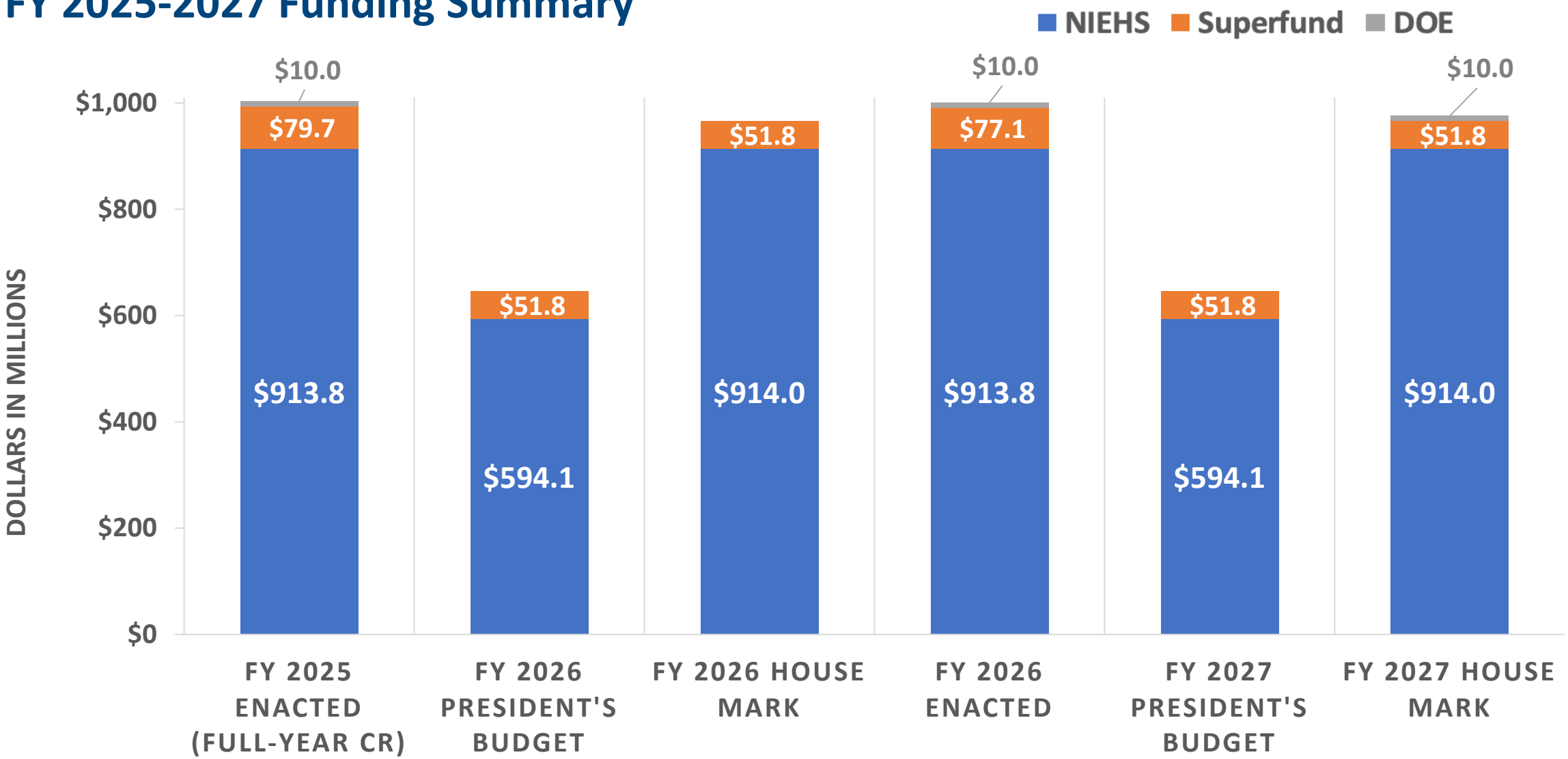
Report to the National Advisory Environmental Health Sciences Council

Kyle M. Walsh, Ph.D.
Director
National Institute of Environmental Health Sciences and
National Toxicology Program

September 10, 2026

Budget Update & Congressional Activities

FY 2025-2027 Funding Summary



Enacted appropriation levels for NIEHS (FY24-FY26) are post-AIDS transfer. FY 2026 and 2027 President's Budget level, as well as FY 2026-2027 House Marks, are pre-AIDS transfer.

FY 2027 Continuing Resolution

NIH funded through December 11, 2026

- **H.R. 6500 signed into law September 2, 2026**
  - Avoids a shutdown and extends federal funding through **December 11, 2026**
- **NIH continues at FY 2026 funding rates**
  - Provides near-term continuity for research and operations
- **FY 2027 appropriations are still pending**
  - Congress must act again by December 11 to provide full-year funding or another extension
- **CR limitations remain in effect**
  - Continue existing activities and preserve flexibility pending final appropriations

www.congress.gov/bill/119th-congress/house-bill/6500

National Institute of Environmental Health Sciences
Your Environment. Your Health.

NIEHS

CELEBRATING 60 YEARS

1966 ♦ 2026



National Institute of Environmental Health Sciences
Your Environment. Your Health.

K99/R00 → R01: Career Development to Research Independence



Tanya Alderete, Ph.D.

Associate Professor
Johns Hopkins Bloomberg School of Public Health

Environmental epidemiology • microbiome • multi-omics

CAREER DEVELOPMENT

K99/R00 ES027853

Pathway to Independence award to build a niche at the intersection of environmental exposures, microbiome science, and metabolic health.

INDEPENDENCE

R01 ES035035

Current R01 focus

PFAS / air pollution, gut microbiome pathways, and childhood obesity/metabolic risk

Research Outcomes

- Links environmental exposures with microbiome and metabolic outcomes across early life
- Builds on NIEHS-supported findings connecting traffic-related air pollution and gut microbial changes
- Uses a prevention-oriented, life-course framing around obesity and chronic disease risk

ECLIPSE LAB

National Institute of Environmental Health Sciences
Your Environment. Your Health.

K99/R00 → R01: Career Development to Research Independence



Briana De Miranda, Ph.D.

Associate Professor
University of Alabama at Birmingham

Neurotoxicology • Parkinson's disease • environmental contaminants

CAREER DEVELOPMENT

K99/R00 ES029986

Pathway award supported early work on environmental mitochondrial toxicants and Parkinson's disease mechanisms

INDEPENDENCE

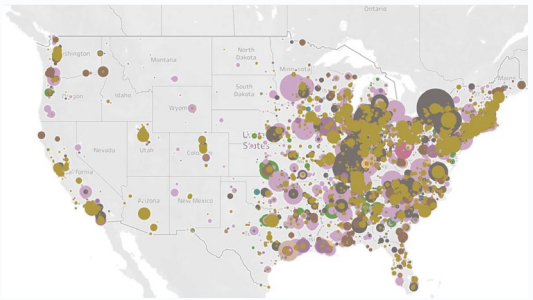
R01 ES034846

Current R01 focus

> **The role of lysosomal impairment in trichloroethylene-induced Parkinsonian neurodegeneration**

Research Outcomes

- Centers on TCE, a common solvent and environmental contaminant linked to Parkinson's disease risk
- Uses inhalation models to better mirror human exposure routes
- Examines dopamine neuron loss, LRRK2 signaling, protein accumulation, and lysosomal dysfunction



K99/R00 → R01: Career Development to Research Independence



Somshuvra Mukhopadhyay M.B.B.S., Ph.D.

Professor
The University of Texas at Austin

Metals toxicology • manganese biology • parkinsonism

CAREER DEVELOPMENT

K99/R00 ES020844

Pathway award supported work on manganese efflux, homeostasis, and detoxification mechanisms.

INDEPENDENCE

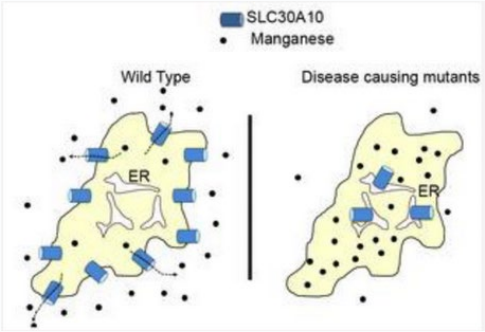
R01 ES024812

Current R01 focus

Manganese homeostasis and detoxification: mechanisms relevant to neurotoxicity and parkinsonism

Research Outcomes

- Focuses on how metal transporters regulate manganese levels in the brain and body
- Connects genetic susceptibility and environmental metal exposure to parkinsonism mechanisms
- Extends mechanistic findings toward strategies for treatment and prevention



K12 → P30/P42 Center Leadership: Career Development to Research Independence



Tamarra James-Todd Ph.D., M.P.H.

Professor
Harvard T.H. Chan School of Public Health

Environmental reproductive health • consumer product chemicals • maternal cardiometabolic health



Current P30 center leadership focus

Harvard Chan NIEHS Center for Environmental Health (P30 ES000002): Deputy Director helping connect population science, mechanisms, translation, and community engagement

Research Outcomes

- Built ERGO and related studies linking perinatal chemical exposures to parental cardiometabolic health
- Advances environmental reproductive health through work on phthalates, PFAS, personal care products, and health disparities
- Extends individual grant success into P30 deputy leadership and P42 Community Engagement Core leadership

ERGO

NIH Update on the Career Development (K) Awards Program

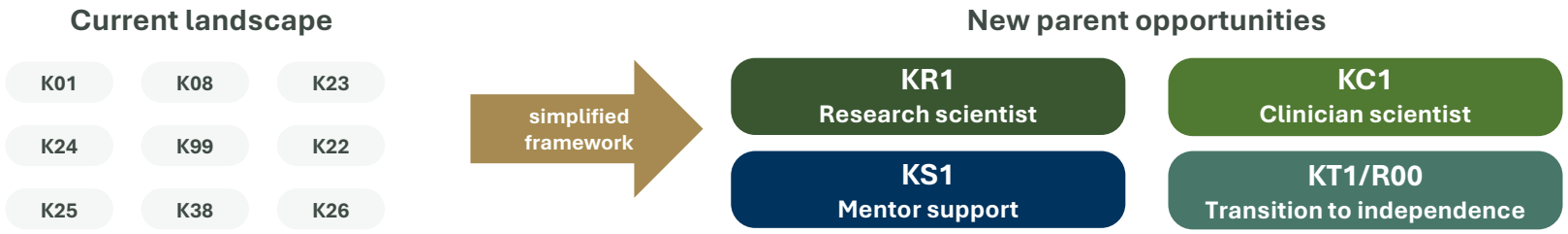
NIH is Streamlining Career Development (K) Awards Program

What is changing?

Individual K award NOFOs will be streamlined. Parent opportunities will be grouped by their career-development objectives.

IMPLEMENTATION
application due dates
on or after
Oct. 12, 2027

1. **Consolidate individual K NOFOs**
2. **Remove Data Management and Sharing Plan requirement**
3. **Clarify clinical-trial funding rules**



Sources: NIH Notice NOT-OD-26-098; NIH Extramural Nexus, August 2026

A Simpler K Awards Landscape

Current individual K mechanisms will map into four parent opportunities organized by program type

New activity code	Current codes consolidated	Award / career-development purpose
KR1	K01 K21 K25 K32	**Mentored Research Scientist Career Development Award** Research doctoral scientists pursuing independence under sustained mentorship.
KC1	K08 K23 K38	**Mentored Clinician Research Scientist Career Development Awards** Clinician-scientists balancing research and clinical responsibilities while moving toward independence.
KS1	K02 K07 K18 K24 K26	**Investigator Award to Support Mentoring of Early Career Clinician Scientists** Established investigators protected to mentor and develop future clinician-scientists.
KT1/R00	K99 K22	**NIH Career Transition to Research Independence Award** Postdoctoral researchers transitioning into independent research positions.

What Applicants and Reviewers Need to Know

The policy shifts reduce burden, clarify expectations, and keep the focus on mentored career development

Applicants

- DMS Plans no longer required for K applications
- KT1/R00 eligibility expected to be limited to U.S. citizens, non-citizen nationals, and permanent residents
- Current affected K NOFOs expire by July 13, 2027

Reviewers

- Streamlined review criteria in new parent opportunities
- Three scored areas:
  - candidate/career development,
  - research plan,
  - environment/mentorship
- Evaluated in context of career stage and path to independence

Clinical Trials

- No “Independent Clinical Trial Required” K opportunities
- K funds may not support conduct of a clinical trial, feasibility study, or ancillary study
- K awardees may participate in trials led by mentors/co-mentors

Update on the R35 Mechanism at NIEHS

Revolutionizing Innovative, Visionary Environmental Health Research (RIVER) Program

RIVER Program Accomplishments (FY 2017 – 2026)

PROGRAM OUTPUTS & IMPACT

7
RFAs issued

$164M
total invested

35
Individual EHS research programs supported

Over 1,100
publications and 31,000 citations

The RIVER Dividend: Returns on Freedom & Flexibility

A Closer Look at the First Cohort (RFA-ES-16-008)

BUILDING PEOPLE & NETWORKS

1 Mentoring & Career Development

Extended time and flexibility supported mentoring of junior scientists, clinical fellows, and trainees.

2 Collaborative Research, Hub Formation & Networking

Structured research hubs, regular scientific meetings, shared resources, co-authored publications, and partnerships broadened impact and opened new directions.

EXPANDING SCIENTIFIC OPPORTUNITY

3 Expansion into New Research Areas

Enabled novel, high-risk projects and foundational research difficult to pursue through traditional mechanisms.

4 Advanced Technology

Enabled state-of-the-art equipment purchases, accelerating timelines and expanding experimental capabilities.

5 Scientific Output & Recognition

Supported landmark publications, increased manuscript output, awards, promotions, and visibility for emerging fields.

EXTENDING SCIENTIFIC LEADERSHIP

6 Scientific Service & Leadership

Reduced grant-writing pressure allowed more time for conferences, committees, editorial boards, grant review panels, and educational leadership.

7 Educational Impact

PIs enhanced teaching, developed courses, revised curricula, contributed to textbooks, and strengthened undergraduate and graduate training.

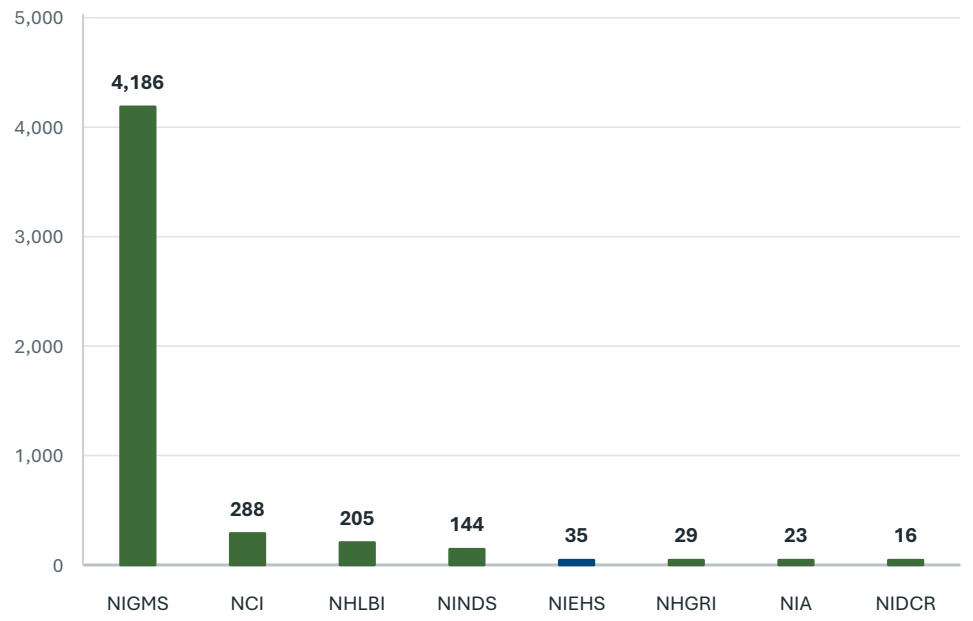
Future of the R35 Mechanism at NIEHS

Longstanding Discussions and Interests in Investigator Focused Support

"Fund the Person, Not the Project"

Congressional language and NIH discussion around R35/MIRA have emphasized investigator-focused support that gives scientists greater flexibility to pursue the best science.

NIH has been encouraged to evaluate broader use of the mechanism.



Investigator-Focused Award (Parent R35)

- Supports investigators **at all career stages.**
- Funds an investigator's **program of research** rather than a predefined project with specific aims.
- Intended to be the investigator's primary (or only) source of research funding from the awarding IC.

Key benefits remain unchanged

Flexibility
Follow the science as it evolves within the awarding IC's mission.

Stability
Take on important, challenging research questions.

Protected Time
More time for research, mentoring, and service; less grant administration.

Scientific Opportunity
Freedom to pursue promising and potentially transformative directions.

Forecasted

Estimated Post Date:
May 27, 2027

Estimated Application Due Date:
October 4, 2027

Estimated Due Date Description:
Not available

Estimated Award Date:
July 1, 2028

Estimated Project Start Date:
July 1, 2028

Fiscal Year:
2028

Clinical and Computational Sciences Building

Building the Next Platform for NIEHS Science

CCSB: Building the Next Platform for NIEHS Science

What CCSB will enable

Clinical research

Purpose-built replacement for the CRU / Building 109.

Computational science

Co-locates computational programs from Keystone and Building 101 to strengthen collaboration.

High-perf computing & data infrastructure

Positions NIEHS for future computational needs through improved data infrastructure.

Collaboration and interaction

Expands conference and meeting capacity, providing more options beyond Rodbell.

Campus consolidation

Supports transition of Keystone-based NIEHS staff to campus.



CCSB: Building the Next Platform for NIEHS Science

Now

- NIH/HHS has funded the project.
- Acquisition work is underway.

Next

- After award, the selected design-build team begins design.
- Stakeholder feedback checkpoints will occur during design.

Future

- Construction timing, phasing, and campus impacts will become clearer as design matures.
- Updates will be shared before construction begins.

Award
Sept 2026

Design
12 – 15 months
June – Dec 2027

Construction
36 – 42 months
Late 2030 – Mid 2031

Activation
6 – 12 months
Mid 2031 – Mid 2032

Scientific and Programmatic Highlights

NIEHS Highlighted Topics Updates

New NIEHS-led Highlighted Topics

Detecting and Evaluating Contaminants of Emerging Concern: Optimizing Data-Driven Exposure Characterization
Lead ICO: NIEHS

Time-Sensitive Research Opportunities in Environmental Health Sciences
Lead ICO: NIEHS

Wastewater-Based Epidemiology: A Critical Tool for Monitoring Environmental Chemicals, Medications, Drugs, and Pathogenic Exposures
Lead ICO: NIEHS

New NIEHS Participation Since Last Council Meeting

Strengthening Biomedical Research, Promoting Trust, and Improving Health through Bioethics Research

NIEHS-led Topics at Last Council Meeting

Health and Extreme Weather: Advancing Critical Research to Address Direct and Indirect Health Impacts of Weather-Related Natural Disasters and Emerging Weather-Related Harms
Lead ICO: NIEHS

Integrating Environmental Science and Engineering with Biomedical Research for Effective Exposure Prevention and Disease Intervention
Lead ICO: NIEHS

Environmental Contributors to Infertility
Lead ICO: NIEHS

Integrative Health Assessments Branch Responds to HHS Request, Fills Key Research Gaps on Glyphosate

From request to academic products

DTT is developing systematic review products to assess evidence on two health endpoints.

HHS request ▸ **DTT evaluation** ▸ **Systematic Review Protocols Posted**

Posted protocols / evaluation products

Cancer systematic review
Human evidence and animal evidence protocols

Male reproductive health systematic review
Protocol for evidence evaluation



Major kudos to Andy Rooney, his team in IHAB, and many others across DTT for completing the initial phases of this project.

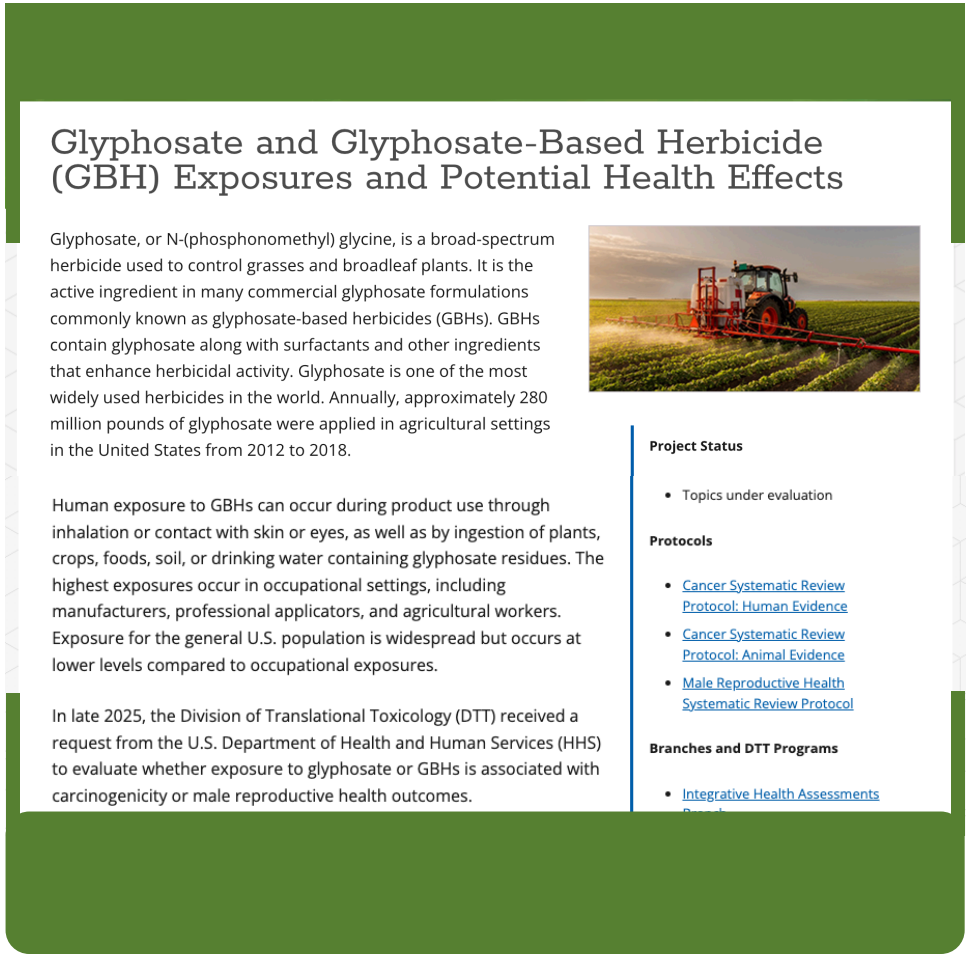
DTT Glyphosate/GBH Evaluation Added to NIEHS Website

NIEHS Website Update

Glyphosate and Glyphosate-Based Herbicide (GBH) Exposures and Potential Health Effects

Why it matters

- Responds to a late-2025 HHS request to evaluate carcinogenicity and male reproductive health outcomes
- Makes DTT protocols and evaluation scope visible through a public NIEHS project page
- The products are DTT academic outputs, separate from formal NTP reports



Glyphosate and Glyphosate-Based Herbicide (GBH) Exposures and Potential Health Effects

Glyphosate, or N-(phosphonomethyl) glycine, is a broad-spectrum herbicide used to control grasses and broadleaf plants. It is the active ingredient in many commercial glyphosate formulations commonly known as glyphosate-based herbicides (GBHs). GBHs contain glyphosate along with surfactants and other ingredients that enhance herbicidal activity. Glyphosate is one of the most widely used herbicides in the world. Annually, approximately 280 million pounds of glyphosate were applied in agricultural settings in the United States from 2012 to 2018.

Human exposure to GBHs can occur during product use through inhalation or contact with skin or eyes, as well as by ingestion of plants, crops, foods, soil, or drinking water containing glyphosate residues. The highest exposures occur in occupational settings, including manufacturers, professional applicators, and agricultural workers. Exposure for the general U.S. population is widespread but occurs at lower levels compared to occupational exposures.

In late 2025, the Division of Translational Toxicology (DTT) received a request from the U.S. Department of Health and Human Services (HHS) to evaluate whether exposure to glyphosate or GBHs is associated with carcinogenicity or male reproductive health outcomes.

Project Status

- Topics under evaluation

Protocols

- Cancer Systematic Review Protocol: Human Evidence
- Cancer Systematic Review Protocol: Animal Evidence
- Male Reproductive Health Systematic Review Protocol

Branches and DTT Programs

- Integrative Health Assessments

A New NIH Common Fund Program:

The RNomics Program

Visit the website:

Objective: Build the tools and technologies needed to study the entire set of RNA molecules in the human body, or the "RNome"

NIH National Institutes of Health
Office of Strategic Coordination–The Common Fund

The RNomics Program

Common Fund website:

A new NIH Common Fund Program aims to build the tools and technologies needed to study the entire set of RNA molecules in the human body, or the "RNome"

Forecasts now available for anticipated opportunities:



RNomics Technology Enhancement Centers (RTECs) to further develop existing technologies, with the goal of delivering measurable improvements and supporting broad community use.



Transformative Technologies for Experimental and Computational RNome Characterization and Functional Analysis to support new early-stage RNA technologies that address major limitations of current methods.



RNomics Molecular Standards to support development, testing, refinement, and distribution of RNA molecular reference standards.



RNomics Outreach and Coordination (ROC) Center to serve as the consortium's hub for data management, coordination, and community engagement.

Addressing Public Concern: NIH Working to Address Concerns about Fluoride

- NIH is bolstering research efforts on health impacts of fluoride exposure at levels present in the U.S.
  - Tapping into existing public health surveillance data
  - Leveraging ongoing, large-scale, longitudinal studies
  - Encouraging reuse of large data sets for new analyses
  - Assessing potential fluoride biomarkers
  - Supporting investigator-initiated research



- NIH is collaborating with other federal agencies to identify and address needed research avenues and useful biomarkers
  - FDA-NIH fluoride research agenda
  - Inter-agency discussions on state of the science, research gaps, studies across the lifespan

Addressing Public Concern: NIH Working to Address Concerns about Fluoride

- NIH is facilitating informed decision making by the American people
  - Supporting the generation of high-quality evidence
    - EPA currently reviewing fluoride under the Safe Water Drinking Act
  - Strengthening public trust in science
    - NIH generating visual dashboards on fluoride



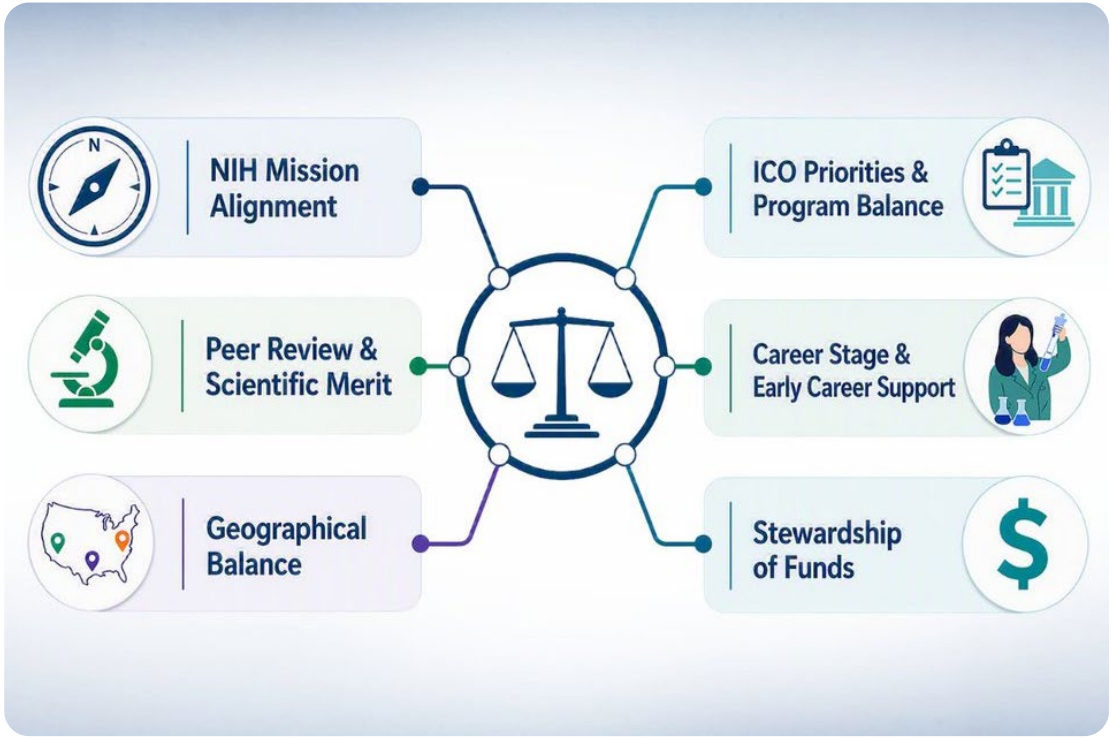
NIH Director's Priorities

NIH Unified Funding Strategy

Multifaceted and harmonized approach to funding that incentivizes a strong research ecosystem

Funding decisions move beyond a single score or payline expectation to a fuller view of merit, mission fit, and portfolio needs.

- Peer review remains foundational for scientific and technical merit.
- ICOs consider reviewer feedback in its entirety, including strengths, concerns, innovation, and risk/reward.
- IC Directors retain final funding authority within a standardized framework.



UFS is not a major shift for NIEHS, which has historically considered factors beyond a strict payline in funding decisions.

NIH Unified Funding Strategy

Moving Beyond a Single Number

Payline Strategy

One number

31

Average of peer review scores

Funding Decisions

In both funding approaches, Institute & Center Directors make final funding decisions

Unified Funding Strategy



Funding Decisions

A Proposed Approach to Cap the Number of Research Project Grants

RFI released (NOT-OD-26-086): June 8th, 2026

- NIH issued a Request for Information proposing a cap on simultaneous Research Project Grants (RPGs) per PI.
- The proposal was an approach to broaden funding distribution, enhance oversight, and support early-career researchers.
- NIH requested input on cap levels, implementation options, and potential unintended consequences.

Public response published: August 19th, 2026

- NIH received nearly 3,300 comments from the research community.
- Perspectives were mixed: many supported broader distribution; others raised concerns about impacts on large labs, collaboration, and administrative burden.

Key themes in feedback

- Support for broader distribution of NIH RPG support
- Potential effects on team science and large, complex programs
- Alternatives such as capping total dollars, partial counting of multi-PI awards, and exemptions for small grants

NIEHS Awardees and Recognition

Annual Karen Wetterhahn Award Lecture



Dr. Karen Wetterhahn

October 16, 1948 – June 8, 1997

Program Director of the Dartmouth College

Superfund Research Program (SRP)
1995 to 1997

https://www.niehs.nih.gov/research/supported/centers/srp/training/wetterhahn

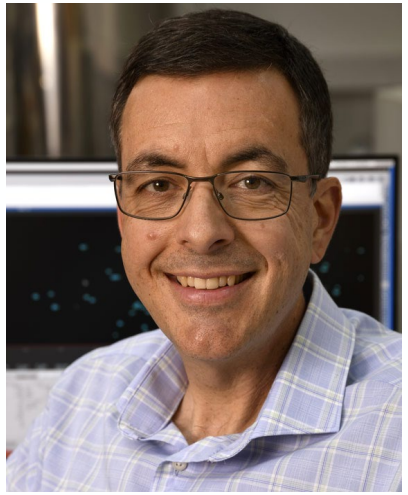
Annual Karen Wetterhahn Award Lecture



Brendan O'Leary, Ph.D.

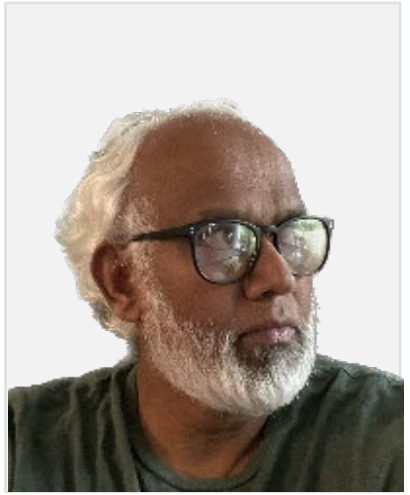
27th recipient of the Karen Wetterhahn Memorial Award

Awards at NIEHS

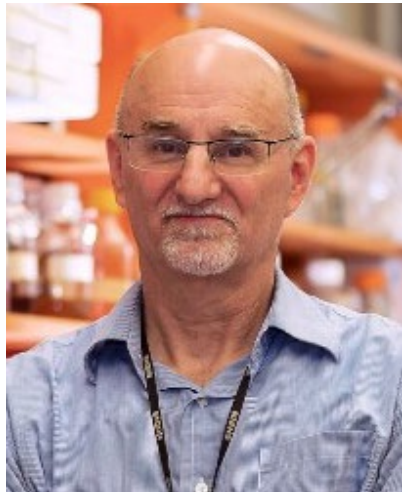


Geoff Mueller, Ph.D.

Awarded a
Bench to Bedside award
in collaborations with
Sarita Patil, M.D. (MGH)



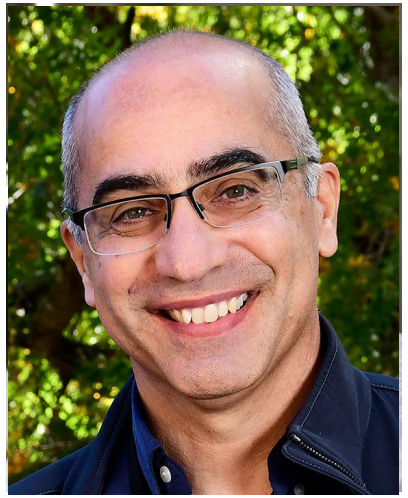
Lalith Perera, Ph.D.



Bill Copeland, Ph.D.

Awarded a grant from The PolG Foundation

Awards at NIEHS



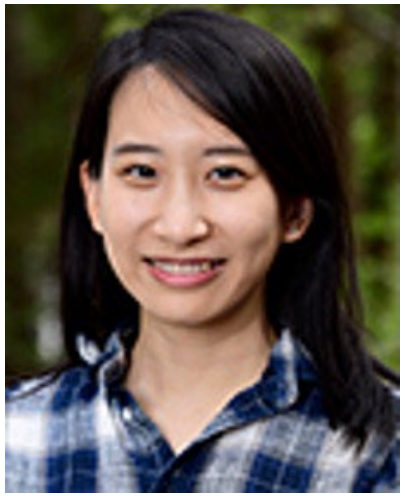
Stavros Garantziotis, M.D.

Medical Director,
NIEHS
Clinical Research Unit

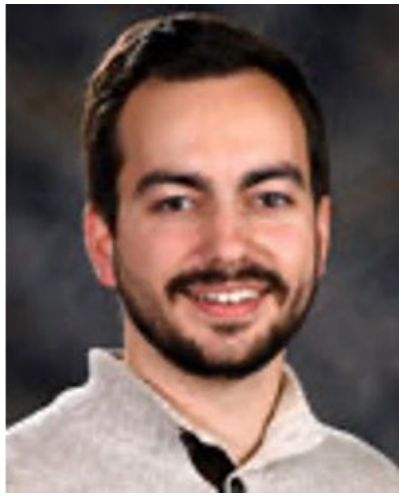
Congratulations,
Dr. Stavros Garantziotis!

Awarded tenure by the
NIH Central Tenure Committee
and promoted to Senior Investigator in CTRB.

NIEHS Fellow Accomplishments



Yu-Ying Chen, Ph.D., RDBL



Ryan Marquardt, Ph.D., RDBL



Joseph Breeyear Ph.D., BCBB

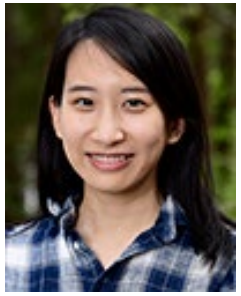
K99/R00 Awardees

National Institute of Environmental Health Sciences
Your Environment. Your Health.

2027 FARE Awardees



Felipe Aguayo Abarca
MCBL



Yu Ying Chen
RDBL



Meklit Daniel
EB



Osafu Egbon
BCBB



James Falese
ERBL



Minkyung Khang
MCBL



Michelle Klawans
EB



Gage Leighton
GISBL



Sarahna Moyd
EB



Keyshia Negron Rios
RDBL



Serife Gulberk Ozcebe
CTRB



Katherine Pullella
EB



Ammad Shaukat
ERBL



Asmita Singh
RDBL



Dimitrios Theofilatos
ERBL



Vaishnavi Venkat
EB



Shaohua Wang
NL



Rebecca Yeboah
ERBL



Xinwen Zhang
DTT

NIEHS placed 3rd at NIH in total number of FARE awards this year

Acknowledging DERT's September 30th Award Deadline Push

Recognizing the Division of Extramural Research and Training for advancing grant awards under compressed timelines



DERT's work helps keep NIEHS science moving

DERT program, grants management, and administrative teams help move award actions across the finish line.

Thank You, Olivier Deschenes, Ph.D.

In recognition of his service on the National Advisory Environmental Health Sciences Council



Olivier Deschenes, Ph.D.

Professor
University of California, Santa Barbara

As his Council term concludes,

NIEHS thanks Dr. Deschenes for his guidance, insight, and thoughtful contributions to Council deliberations.

Thank you!

National Institute of Environmental Health Sciences

National Toxicology Program
U.S. Department of Health and Human Services

