

National Advisory Child Health and Human Development Council

October 14, 2026

OPEN SESSION

Chris J. McBain, PhD
Scientific Director



Outline

- Division of Intramural Research Overview
- Budget & Personnel Updates
- Office of Education Updates
- Competitive Funding Opportunities
- Research Highlights



Division of Intramural Research Overview

DIR in numbers

- Total personnel of ~700 staff
 - 61 PIs (53 Senior; 8 Tenure-Track)
 - 64 Staff Scientists & Staff Clinicians
 - 285 trainees (graduate, postbac, postdoc, and clinical fellows)
- 12 scientifically based affinity groups
- ~67 Clinical Protocols
- Accredited Medical Training Programs
 - Pediatric & Adolescent Gynecology
 - Pediatric Endocrinology
 - Reproductive Endocrinology & Infertility

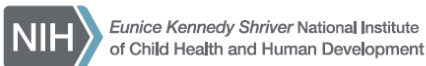


NICHD Intramural Program

Made up of 7 divisions:

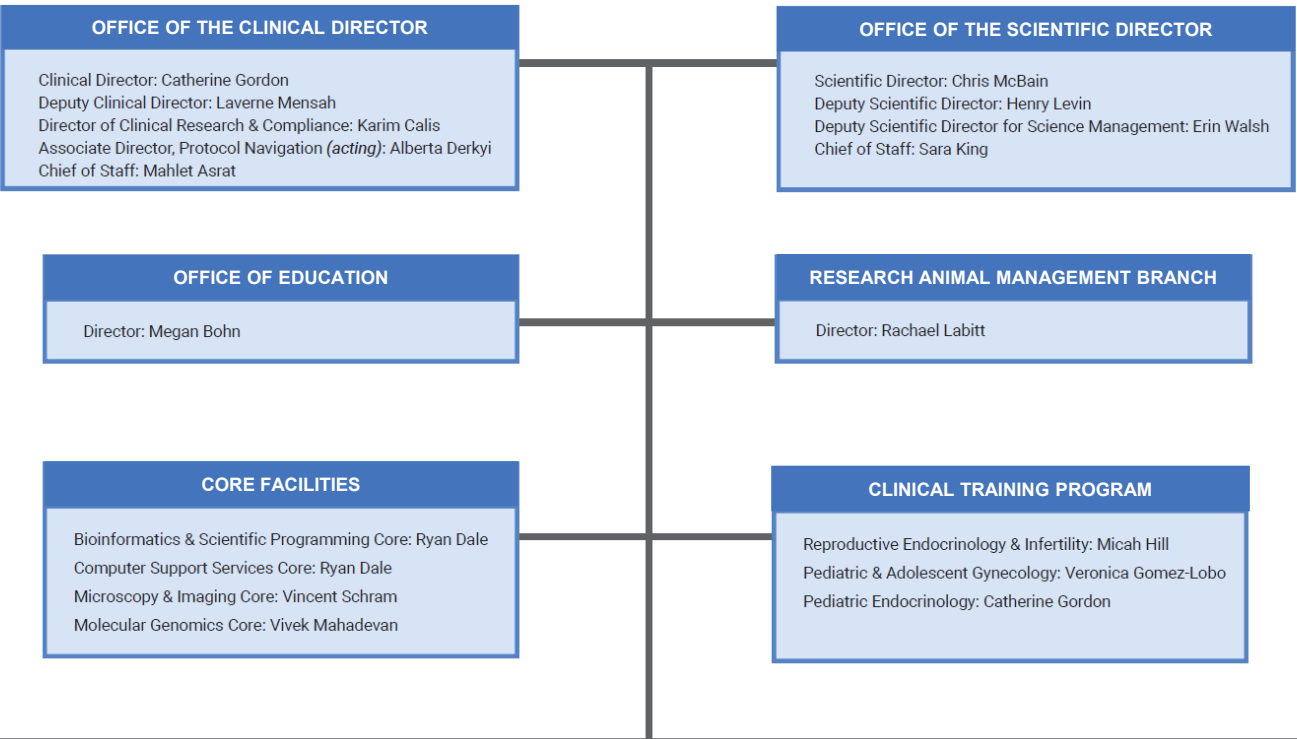
- Division of Developmental Biology
- Division of Translational Medicine
- Division of Molecular and Cellular Biology
- Division of Neurosciences and Cellular and Structural Biology
- Division of Basic and Translational Biophysics
- Division of Translational Imaging and Genomic Integrity
- Division of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





NICHD Division of Intramural Research

Updated October 2026



DIVISION OF DEVELOPMENTAL BIOLOGY

ASD: Todd Macfarlan
Deputy ASD: Pedro Rocha

Jeffrey Baron
Harold Burgess
Ajay Chitnis
David Clark
Jeffrey Farrell
Paul Love
Todd Macfarlan
Keiko Ozato
Pedro Rocha
Katherine Rogers
Leah Rosin
Brant Weinstein

DIVISION OF TRANSLATIONAL MEDICINE

ASD (*acting*): Catherine Gordon
Deputy ASD: Veronica Gomez-Lobo

An Dang Do
Carlos Ferreira
Veronica Gomez-Lobo
Catherine Gordon
Sergey Leikin
Forbes Porter
Roberto Romero
Sarah Sheppard

DIVISION OF MOLECULAR AND CELLULAR BIOLOGY

ASD: Mary Dasso
Deputy ASD: Gisela Storz

Mary Dasso
Thomas Dever
Alan Hinnebusch
Henry Levin
Y. Peng Loh
Matthias Machner
Yun-Bo Shi
Stanko Stojilkovic
Gisela Storz

DIVISION OF NEUROSCIENCE AND CELLULAR AND STRUCTURAL BIOLOGY

ASD: Mary Lilly
Deputy ASD: Timothy Petros

Tamás Balla
Anirban Banerjee
Juan Bonifacino
Dax Hoffman
Claire Le Pichon
Mary Lilly
Chris McBain
Timothy Petros
Tracey Rouault
Mihaela Serpe
Mark Stopfer

DIVISION OF BASIC AND TRANSLATIONAL BIOPHYSICS

ASD: Sergey Bezrukov
Deputy ASD: Leonid Chernomordik

Sergey Bezrukov
Leonid Chernomordik
Doreen Matthies
Alexander Sodt
Joshua Zimmerberg

DIVISION OF TRANSLATIONAL IMAGING AND GENOMIC INTEGRITY

ASD: Amir Gandjbakhche
Deputy ASD: Peter Basser

Peter Basser
Amir Gandjbakhche
Bruce Tromberg
Roger Woodgate

DIVISION OF POPULATION HEALTH RESEARCH

ASD: Una Grewal

Biostatistics and Bioinformatics Branch
Stephen Gilman, Acting Branch Chief
Zhen Chen
Aiyi Liu
Rajeshwari Sundaram

Epidemiology Branch
Bizu Gelaye, Branch Chief
Katherine Grantz
Fasil Tekola-Ayele
Edwina Yeung

Social and Behavioral Sciences Branch
Stephen Gilman, Branch Chief
Bobby Cheon
Tonja Nansel

Contraceptive Development Program
Diana Blithe, Chief

Affinity Group Membership

[Aquatic Models of Human Development](#)

Chitnis, Ajay [Head]

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

[Bone & Matrix Biology in Development & Disease](#)

Leikin, Sergey [Head]

Ferreira, Carlos
Gordon, Catherine (secondary)

[Cell & Structural Biology](#)

Machner, Matthias [Head]

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

[Cell Regulation & Development](#)

Dever, Tom [Head]

Dasso, Mary
Hinnebusch, Alan
Levin, Henry
Serpe, Ela
Shi, Yun-Bo

[Developmental Translational Imaging](#)

Romero, Roberto [Head]

Basser, Peter
Gandjbakhche, Amir
Tromberg, Bruce (NIBIB)

[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

[Genetics & Epigenetics of Development](#)

Rocha, Pedro [Head]

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

[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

[Physical Biology & Medicine](#)

Sodt, Alex [Head]

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

[Population Health Research](#)

Gelaye, Bizu [Head]

Blithe, Diana
Chen, Zhen
Cheon, Bobby
Gilman, Stephen
Gomez-Lobo, Veronica (secondary)
Gordon, Catherine (secondary)
Grantz, Katherine
Grewal, Una
Liu, Aiyi
Nansel, Tonja
Romero, Roberto (secondary)
Sundaram, Rajeshwari
Tekola-Ayele, Fasil
Yeung, Edwina

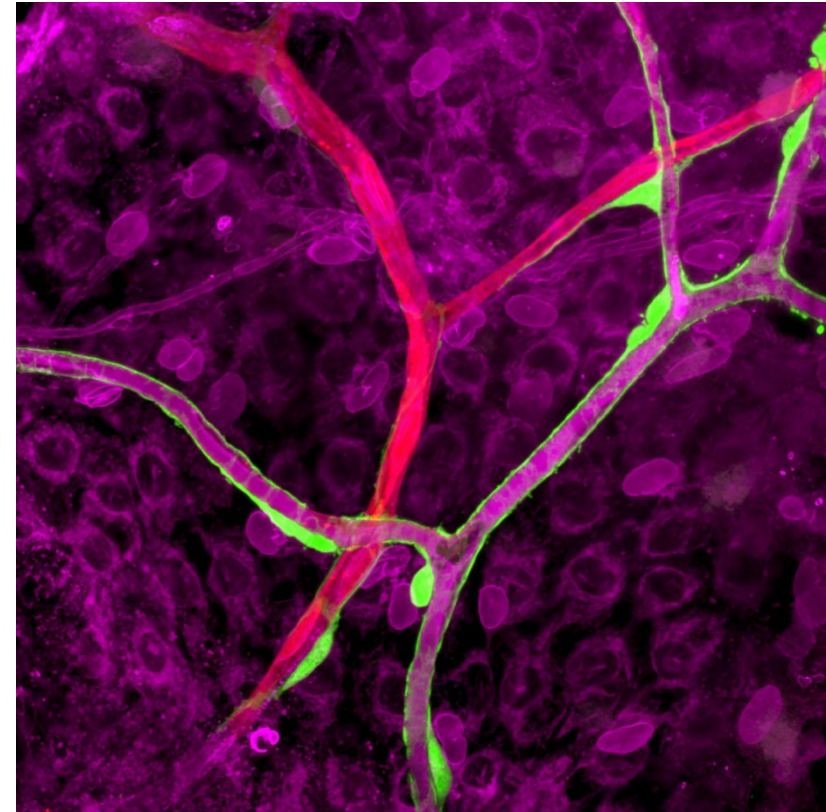
[Women's Reproductive Health](#)

Gomez-Lobo, Veronica [Head]

Blithe, Diana (secondary)
Chen, Zhen (secondary)
Gandjbakhche, Amir (secondary)
Gelaye, Bizu (secondary)
Gordon, Catherine
Grantz, Katherine (secondary)
Grewal, Una (secondary)
Halvorson, Lisa (REI Training Program)
Hill, Micah (REI Training Program)
Macfarlan, Todd (secondary)
Romero, Roberto (secondary)
Sundaram, Rajeshwari (secondary)

2025 NICHD DIR Annual Report Now Live

<https://annualreport.nichd.nih.gov/>



Transgene-labeled vessels and vessel-associated pericytes in the skin of an adult zebrafish

Credit: Vishakha Vishwakarma and Daniel Castranova

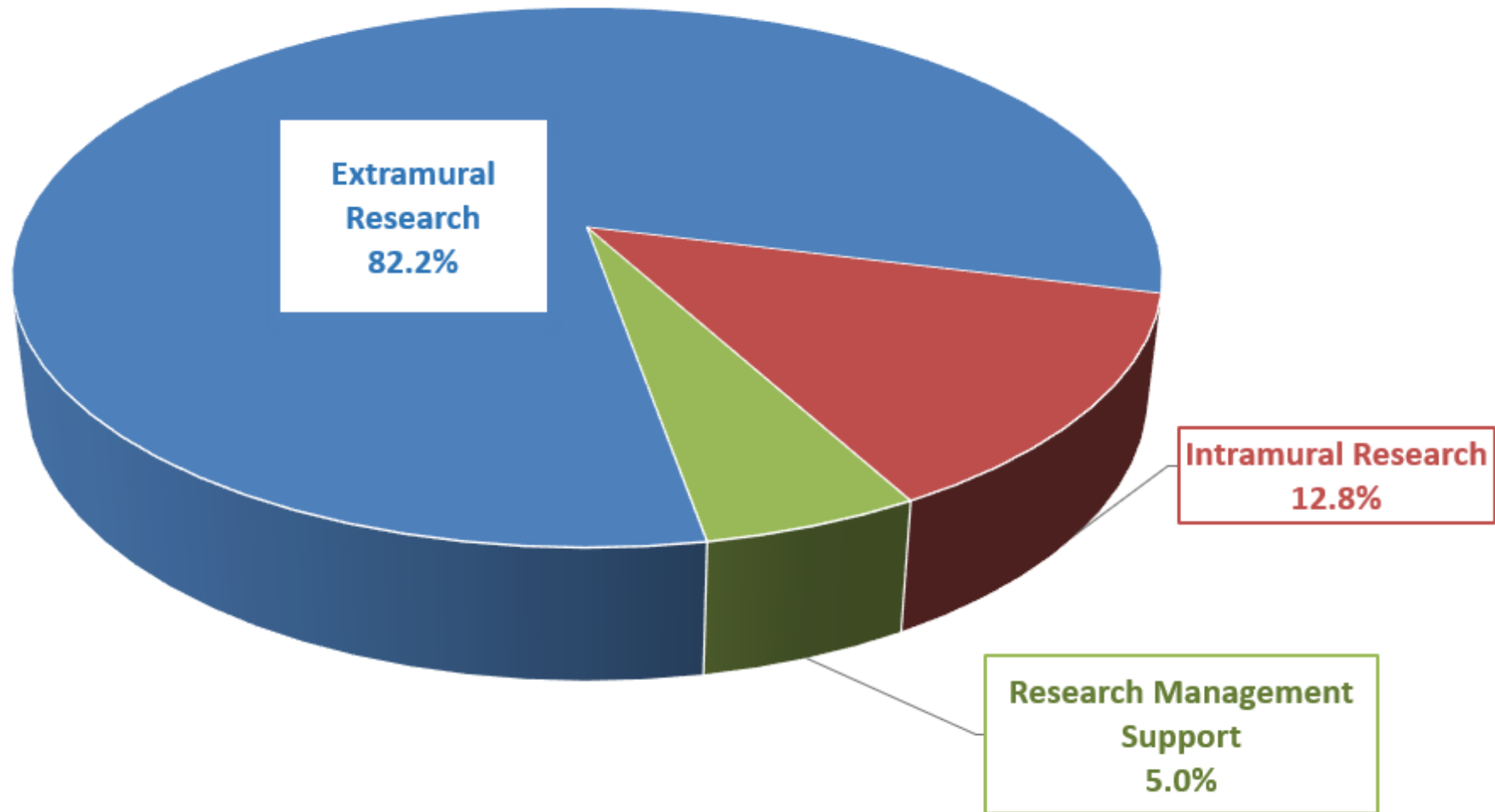




Budget & Personnel

NICHD Intramural Program

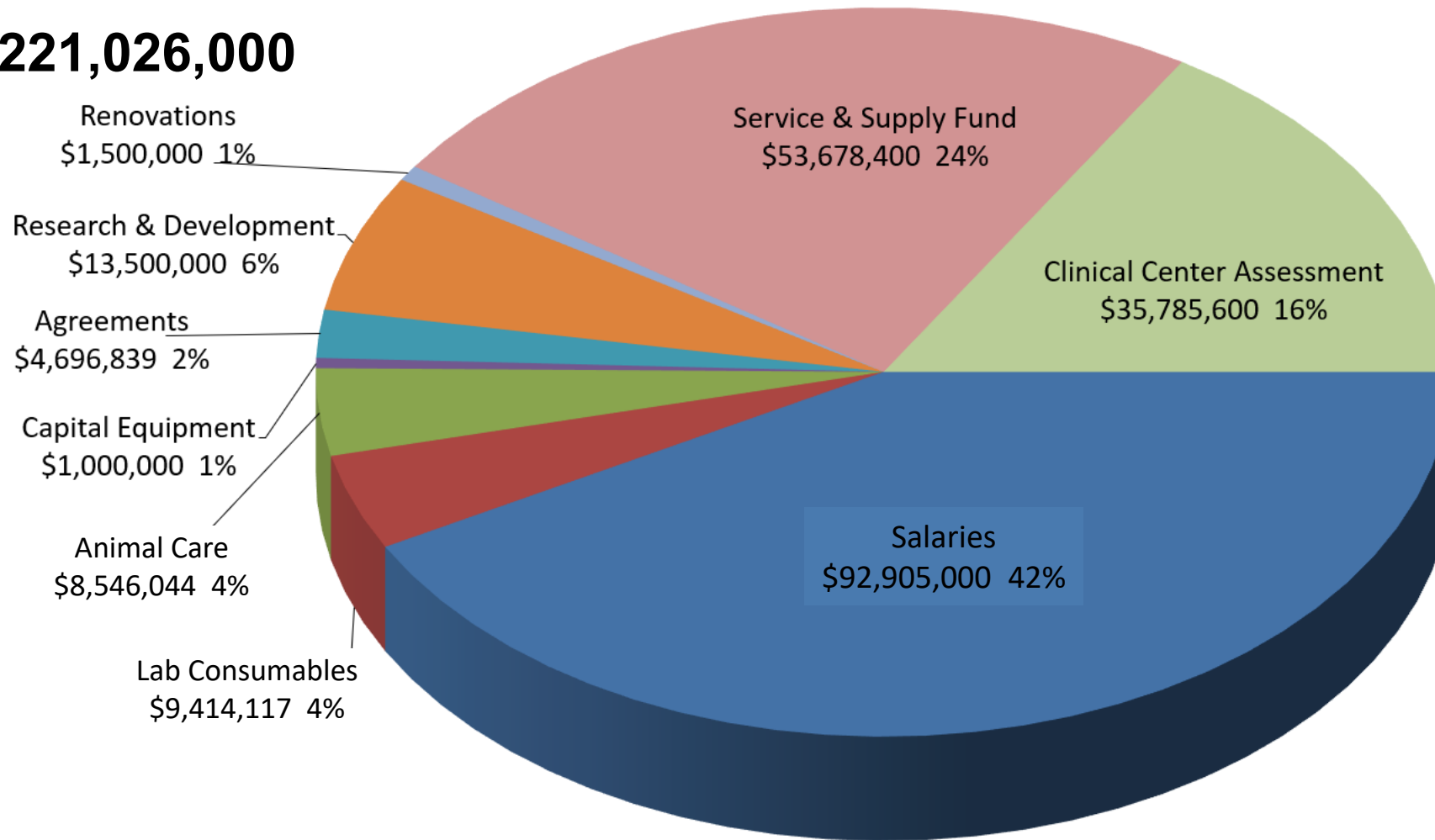
FY2026 Estimates



NICHD Intramural Budget Breakdown

FY2026 Estimates

Total \$221,026,000



Retirements & Departures



Christina Tatsi, MD – September 20, 2025

Assistant Clinical Investigator, Unit on Hypothalamic & Pituitary Disorders



Jack Yanovski, MD, PhD - September 29, 2025

Senior Investigator, Section on Growth & Obesity



Robert Crouch, PhD, - September 30, 2025

Senior Investigator, Section on Formation of RNA



Karl Pfeifer, PhD – April 3, 2026

Senior Investigator, Section on Genomic Imprinting

Honors & Awards



Jeffrey Farrell, PhD

2026 Elizabeth D. Hay New Investigator Award from the Society for Developmental Biology



Sarah Sheppard, MD, PhD, MS

2026 ASCI Young Physician-Scientist Award from the American Society for Clinical Investigation (ASCI)

Honors & Awards



Carlos Ferreira, MD

Suzanne Hart Award for Outstanding Teaching in
Medical Genetics



Karim Calis, PharmD, MPH

Elected Fellow to the Society for Clinical Trials

Honors & Awards



Juan Bonifacino, PhD

- Elected to the American Association for the Advancement of Science
- Elected to the American Academy of Arts & Sciences
- Received the Van Deneen Medal, Utrecht University



Mary Dasso, PhD

- Elected to the American Society for Biochemistry and Molecular Biology
- 2025 NIH Director's Award
in recognition of her significant leadership, skill, and ability in serving as a mentor

Honors & Awards



Tamas Balla, PhD

2025 NIH Director's Award

for achievements in the fields of inositol phosphate signaling, phosphatidylinositol 4-kinases, and tools for monitoring and dynamically perturbing phosphatidylinositol phosphates (PIPs) in living cells



Anirban Banerjee, PhD

2025 NIH Director's Award

for significantly advancing our understanding in the field of membrane biology through pioneering discoveries on the structure and mechanism of membrane proteins

Honors & Awards



Forbes “Denny” Porter, MD, PhD

Cristin Davidson, PhD, Staff Scientist

2025 NIH Director’s Award to the Orphan Drug and Rare Pediatrics Disease Designation Team

for securing Orphan Drug and Rare Pediatric Disease designations for AAV gene therapies and small molecule therapies for the treatment of genetic disorders



Alan Hinnebusch, PhD

2026 Gruber Genetics Prize

for his pioneering work that led to a genetic and molecular understanding of the Integrated Stress Response, which is the mechanism by which eukaryotic cells reprogram protein synthesis under stress.

Honors & Awards



Pedro Rocha, PhD

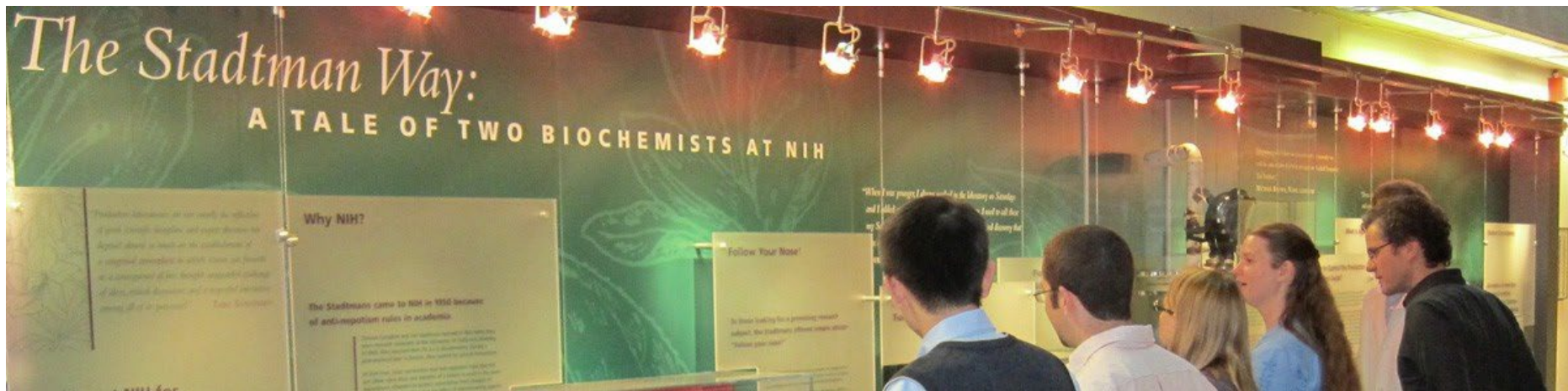
Senior Investigator, Section on Genome Structure & Regulation

Awarded Tenure July 20, 2026

Stadtman Tenure-Track Investigator Program

- Goal – To identify talent through a broad search that can focus on specific areas of science or enable the candidates to bring their ideas to us. Applicants describe their research and if we like what we see, we try to create a tenure-track position in one of the ICs to match that talent.
- Application deadline: *September 30*

<https://irp.nih.gov/careers/trans-nih-scientific-recruitments/stadtman-tenure-track-investigators>



Lasker Clinical Research Scholars Program

- Goal – To grow the diminishing pool of talented clinical/translational researchers.
- Total program duration 8+ years:
 - Years 1-5: NIH Intramural Research Program full support (salary and research support)
 - Years 6-8: salary and/or research support of up to \$500,000/year at outside institution, OR continuation in Intramural Research Program
- Candidates – Early-stage clinical researchers, within 10 years of completing core residency, with the ability to conduct independent research.
- Application deadline: **November 6, 2026**



<https://www.nih.gov/research-training/lasker-clinical-research-scholars>

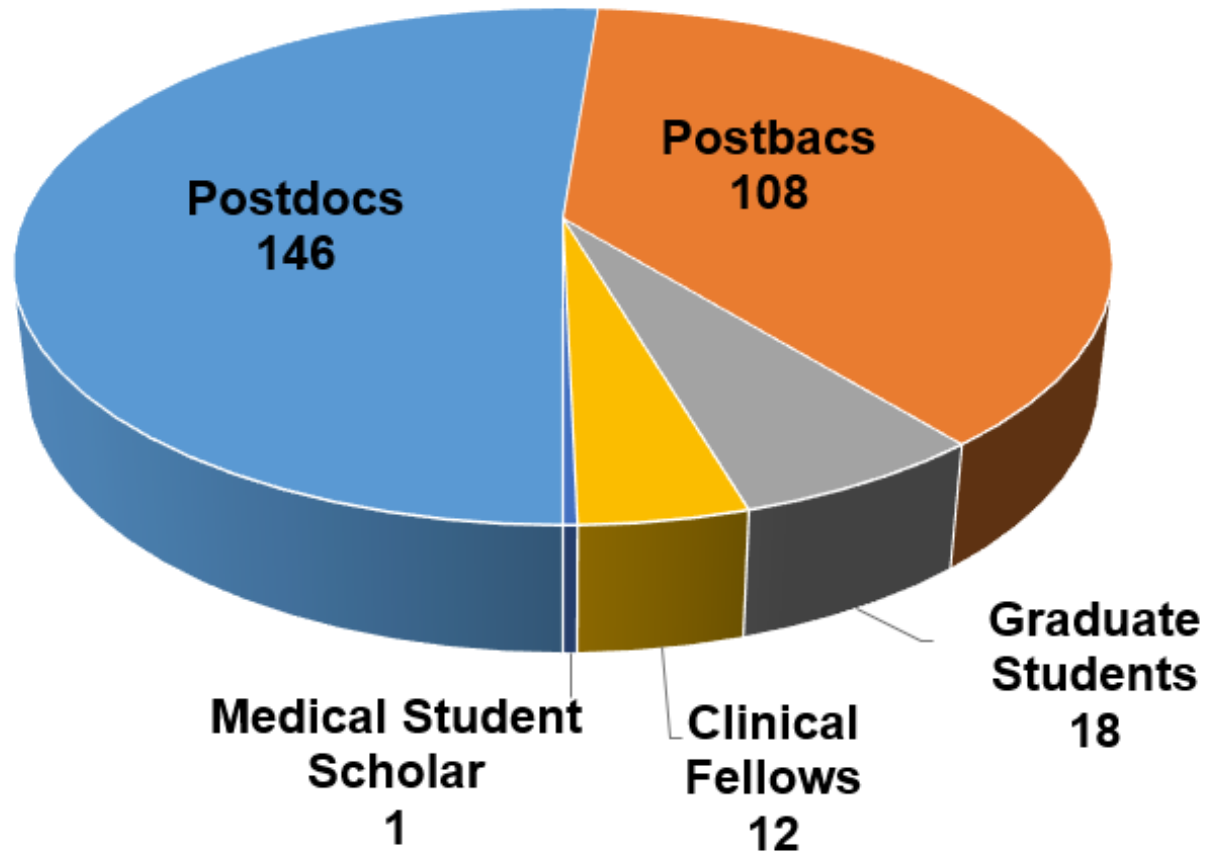




Education Updates

NICHD Intramural Trainee Numbers

As of September 2026, 285 currently



- Recruitment on hold
January – April 2025
- Summer Internship Program
 - No Interns in 2025
 - 20 Interns in 2026



Navigating Uncertainty—Structure & Support

Structured Training

- Annual Progress Reports
- Establishing Timelines
- Frequent Mentor Feedback
- Regular Check-Ins with Office of Education

Career Planning

- Start Early
- Exploring non-academic careers
- Back-up Plans/Multiple Paths
- Emphasize Skill-Building
- Honest Career Feedback

Grant Writing

- Internal Funding Opportunities
- Training Workshops
- Individual Guidance/Support
- Training Cohorts
- Scored Feedback

Engagement & Networking

- Morale building
- Peer Support Cohorts
- DIR Retreats
- Invited Career Speakers

Recruitment

- Move forward with trainee hiring
- Showcase DIR Opportunities and Resources
- Personalized Follow-Ups
- Address Uncertainty Early



Office of Education Key Activities: 2025-2026

CAREER DEVELOPMENT SUPPORT

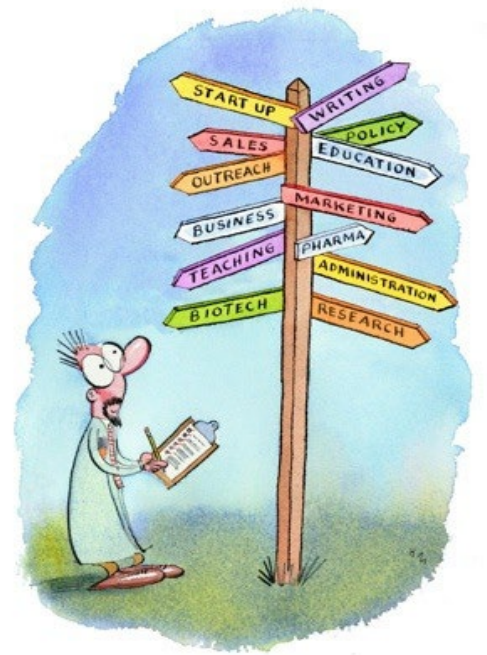
- Postbac Seminar Series: Career Exploration, Professional Development, & Graduate/Medical School Application Prep
- 20th Annual Fellows' Retreat: December 9, 2025
- Faculty Support
- Spring Fellows' Talks: April 17, 2026
- Planning Your 2026 Job Search
- Aligning Your Talents, Interests and Career Goals
- Using Writing to Improve Research (for PIs)
- Finding the Right Questions: How Curiosity Shapes Your Scientific Career

GRANT WRITING

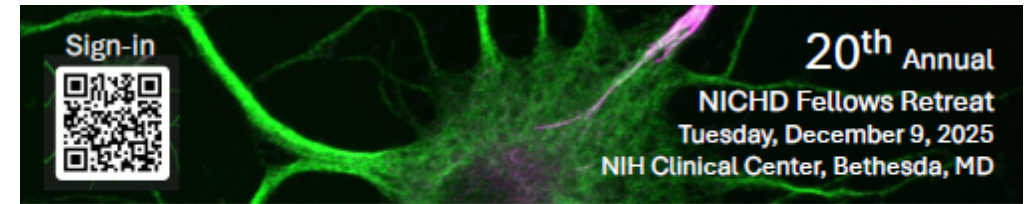
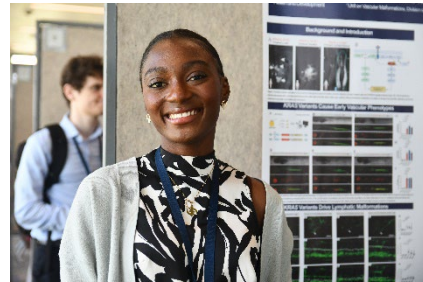
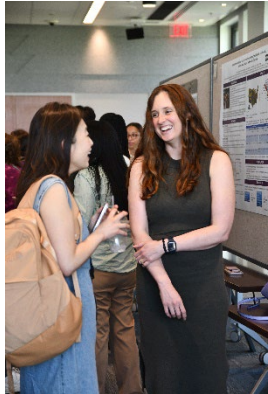
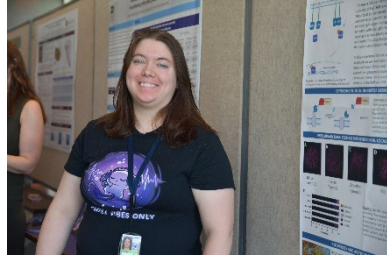
- K99 Grant Writing Course with Dr. Paula Gregory (Spring 2026)
- K99 Cohort Support Series
- Early Career Fellowship Training Session
- One-Day Intensive Grant Writing Workshop
- How Scientific Research is Funded

INDUSTRY GUIDANCE

- Industry Careers Webinar Series (Propel Careers): Interviewing for Your Next Job, Taking Stock of Your Scientific Career
- Professional Branding & LinkedIn



Annual Fellows Retreat & Spring Talks Day



Agenda

9:45 a.m.	Opening Remarks & Welcome	Lipsett Amphitheatre
10:00 a.m.	Life's code: A genomic foundation for precision medicine Keynote Adam Phillippy, Ph.D. Director, Center for Genomics & Data Science Research Head, Genome Informatics Section, NHGRI	Lipsett Amphitheatre
11:00 a.m.	Chris McBain, Ph.D. Meet & Greet NICHD DIR Scientific Director A chance to connect, ask questions, and look ahead to 2026.	Lipsett Amphitheatre
11:45 a.m.	Coffee • Sweet Treats • Holiday Cheer Holiday Reception Bring your best cookie recipe for our holiday cookie competition!	FAES Terrace
1:00 p.m.	1:00 p.m. Sessions Concurrent Job Search Skills - Classroom 1 & 2 Professional Development Interviewing for Grad & Professional School – Classroom 3 & 4 Sessions 2:00 p.m. Sessions AI Resources at NIH – Classroom 1 & 2 Professional Branding School – Classroom 3 & 4	FAES Classrooms

About the Keynote Speaker



Dr. Adam Phillippy is internationally recognized for pioneering single-molecule genome sequencing and leading the team that produced the first complete “telomere-to-telomere” human genome. His work bridges computer science and genomics, with major contributions to genome assembly, microbial forensics, metagenomics, and large-scale comparative genomics. Named one of *TIME Magazine*'s most influential people of 2022.



2026 NICHD Spring Fellows Research Talks

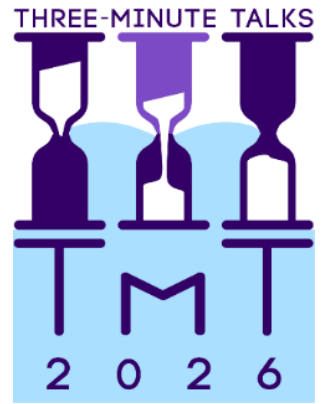
April 17, 2026

- 21 scientific talks by fellows at all levels
- Two poster sessions
- Attended by fellows and investigators across the DIR



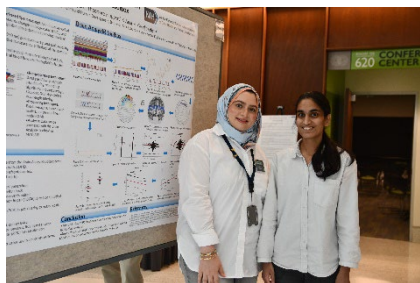
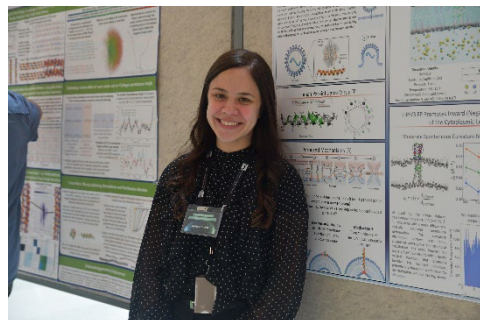
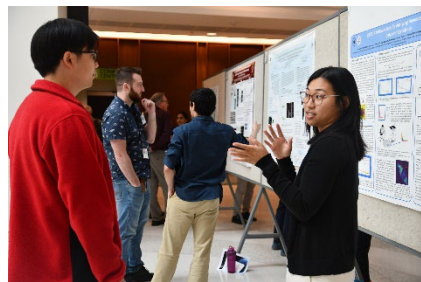
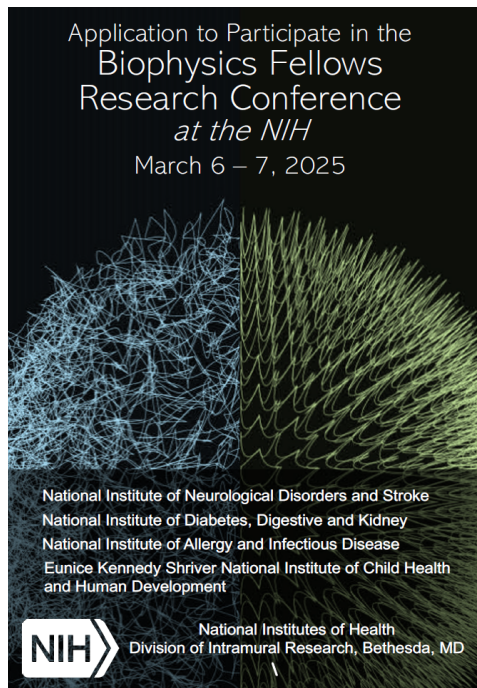
2026 Three-minute Talks (TmT): Science Communication Training

- 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 10 NICHD fellows participated this year, received one-on-one communication training.
- 13 Participating Institutes: NICHD, NIAMS, NHGRI, NEI, NIDCD, NINDS, NIMH, NIDCR, NCATS, NIAID, NIDDK, NIEHS, NIH Clinical Center.
- **Postbac Otiti Mayo** (Yanovski/Cheon Labs) represented NICHD and placed 1st overall in the NIH competition.



NICHD 2026 Finalist
Otiti Mayo





NIH Biophysics Fellows Research Conference

- 35 PhD students and postdoctoral biophysics researchers will be selected to visit NIH, present their research, and network with potential NIH mentors
- NIH investigators and trainees from 5 ICs will participate to share the current research in their labs
- Inaugural event held in August 2025 was a success
- **Next event: March 4 & 5, 2027**





Competitive Funding Opportunities

NICHD Career Development Awards Continue, with Enhancements

- **Internal funding opportunity aimed at promoting the research careers of early-stage intramural researchers in the basic, clinical, and translational sciences.**
- **FY26 was the 6th 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



FY26 NICHD Career Award Opportunities

\$5K for
scientific
development



Early Career Award

- DIR graduate students, postdocs, staff scientists and staff clinicians
- Short proposal describing the applicant's research and career development and award impact
- Supports training, conference, equipment, core services
- 57 applications received, reviewed and scored by DIR investigators
- 23 awardees in FY26



\$25K for
one-year
research
proposal

Early Career Fellowship

- DIR graduate students, postdocs, research and clinical fellows
- Proposal and review modeled after the NIH F-series
- Formal training in grant writing
- 40 applications received and reviewed by DIR investigators, plus study section
- 11 fellowships awarded
- 15 fellowship applicants received a \$5,000 award for strong proposals



NICHD Scientific Director Awards

- Sixth cycle starting for FY27-28, providing two years of funding
 - FY25-26, \$2.8M, 8 out of 13 applications funded
- Established pursuant to a recommendation in the 2013 Blue Ribbon Panel Report to create competitive research opportunities with a collaborative focus among investigators, and to support new research ideas.

FY25-26 Projects

Molecular dissection of Polyamine Transport by Hol1

Delineating Molecular Mechanisms and Tissue Differentials of Integrated Stress Response in MEHMO Syndrome Models

Is TDP-43 an Iron-Sulfur Protein? A Novel Perspective on Neurodegeneration and Opportunities for Therapeutic Intervention

Identification and characterization of cerebrospinal fluid biomarkers in individuals with Smith-Lemli-Opitz syndrome

Exploring the role of IDH1 in lymphatic disease

Understanding and diagnosing fertility differences among Turner Syndrome patients by combining clinical and basic research tools

Role of oligomerization in modulating P-type ATPases

Comparing gas-exchange cells in the lungs and gills of *Xenopus tropicalis*, an organism that develops both organs





Research Highlights

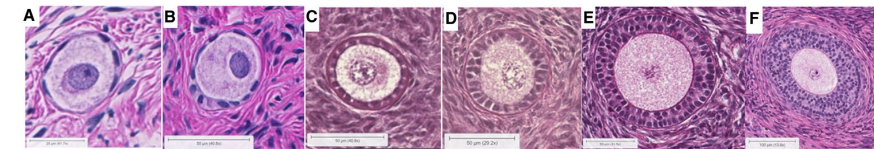
NICHD Classification system of human ovarian follicle morphology

Yano Maher JC, et al. *Fertil Steril*. 2025 (Gomez-Lobo Lab)

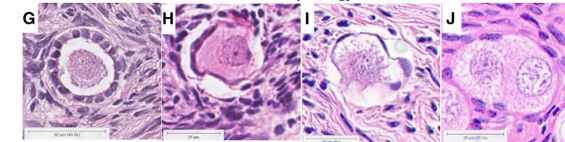
- Human ovarian follicles, which are comprised of an oocyte surrounding cells, are essential for hormone production and reproduction.
- Follicle numbers are fixed before birth and decline logarithmically throughout life through processes of activation and apoptosis. There exist significant gaps in our understanding of these processes.
- The lack of established method for follicle classification and density calculation presented a significant gap to properly analyze and compare research regarding folliculogenesis and ovarian aging.
- After an Ovarian Anatomy Workshop May 2021 with national experts in ovarian biology, reproductive endocrinology, oncology, pathology, radiology and bioinformatics, a group of specialists met over several years to devise a new follicle classification system.



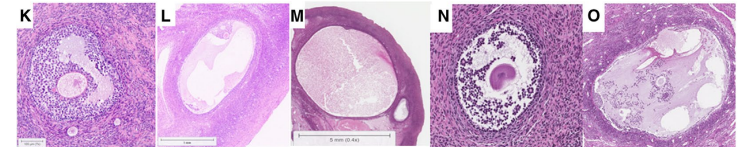
Preantral Follicles with Normal Morphology



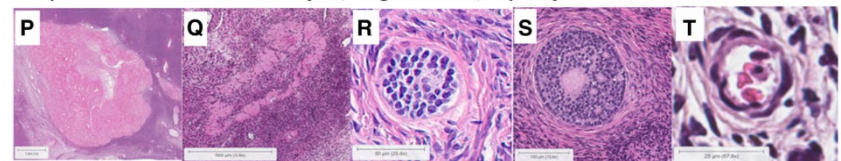
Preantral Follicles with Abnormal Morphology



Antral Follicles



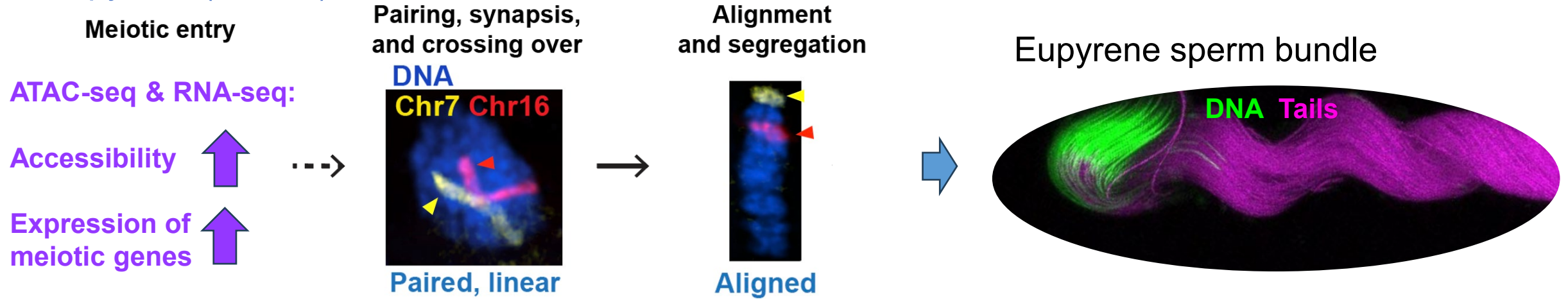
Corpus Luteum of the Menstrual Cycle, Tangential cuts, Capillary



Apyrene meiosis is programmed for DNA loss from the start!

Benner L, et al. *Proc Natl Acad Sci*. 2026. (Rosen Lab)

Eupyrene (normal) meiosis I:



Apyrene (abnormal) meiosis I:



Establishing Modern Birth Weight Centiles for Twins in the United States

Gleason JL, et al. *Obstet Gynecol.* 2026. (Grantz Lab)

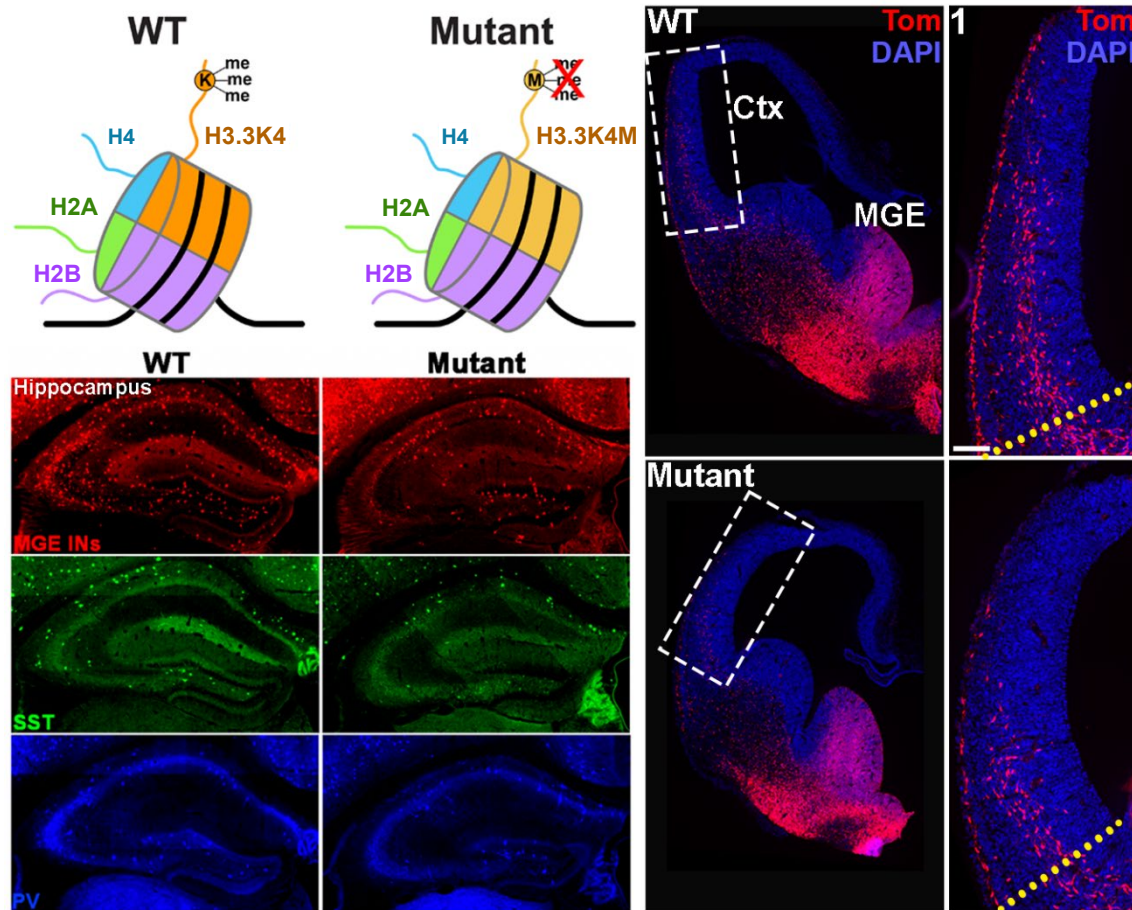
- Data gap: only twin birth weight chart that existed in U.S. had errors in obstetric dating
- Objectives
 - Develop an updated U.S. twin birth weight reference using current methods of gestational dating to estimate gestational age,
 - Compare with existing references used in clinical practice
- Findings: Existing references showed misclassification
 - Alexander (twins): underestimates <10th (SGA) and >90th percentiles (LGA)
 - Fenton (preterm, mostly singletons): overestimates <10th percentile in twins
- Conclusions: New reference provides more accurate classification of twin birth weights and includes a matched singleton reference

Gestational Age (wk)	Birth Weight Percentile									
	Girls (n=280,110)					Boys (n=283,424)				
	5th	10th	50th	90th	95th	5th	10th	50th	90th	95th
22	337	369	455	555	585	374	405	492	605	649
23	390	430	540	660	700	419	462	573	695	737
24	450	499	635	768	817	482	539	681	810	852
25	504	567	738	882	937	544	615	790	938	985
26	560	640	849	1,010	1,070	610	695	903	1,080	1,136
27	635	730	970	1,164	1,228	688	788	1,030	1,239	1,304
28	730	837	1,102	1,337	1,407	778	895	1,171	1,413	1,487
29	839	953	1,245	1,515	1,593	877	1,009	1,320	1,595	1,680
30	961	1,077	1,398	1,690	1,780	990	1,130	1,476	1,781	1,880
31	1,100	1,215	1,559	1,870	1,970	1,131	1,270	1,640	1,970	2,080
32	1,257	1,370	1,726	2,060	2,166	1,303	1,432	1,814	2,164	2,279
33	1,418	1,530	1,897	2,258	2,368	1,481	1,600	1,993	2,367	2,483
34	1,570	1,686	2,070	2,460	2,578	1,640	1,760	2,171	2,580	2,700
35	1,729	1,850	2,249	2,665	2,791	1,800	1,926	2,355	2,796	2,923
36	1,920	2,038	2,440	2,871	3,005	1,995	2,120	2,551	3,005	3,140
37	2,120	2,231	2,630	3,070	3,210	2,199	2,320	2,745	3,200	3,345
38	2,268	2,381	2,795	3,250	3,395	2,340	2,470	2,906	3,380	3,534
39	2,260	2,410	2,909	3,407	3,563	2,343	2,510	3,009	3,540	3,704
40	1,928	2,195	2,944	3,549	3,739	2,126	2,375	3,032	3,668	3,856
41	1,266	1,730	2,892	3,685	3,945	1,626	2,030	3,005	3,770	3,996
42	821	1,408	2,807	3,816	4,184	830	1,540	3,120	3,914	4,153

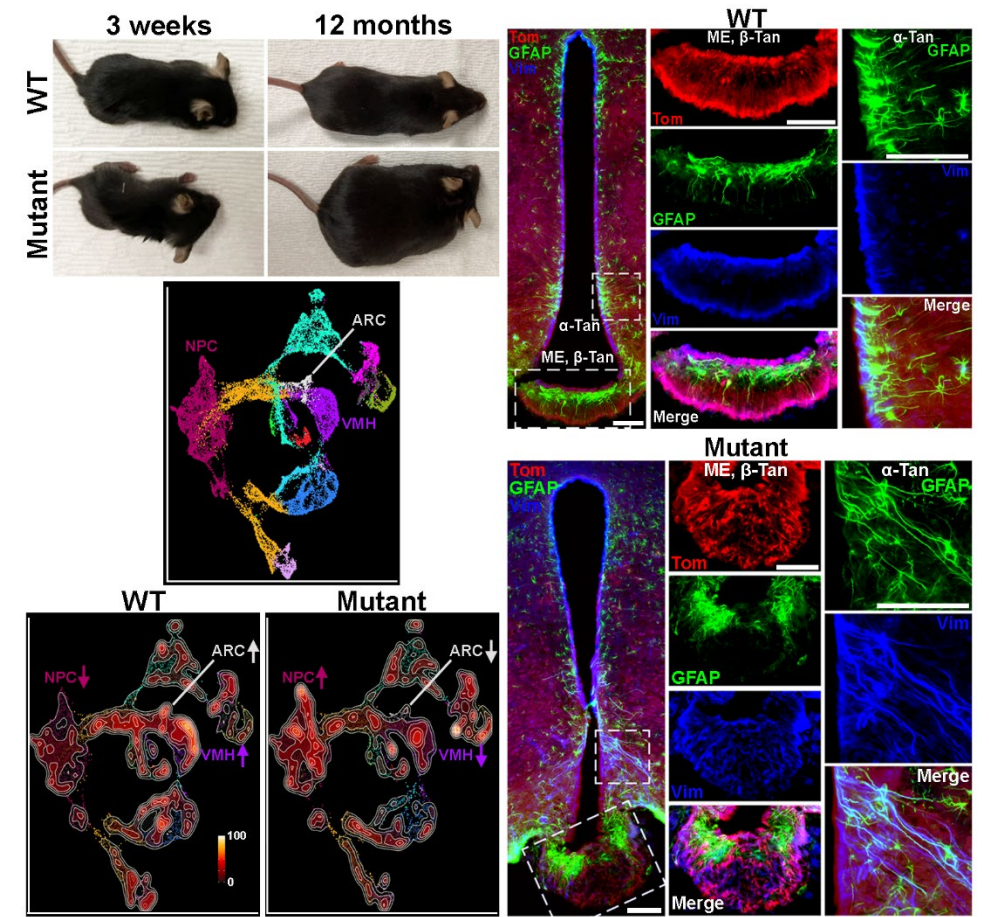


Reduced H3K4me in interneurons & hypothalamus recapitulates many disease phenotypes

Li J, et al. *Nat Commun.* 2026. (Petros Lab)



Fewer cortical & hippocampal interneurons in the H3K4 mutant mouse due to decreased cell migration from the MGE into the cortex, leading to epilepsy



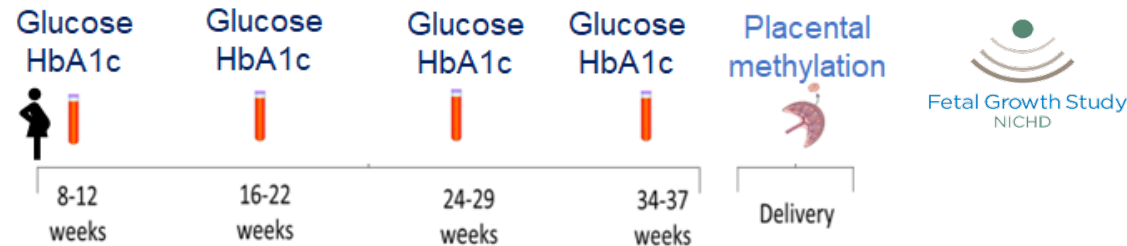
Mutant mice are initially underweight but eventually become obese, with fewer neurons fated towards hypothalamic nuclei involved in feeding (ARC & VMH), and altered cellular organization throughout the hypothalamus



Association of prenatal glycemic marker cumulative exposure with placental DNA methylation change

Habtewold, et al. *J Clin Endocrinol Metab.* 2026. (Tekola-Ayele Lab)

- Glycemic dysregulation during pregnancy increases risk of large neonatal weight
- Previous studies were cross-sectional and mechanisms unclear
- Hypothesis: Placental methylation may modulate elevated glycemic effect on neonatal weight



- Findings:
 - Placenta methylation altered at *CBLN3*, *NTN1*, *ITGB8*, *KHNYN*
 - Altered methylation in turn increased neonatal and placental weight
 - Inflammation and metabolic processes enriched
- Summary: Elevated glycemic levels, even at sub-clinical levels, can alter placental methylation leading to increased neonatal size. Suggests potential placental exposure marks.





QUESTIONS?