



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

Report to the National Advisory Environmental Health Sciences Council

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September 12, 2024



FY25 House Appropriations

- The **House FY25 Interior and Environment Bill** has the NIEHS Superfund related programs at a **mark of \$75M**
 - **\$4.7M below FY24**
 - \$8M below the President's Budget request and FY23 enacted
- The **House FY25 Labor-HHS bill includes a portion of the NIH reform** proposed by House Energy and Commerce Chair, which **consolidates NIH to 15 Institutes and Centers.**
 - If passed into law, NIEHS would be a part of the National Institute on Health Science Research with NIMHD, NCCIH, NINR and FIC.
 - Mark for this new Institute is **\$1,931,662,000, which is a total increase of \$20,049,000 from FY24 for all the combined ICs.**

FY25 Senate Appropriations

- The **Senate FY25 Interior and Environment Bill** has our NIEHS Superfund related programs at a mark of **\$81.6M**
 - **Increase of \$1.9M from FY24 levels**
 - \$1.4M less than the President's Budget request and FY23 enacted
- The **Senate FY25 Labor-HHS bill** has **NIEHS flat at \$913,979,000, same as our FY23 and FY24 levels**
 - \$2.8M less than the President's FY25 Budget request

NIEHS FY2025-2029 Strategic Plan

***Health at the Intersection of People
and Their Environments***

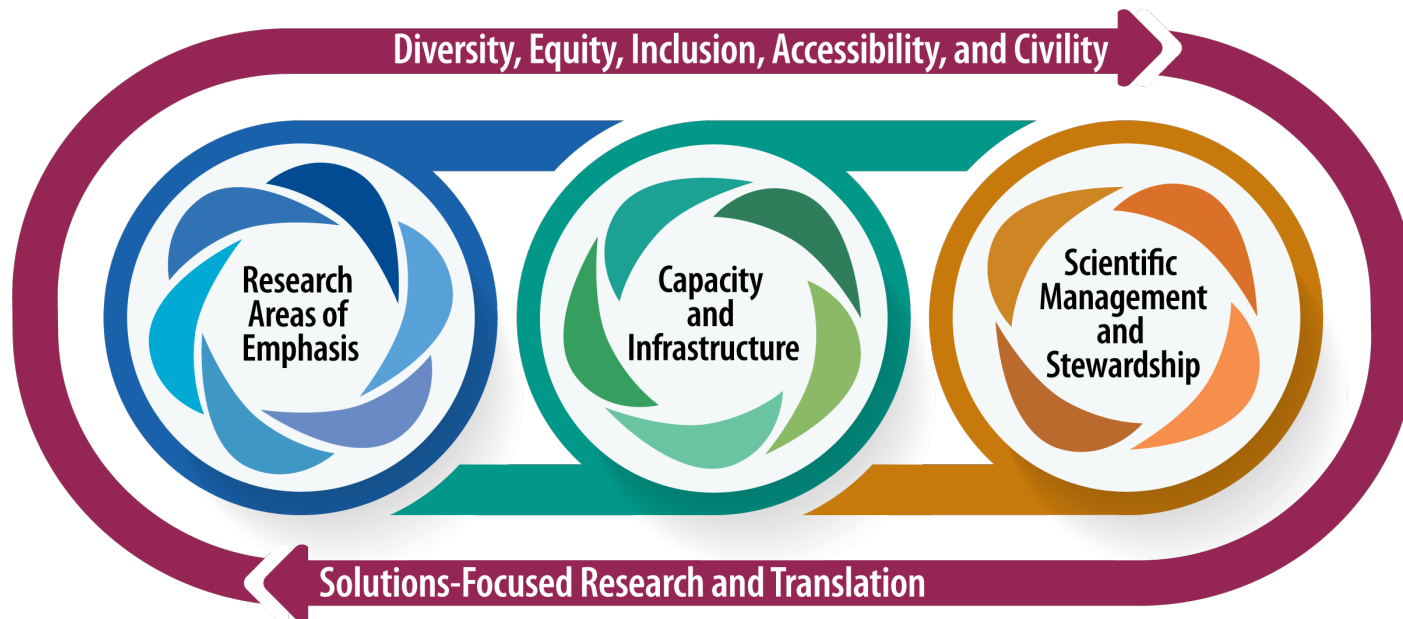
The mission of the National Institute of Environmental Health Sciences is to research how the environment affects biological systems across the lifespan and to translate this knowledge to reduce disease and promote human health.



The vision of the National Institute of Environmental Health Sciences is to provide global leadership for innovative research that improves the health of people and communities.



NIEHS Strategic Plan Overview

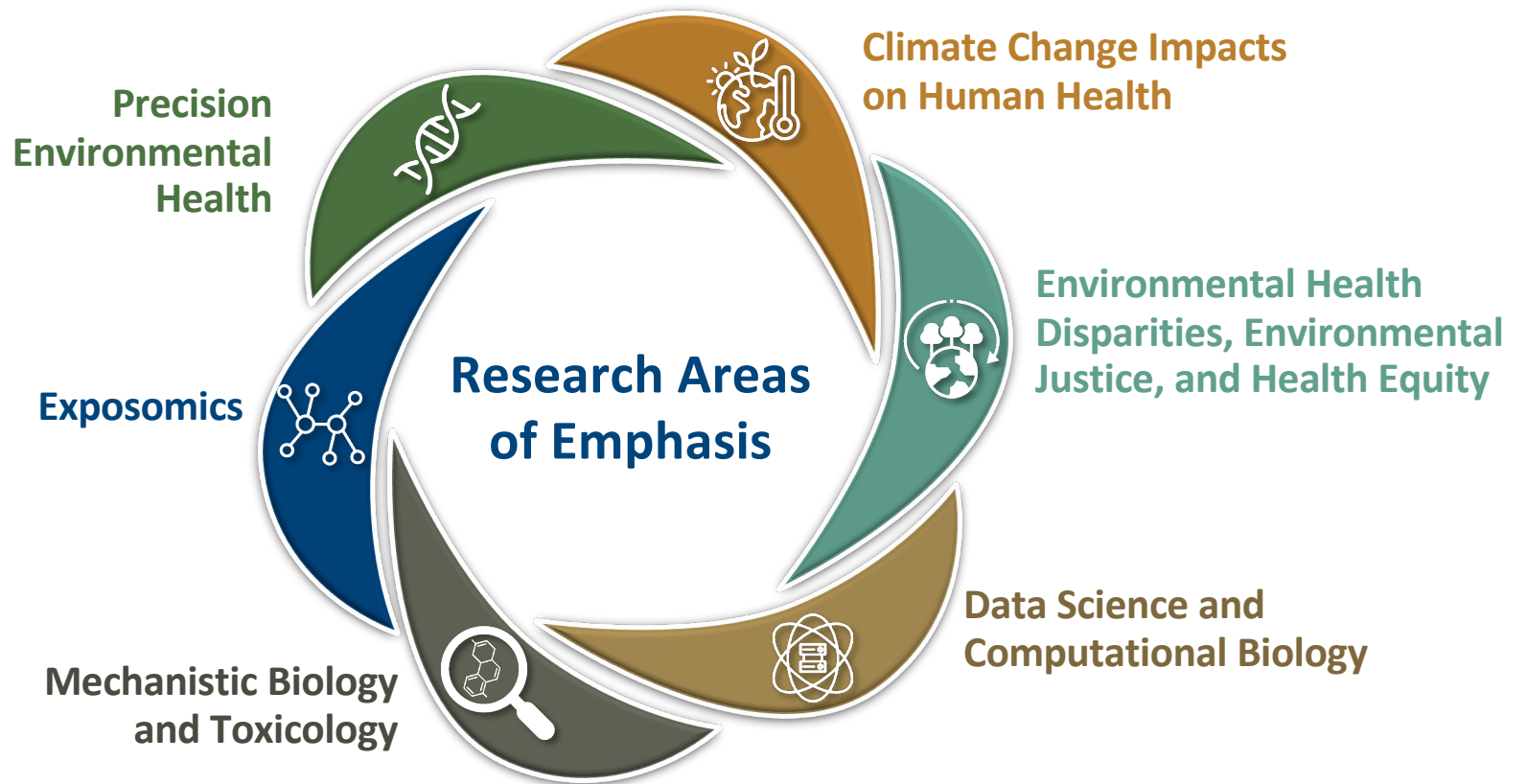


Cross-cutting Themes

- Diversity, Equity, Inclusion, Accessibility, and Civility
- Solutions-Focused Research and Translation



Bernard et al., 2021, *Nature Medicine*



Exposomics

Translational Goal

- Develop the ability to understand interactions across the exposome for the purpose of generating, and sharing, **a more complete picture of positive and negative environmental effects on health, including disease risk, progression, severity, and management**

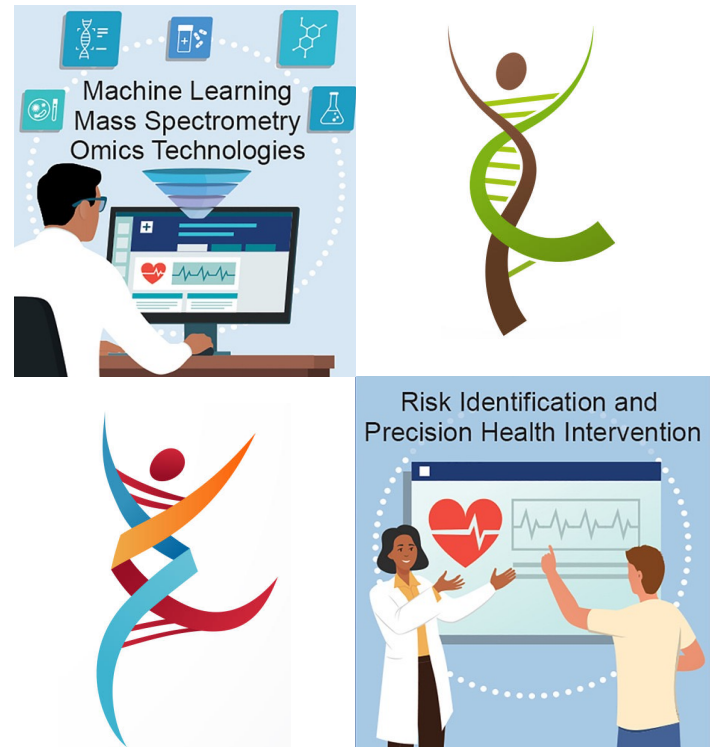


Motsinger-Reif et al., 2024, *Cell Genomics*

Precision Environmental Health

Translational Goal

- Advance PEH science to obtain a level of knowledge that will permit individuals and healthcare providers to **better understand, manage and communicate environmental risks, in both general and clinical settings, based on individual susceptibilities.**





Mechanistic Biology and Toxicology

Translational Goal

- Discover the mechanisms underlying the biological impacts of environmental exposures and **use that knowledge to identify strategies to improve individual and population health**



Data Science and Computational Biology

Translational Goal

- Fully harness the increasing availability of diverse environmental health-relevant data and advances in data science methods, tools, and management **to enable more precise identification and understanding of the complex casual relationships between environmental exposures and health impacts and translation of scientific discovery into actionable knowledge**





Environmental Health Disparities, Environmental Justice, and Health Equity

Translational Goal

- Prioritize research to understand and address environmental health disparities and **enable full application of the knowledge gained to achieving environmental justice and health equity**



Climate Change Impacts on Human Health

Translational Goal

- Catalyze research and translation of climate change effects on human health to **reduce related health threats and impacts, especially among those most at-risk, and build health resilience to climate change impacts among individuals, communities, and nations around the world.**



Capacity and Infrastructure

- **Scientific Workforce Development and Training**
- **Data Infrastructure and Management**
- **Human Studies and Community-engaged Research**
- **Exposure Measurement**
- **Communication and Dissemination**



Scientific Management and Stewardship

- **Public Trust in Science**
- **Sustainability**
- **Review, Evaluation, and Assessment Capabilities**
- **Leadership Core Values**



NIEHS Commitment to Open Communication and Collaboration

Continued Collaboration is Key: Sharing the New NIEHS Strategic Plan



Bruce J. Tromberg, Ph.D.
NIBIB Director



Joni L. Rutter, Ph.D.
NCATS Director



Eric D. Green, M.D., Ph.D.
NHGRI Director



Kathleen Neuzil, M.D.
FIC Director



**Jennifer Webster-Cyriaque,
DDS, Ph.D**
NIDCR Deputy Director

U.S. Congresswomen Valerie Foushee and Deborah Ross Visit NIEHS

June 18, 2024



<https://x.com/ValerieFoushee/status/1805720792300191979>

NIEHS Hosted Biannual Meeting of the NIH Tribal Advisory Committee

June 26-28



White House Climate and Health Forum

August 14, 2024

NIH Principal Deputy Director Larry Tabak D.D.S., spoke about the NIH Climate Change and Health Initiative led by NIEHS



Stacy Aguilera-Peterson, John Balbus, Carmen Coles,
Stephanie Dobitsch, Geoffrey Plumlee, Lawrence Tabak

NIEHS Updates

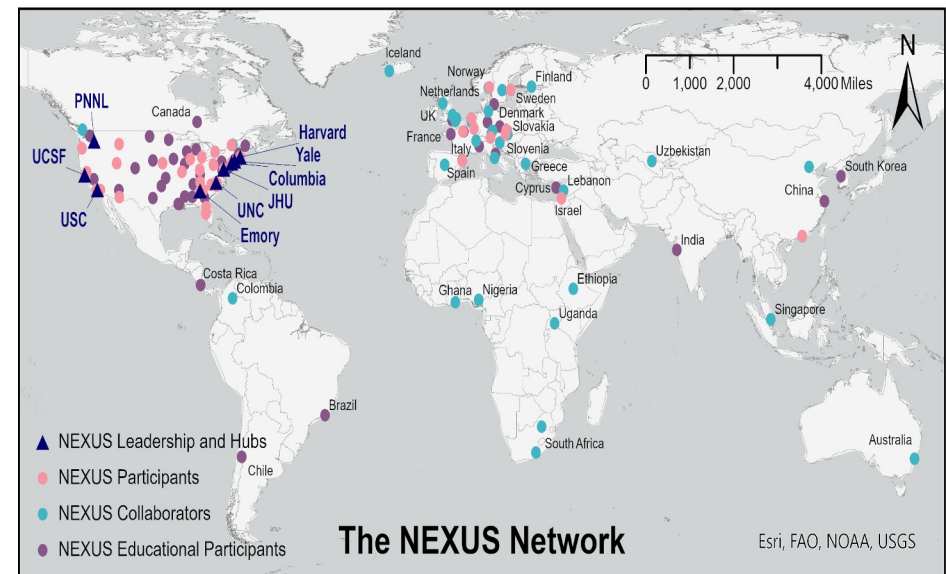
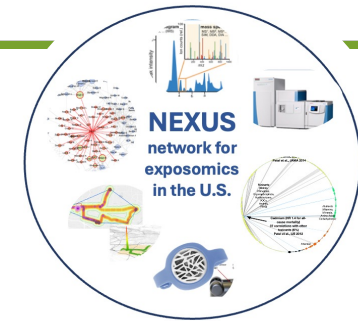
NIH: Center for Exposome Research Coordination

- **Awarded September 4, 2024**
 - NEXUS: Network for Exposomics in the U.S. (Columbia, Harvard, and the University of Southern California)
- **Overall Goal:**
 - **Build a Global Community of Practice for cooperation and collaboration in coordination with the European Human Exposome Network**
 - Develop a conceptual framework to address exposomics
 - Promote technologies/methods and data sharing
 - Capitalize on existing exposome research initiatives, infrastructures, and resources
- **Funding: \$1.55M in FY2024**



NEXUS: Network for exposomics in the U.S.

U24ES036819 Center for Exposome Research Coordination (CERC)



<https://www.nexus-exposomics.org/>

Complement-ARIE NAMs Technology Development Center Notice of Intent to Publish a Funding Opportunity

The NIH Common Fund Complement Animal Research In Experimentation (Complement-ARIE) Program **has released a Notice of Intent to Publish a Funding Opportunity.**

The purpose of this Notice is to alert the research community of a pending funding opportunity to **support Complement-ARIE NAMs Technology Development Centers.**

The goal of the Comprehensive NAMs Technology Development Centers is to stimulate the development of combinatorial NAMs to support the areas of greatest need.

The estimated release date of the NOFO is: **October 18, 2024.**

View the Complement-ARIE NOITP: <https://go.nih.gov/iuNC9v>

Join the Complement-ARIE listserv: go.nih.gov/ComplementARIE_listserv



Link to Complement-ARIE Notice of Intent to Publish a Funding Opportunity

Launch of the New Climate Change and Health Initiative Website



climateandhealth.nih.gov/



Get Funding

Grants are available for solutions-focused research to address health threats related to climate change. Find open funding opportunities and already funded projects. Read the guidelines and apply today.



Join the Community of Practice

Learn about our Research Coordinating Center, referred to as CAFE, (Convene, Accelerate, Foster, and Expand) that connects people around the globe interested in climate and health. Find collaborators, resources, and tools.



Attend Our Seminars

Participate in scientific seminars and workshops hosted by NIH Institutes and Centers to learn about the human health implications of climate change.



Visiting Scholars Build Capacity at NIH

Meet the scholars selected to share their knowledge and skills with NIH scientists and staff to build capacity for conducting climate-related and health research at NIH.



NIH CCHI Research Activities

Learn about the many NIH CCHI programs and activities underway including Research Centers located across the country, the Research Coordinating Center, Exploratory Grants for new Research Centers, the Alliance for Community Engagement, and Disaster Response Research.

About the NIH CCHI

Learn about our strategic framework; and our leadership team, partners, and collaborators.

Impacts of Climate Change on Human Health

Download the diagram (PDF, 2MB) that depicts the range of climate impacts that can affect health.

Literature Portal [↗](#)

Dig into an integrated bibliography of global peer-reviewed research and gray literature on the science of climate impacts on human health curated by NIH's National Institute of Environmental Health Sciences.

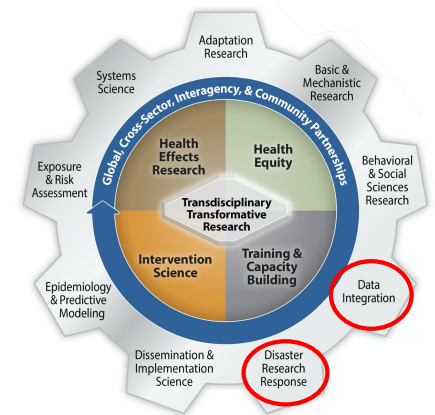
NIH CCHI Climate and Health Outcomes Research Data Systems (CHORDS) PCORTF-Funded Project (March 2023 – March 2026)

- **Goal:**

The **CHORDS** project will create **data products and resources** that standardize, harmonize, and link **climate and environmental data with health outcomes data (focus on wildfires)** so researchers can identify, analyze, and reduce the negative health effects associated with climate-related events and improve patient and population health outcomes.

- **Examples of data types:**

- GIS mapping data
- Climate satellite data
- Personal exposure data
- Electronic health records



CHORDS program page: <https://www.niehs.nih.gov/research/programs/chords>

CHORDS Climate and Health Data Website Launched

- **New resource houses wealth of environmental and health data to advance research**
 - Catalog of available data resources and data sets
 - Toolkit of data resources and educational materials
 - Use case data sets aligned to common spatial and temporal dimensions for use by health researchers
 - Literature portal of curated climate change and health publications
 - Glossary of terms to aid researchers seeking to understand the space



CHORDS platform page: https://niehs.github.io/chords_landing/index.html


Senior Leadership Committee Update

Acting Clinical Director

- **Michael Fessler, M.D.** has stepped in as Acting Clinical Director as of July 1, 2024, until a permanent Clinical Director for NIEHS is on board.
- Dr. Fessler will be contributing to the Senior Leadership Committee functions as well as attending the NIH Medical Executive Meetings and SD/CD meetings.
- Dr. Fessler is the Chief of the Immunity, Inflammation and Disease Laboratory



Michael Fessler, M.D.
Acting Clinical Director



NIEHS
BOLD
PREDICTIONS

NIEHS Bold Predictions

- 1 Encourage your scientific networks to read the NIEHS FY 2025-2029 Strategic Plan
<https://www.niehs.nih.gov/about/strategicplan>
- 2 We'd like the community's predictions!
NIEHSDirector@nih.gov
- 3 Discussion of bold predictions at February Council

How will implementing the new NIEHS strategic plan change global human health in the next 5-10 years?

Thank you!

