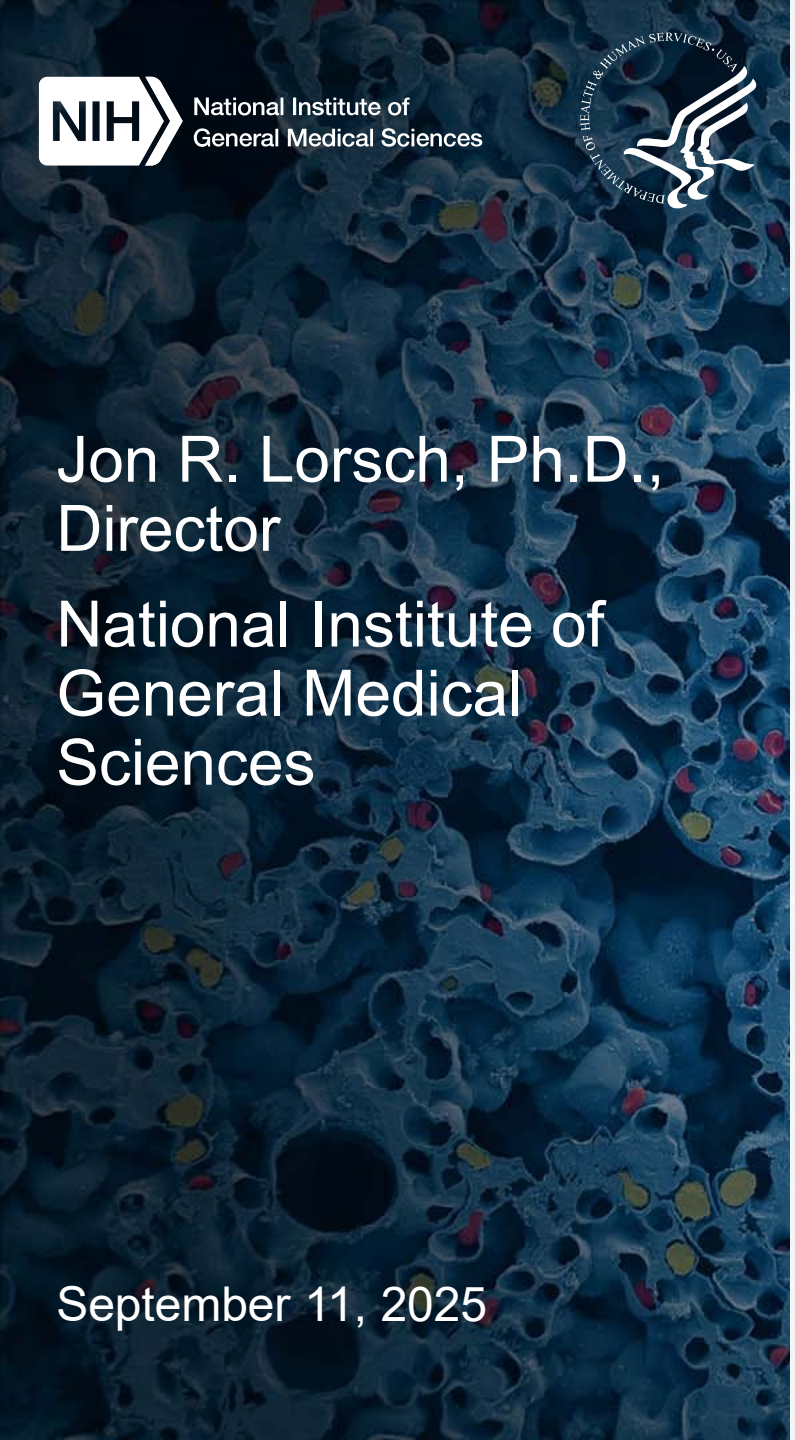


National Institute of General Medical Sciences

Jon R. Lorsch, Ph.D.,
Director

National Institute of General Medical Sciences

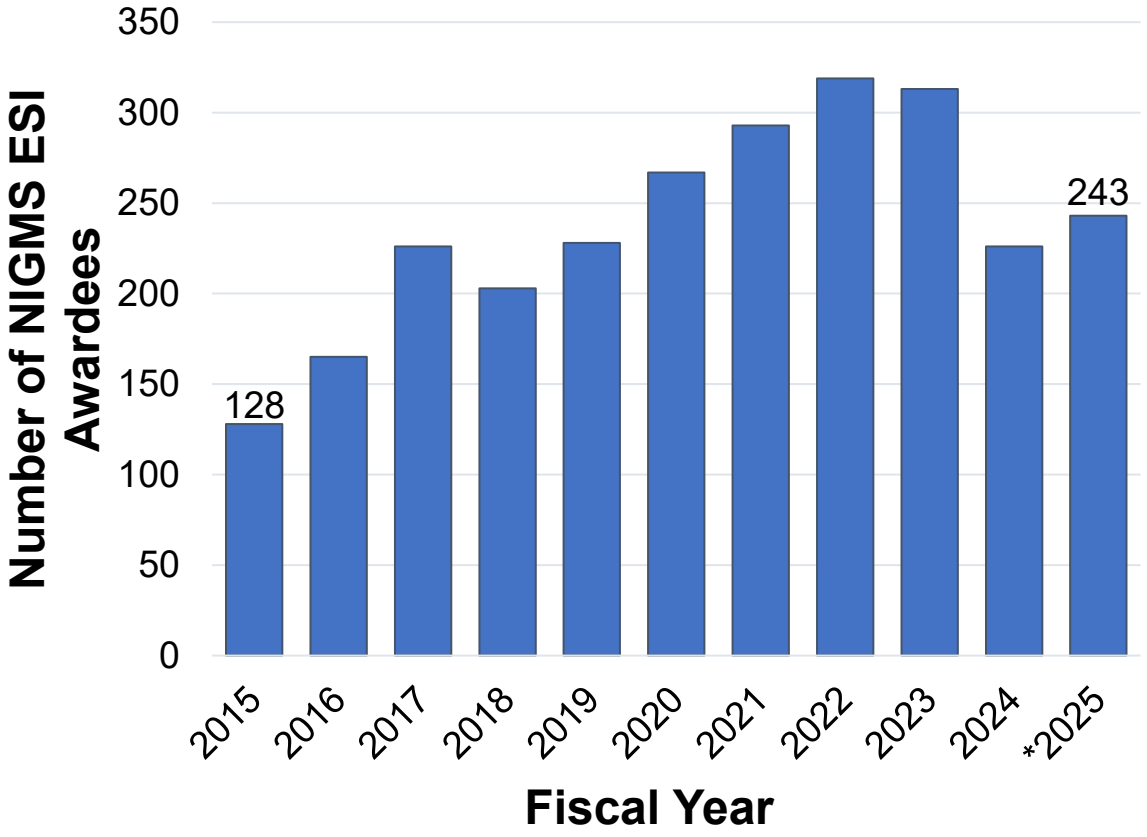
September 11, 2025

National Advisory General Medical Sciences Council

NIGMS Staff Transitions

- Jon Lorsch will be transitioning full-time to the role of NIH Deputy Director for Extramural Research starting in early October
- Erica Brown will become Acting Director of NIGMS
- Darren Sledjeski will become Acting Deputy Director of NIGMS
- All transitions are pending required clearances

NIGMS Continues Support for ESIs

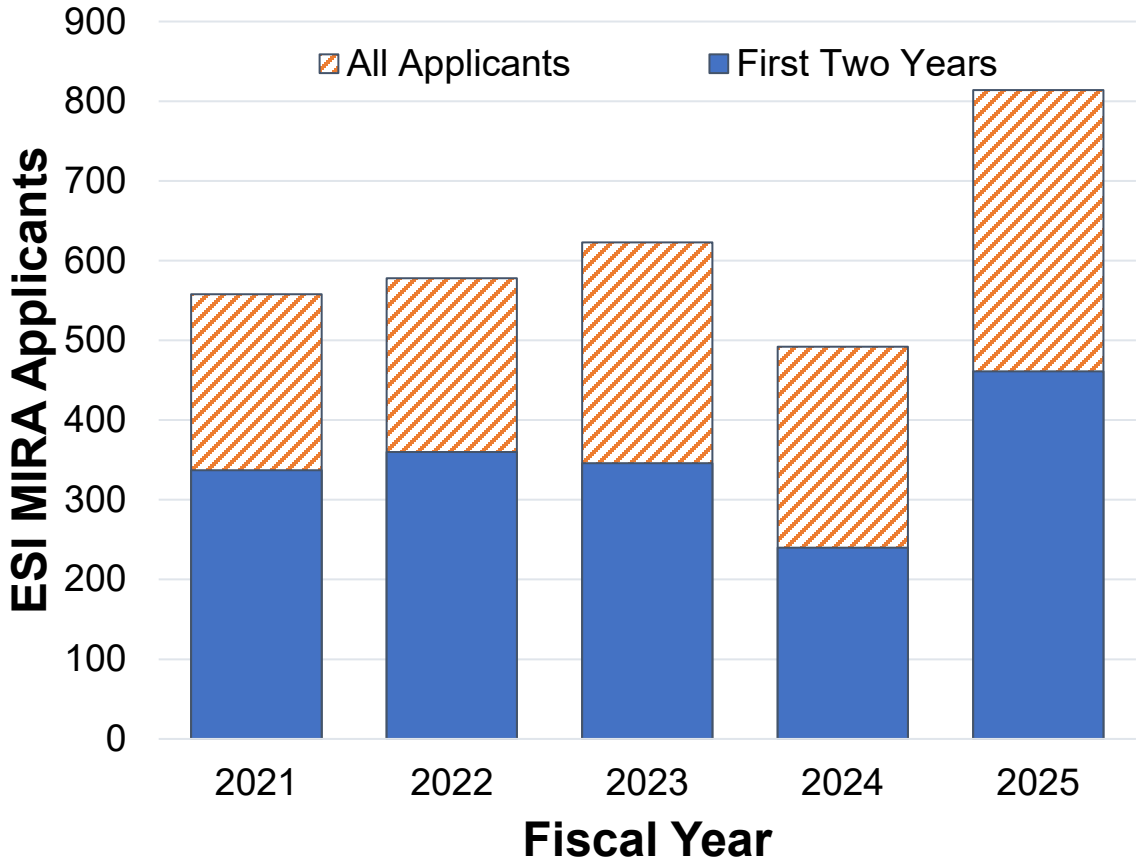


- To date, NIGMS has made awards to 243 Early Stage Investigators (ESIs) in Fiscal Year 2025.
- Over 95% of new awards to ESIs are Maximizing Investigators' Research Award (MIRA) grants.
- NIGMS has supported the largest number of ESIs among ICs since the beginning of the Next Generation Researchers Initiative (NGRI).

*Preliminary Number

ESI MIRA Applicants Continue to Apply Early in Their Careers

- ESI MIRAs are intended to offer support for ESIs as early as possible in their careers.
- 50% or more of NIGMS ESI MIRA applicants apply within 2 years of their first independent research position.
- Recent drop may reflect unsuccessful applicants re-applying.

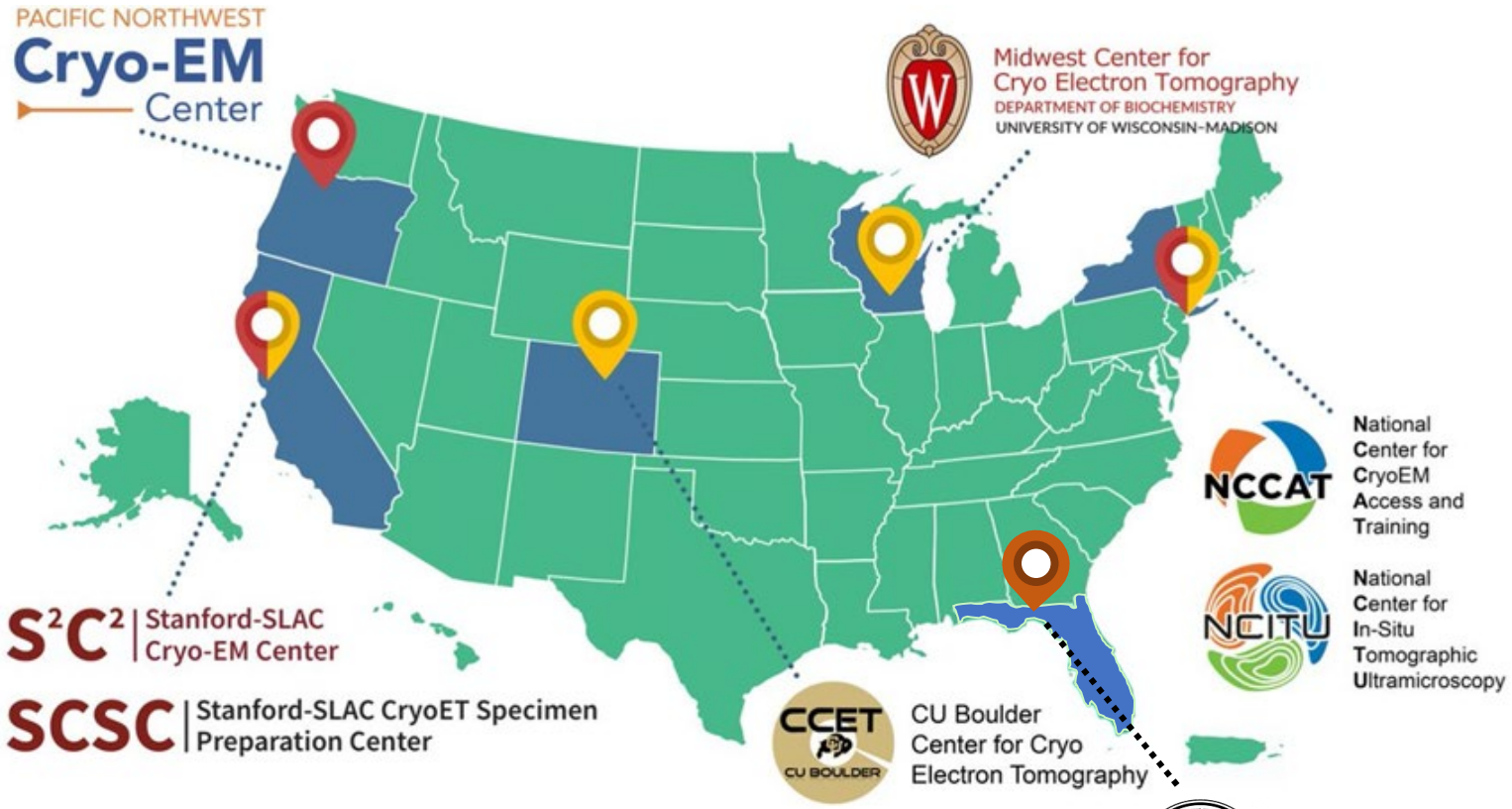


NIGMS National and Regional Technology Resources

- Expand access to high-end technologies
- Create economies of scale
- Reduce costs for institutions
- Many centers are free, all are low-cost
- Examples of funded National Resources:
  - National Cryo-Electron Microscopy Centers (https://www.cryoemcenters.org/)
  - IDeA National Resource for Quantitative Proteomics (https://idearesourceproteomics.org)
  - National Magnetic Resonance Facility (https://nmrfam.wisc.edu)
- https://nigms.nih.gov/Research/mechanisms/Pages/NIGMS-National-and-Regional-Resources-(R24).aspx

National and Regional Cryo-Electron Microscopy and Cryo-Electron Tomography Centers

Single Particle CryoEM Centers (NIGMS managed & supported)
State-of-the-art equipment, technical support, cross-training for the production and analysis of high-resolution data



National Network for CryoET (Common fund through 2026)
Advanced instrumentation for cryoET specimen preparation, high-resolution cryoET data collection and cross-training in cryoET methods.

The Southeastern Center for Microscopy of MacroMolecular Machines (regional center)

Access to these centers is available at no charge for non-profit use

Examples of NIGMS-Supported Data Resources

- BioPortal Knowledgebase
  - Integrates >800 biomedical ontologies for researchers and clinicians
  - https://bioportal.bioontology.org
- Global Proteomics Mass Spectrometry Data Sharing Infrastructure
  - Open sharing of proteomics data, including standards, workflows and data indices
  - https://massive.ucsd.edu/ProteoSAFe/static/massive.jsp
- RRID Portal/Resource Watch
  - Allows research resource identification, discovery and reuse for sharing and reproducibility
  - https://rrid.site

New Tracks to Broaden the Scope of and Enhance Institutional Capacity for Research Training

- Trans-Departmental Basic Biomedical Sciences (TBB) Program
  - Applicants who do not have an active NIGMS predoctoral T32 in any of the other Basic Biomedical Sciences areas at the time of the award (see NOT-GM-25-025).

- MSTP Advancing Health and Development (AHeAD) Program
  - Applicants from IDeA-states, HBCUs or Tribal Entities (see NOT-GM-25-024)

- To enhance research training capacity, TBB and MSTP-AHeAD T32 awards will have higher Training Related Expenses beginning FY26.

Enhancing Capacity for Undergraduate Research Training

- Published forecast for the new “Biomedical Undergraduate Research Training” (BURT) T34 Program (FOR-GM-26-002).

- Provide funding to strengthen research training environments and develop a pool of well-trained undergraduate students who transition into and complete biomedical, research-focused higher degree programs (such as Ph.D. or M.D./Ph.D.).

- Support organizations with modest levels of NIH research project grant funding, including both baccalaureate degree granting institutions, and partnerships between baccalaureate degree and associate-degree granting institutions (community colleges).

Prioritizing Human-Based Research Technologies

- NIH is prioritizing the development and use of human-based research technologies
- All Notices of Funding Opportunity that relate to animal models must also support human-based approaches
  - For example, clinical research, real-world data, New Approach Methods (NAMs) such as organoids, precision cut tissues, and computation/artificial intelligence
- Animal models can still be used when scientifically appropriate

New Approach to Funding of Foreign Collaborations

- NIH will no longer support subawards to foreign institutions
  - Difficulty tracking where the money went and how it was spent
- Will be replaced by linked grants in which the foreign sites are direct grantees
  - Will significantly improve our ability to track funds because foreign sites will draw money directly and follow grantee financial reporting requirements
- See NOT-OD-25-104 and NOT-OD-25-130
- Details of new linked grant structure will be forthcoming very soon

Some NIH Office of Extramural Research Priorities

- Reducing administrative burden and complexity
  - Examples: NOFOs, Data Management and Sharing Plans, Basic Experimental Studies in Humans (BESH)
- Promoting innovation, experimentation and evaluation in funding approaches
- Promoting research integrity
- Enhancing biosafety and laboratory safety
- Detecting and disrupting foreign interference
- NIH/national strategy for shared research resources?

Thank you all!

Headshots of the employees at NIGMS.