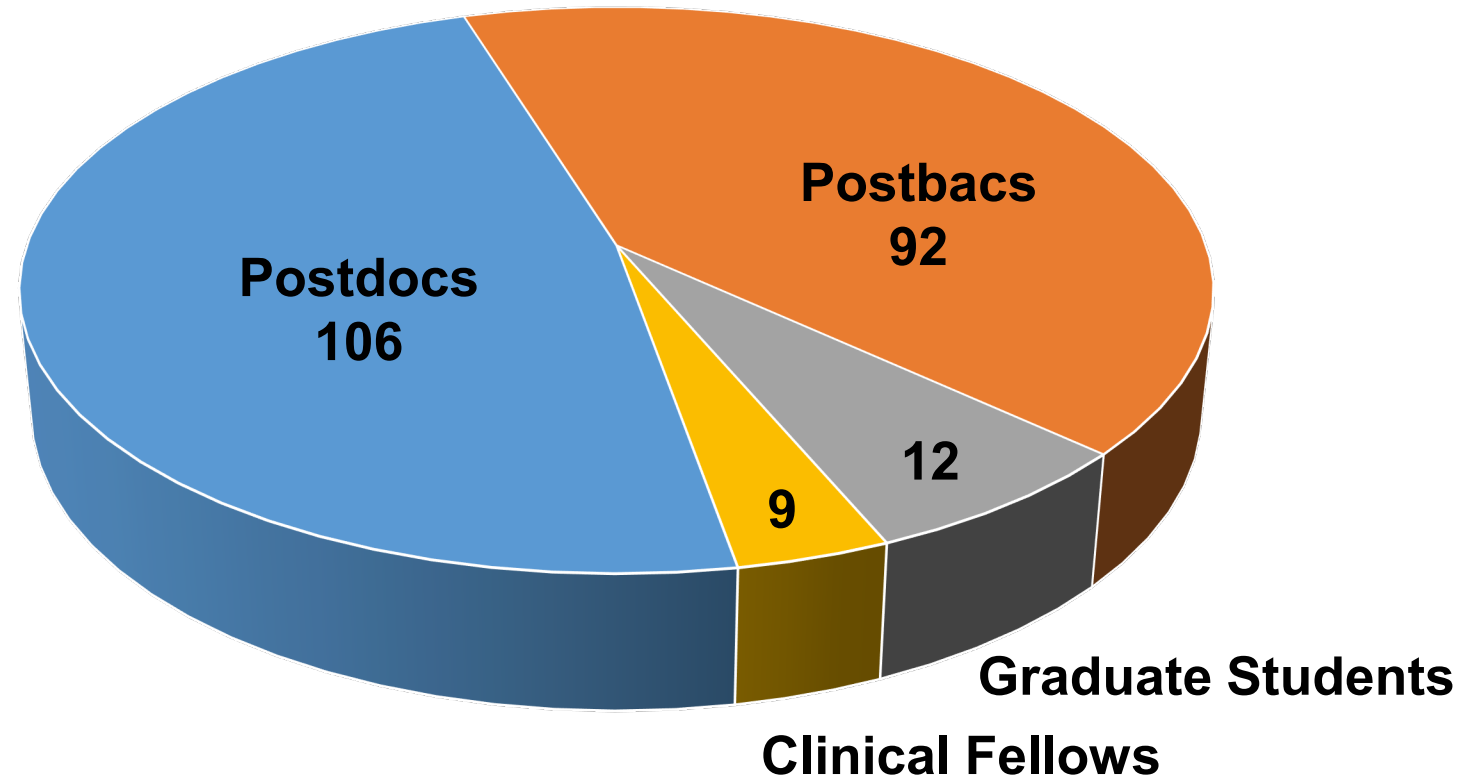


Education Updates

NICHD Intramural Trainee Numbers

As of August 2025, 221 currently

- Recruitment on hold January – April 2025
- No 2025 Summer Internship Program



Office of Education Key Activities: 2025

CAREER DEVELOPMENT SUPPORT

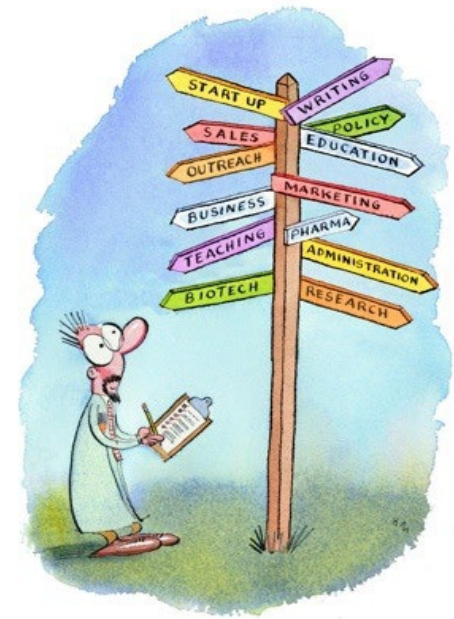
- Postbac Seminar Series: Career Exploration, Professional Development, & Graduate/Medical School Application Prep
- Science Writing Skills Workshop—"Cut the Clutter" (February)
- One-Day Job Application "Boot Camp" (March)
- Taking Stock of Your Scientific Career (April)
- **20th Annual Fellows' Retreat** (December 2025)
- Ad hoc academic job search and application support

GRANT WRITING

- K99 Cohort Support Series: "From Search to Submission" (Started in March)
- One-Day Intensive Grant Writing Workshop
- K99 Grant Writing Course (on hold for FY25)

INDUSTRY GUIDANCE

- Industry Careers Webinar Series: Job search & application materials; developing leadership skills



Bioinformatics Training Program



- Launched in fall 2024, a partnership between Bioinformatics Core and Office of Education, overseeing Dr. Sally Chang, Bioinformatics Training Program Manager
- Assess DIR bioinformatics and data science training needs
- Design short courses and other training content based
- Grow and maintain a community of learners, providing support throughout their NICHD career and beyond
- **Spring 2025 Course: “Bulk RNAseq: From Input to Insight”**
 - Cohort 1: January – early April (7 learners)
 - Cohort 2: April – July (16 learners) - CANCELLED



New Resources for Investigators, Trainees, & Staff Scientists

General Resources

- Live and recorded webinars
- Peer mentoring and accountability partners
- 14-day writing challenges
- Live training opportunities

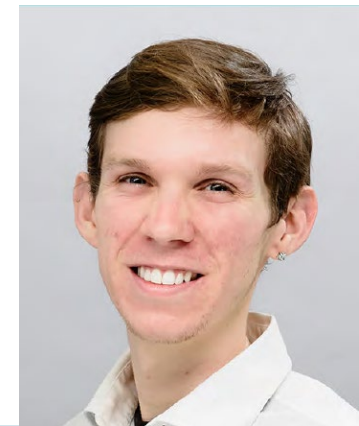
Hosted For DIR Investigators

- December 2024: Writing & Publishing Strategies
- April 2025: Career Navigation after Tenure
- Dr. Claire Le Pichon participated in the spring Faculty Success Program

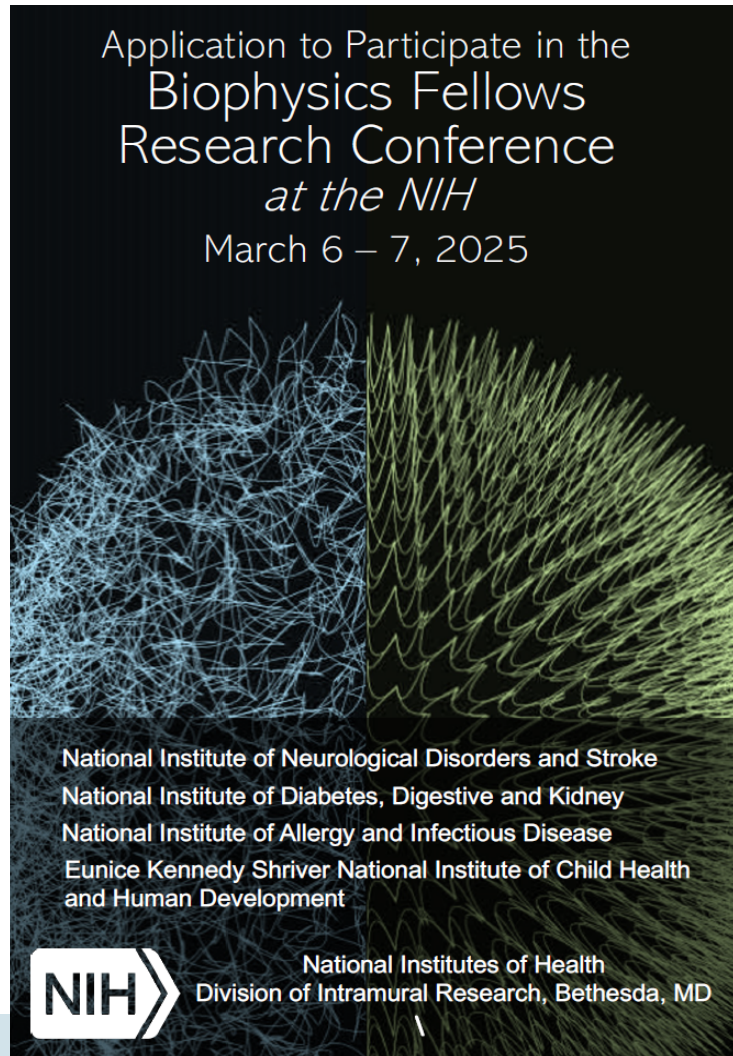


2025 Virtual Three-minute Talks (TmT): Science Communication Training and Awards Program

- Presenters convey the excitement and significance of their research projects in three minutes or less, using just one PowerPoint slide as a visual aid.
- Cohort of 19 NICHD fellows participating this year
- 11 Participating Institutes: NCATS, NEI, NIAID, NIAMS, NICHD, NIDCD, NIDCR, NIDDK, NIEHS, NHGRI, NHLBI
- **Postbac Jack Waite (Rocha Lab)** represented NICHD and placed 1st overall in the NIH competition



Trainee Recruitment Initiatives: Biophysics Fellows



- Postponed to August 28-29, 2025
- Travel awards made to 25 selected applicants
 - PhD students and early postdocs in biophysics
 - Opportunities to present work and to identify NIH mentors
- NIH investigators, leadership, and trainees presented and connected with invitees



2025 Recent Trainee Awards

**NIH K99/R00 Pathway to Independence
Rachel Cosby (Macfarlan Lab)**

**German Research Foundation Fellowship
Janka Schmidt (Storz Lab)**

**NSF Graduate Research Fellowship
Isabella Cisneros (Weinstein Lab)**

**University of Maryland Biophysics Award for Research Excellence
Elissa Moller (Matthies Lab)**

**Center for Compulsive Behaviors Fellowship
Lauren Hewitt (McBain Lab)**





Competitive Funding Opportunities

NICHD Career Development Awards Continue

- **Internal funding opportunity aimed at promoting the research careers of early-stage intramural researchers in the basic, clinical, and translational sciences.**
- **FY25 is the 5th cycle. Launched in FY21 as an NICHD OD, OSD & OE Initiative**
- Applications reviewed by intramural investigators
- Created by Dr. Diana Bianchi, modeled after Tufts University School of Medicine's Zucker Grant Program (Blanchard et al., 2019)
 - Between 2000 and 2016, \$377,050 was awarded to 142 recipients (early-stage, female investigators)
 - Funds were primarily used for development of pilot, preliminary research projects
 - 2016 Survey: awards promoted extramural funding success (60% success rate), mentorship, and boosted confidence and morale at a critical time in their careers



NICHD Career Development Awards: FY25 Updates

- For predoctoral, postdoctoral, research, and clinical fellows; staff scientists and staff clinicians
- Individual awards of \$15,000 for outstanding, original research proposals
- 96 applications received, **45 awards totaling \$675K**
- Scoring Criteria:
 - **Impact:** Will the results contribute significantly to the field and is the topic important to the research of the lab?
 - **Rationale:** Is the rationale of the proposed research effectively described and is it aligned with the stated goals?
 - **Strength:** Is the research plan and methodology well-reasoned? Is the risk of potential trouble low or are there reasonable alternatives?
 - **Clarity:** Is the writing clear, well-organized, and effective?
 - **NIH Biosketch:** Is the Biosketch clearly presented, and does it support the qualifications of the candidate?



NICHD Scientific Director Awards

- Fifth cycle underway, providing two years of funding
 - FY25-26, \$2.8M, 8 out of 13 applications funded
- Established pursuant to a recommendation in the July 2013 Blue Ribbon Panel Report to create competitive research opportunities with a collaborative focus among investigators, and to support new research ideas.
- Uses a modified application based on an R-21, and an expedited administrative review process with the support of NICHD's Division of Extramural Research and a panel of NIH extramural reviewers.



NICHD Scientific Director Awards FY25-26

PI	Collaborators	Project Title
Banerjee, Anirban Dever, Tom		Molecular dissection of Polyamine Transport by Hol1
Dang Do, An Dever, Tom Tatsi, Christina	Mahadevan, Vivek Navid, Fatemeh (NIAMS) Young Baird, Sarah (USUHS)	Delineating Molecular Mechanisms and Tissue Differentials of Integrated Stress Response in MEHMO Syndrome Models
Le Pichon, Claire Rouault, Tracey		Is TDP-43 an Iron-Sulfur Protein? A Novel Perspective on Neurodegeneration and Opportunities for Therapeutic Intervention
Porter, Forbes	Rahal, Samar Dang-Do, An Dale, Ryan Thurm, Audrey (NIMH) Cologna, Stephanie (Univ Illinois)	Identification and characterization of cerebrospinal fluid biomarkers in individuals with Smith-Lemli-Opitz syndrome
Rocha, Pedro Sheppard, Sarah		Exploring the role of IDH1 in lymphatic disease
Rosin, Leah Gomez-Lobo, Veronica	Akera, Takashi (NHLBI)	Understanding and diagnosing fertility differences among Turner Syndrome patients by combining clinical and basic research tools
Storz, Gigi Matthies, Doreen Sodt, Alex		Role of oligomerization in modulating P-type ATPases
Weinstein, Brant Shi, Yun-Bo	Dale, Ryan Margolin, Gennady Dye, Chip	Comparing gas-exchange cells in the lungs and gills of <i>Xenopus tropicalis</i> , an organism that develops both organs





QUESTIONS?