



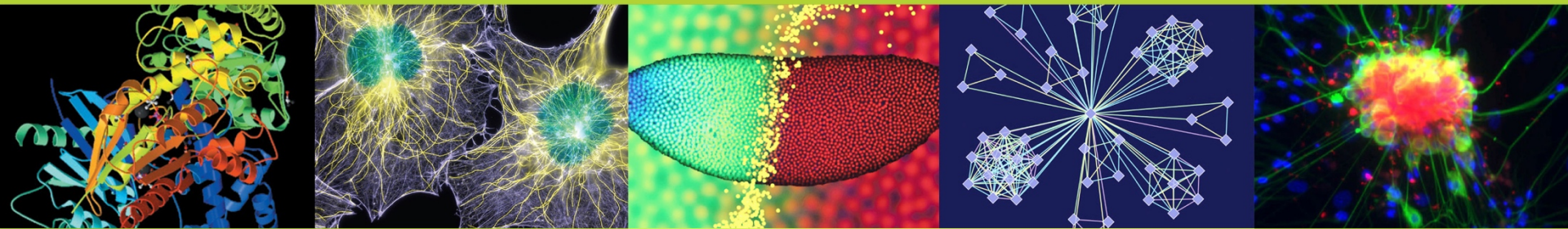
National Institute of
General Medical Sciences



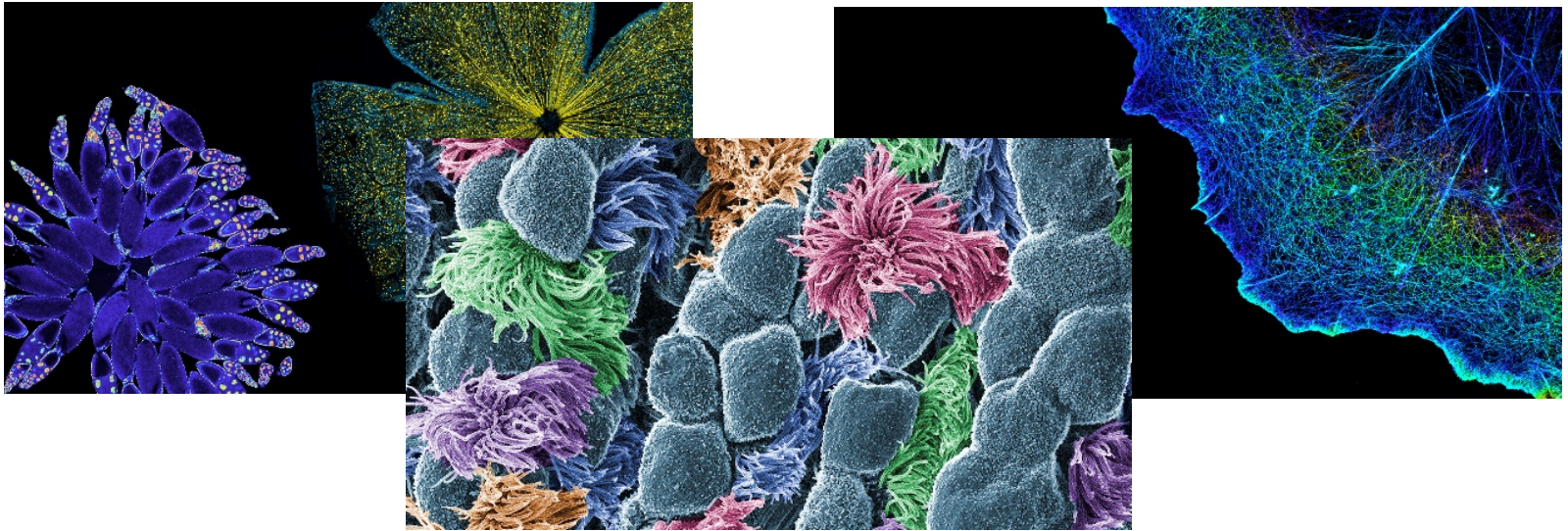
IDeA Program Meeting

September 22, 2020

Jon R. Lorsch, Ph.D., Director
National Institute of General Medical Sciences



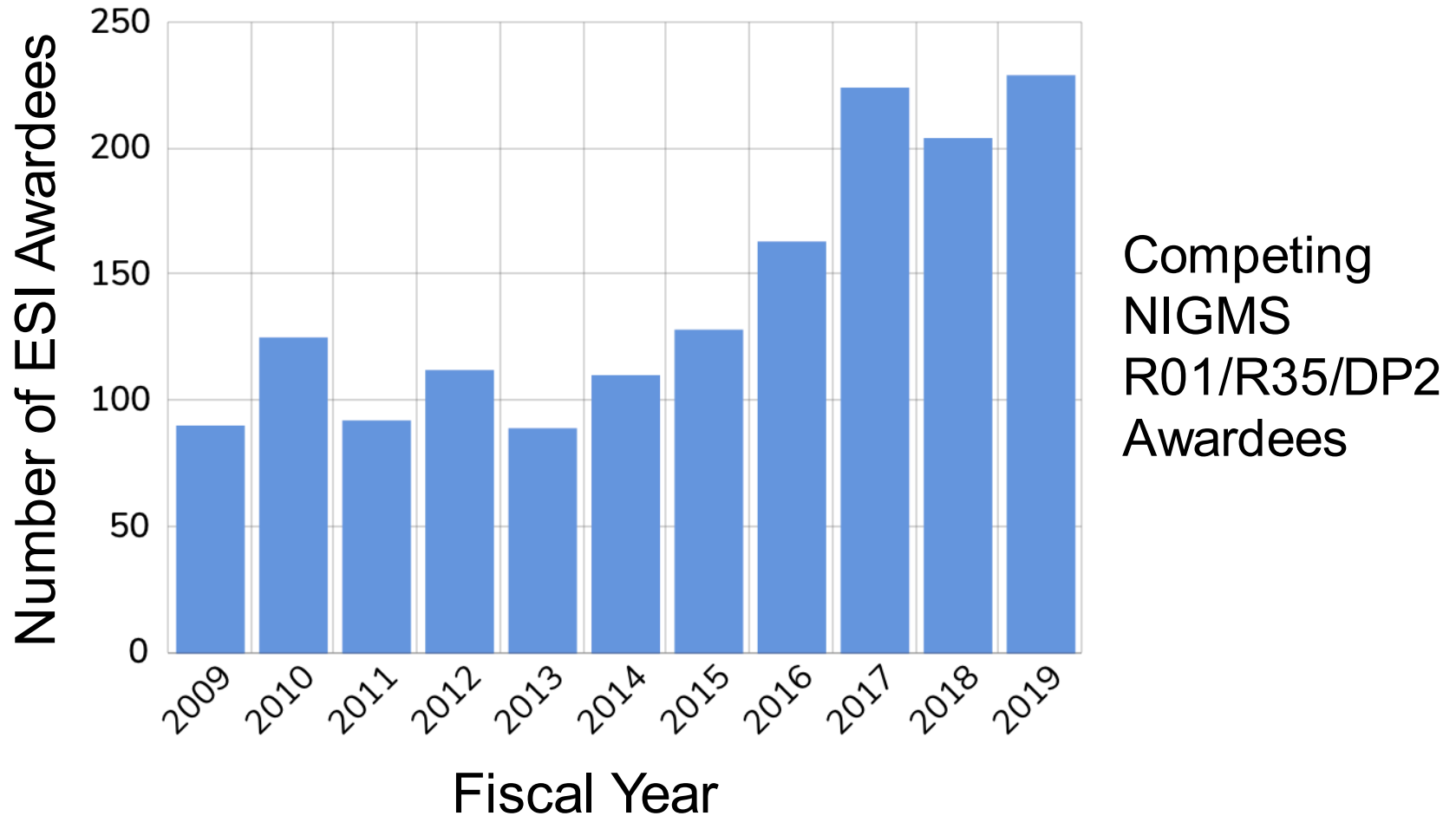
Sign Up for the NIGMS Feedback Loop and BioBeat Blogs!



<https://loop.nigms.nih.gov>

<https://biobeat.nigms.nih.gov>

Record Number of ESIs Funded



<https://loop.nigms.nih.gov/2020/03/application-and-funding-trends-in-fiscal-year-2019/>

Upcoming Event: NIGMS Director's Early Career Investigator Lecture

- **Michael D. L. Johnson, Ph.D.**
University of Arizona Health Sciences
- “Microbes, Metals, Music, and Lessons in Disproving Your Hypothesis”
- October 14, 2020
1:00-2:00 p.m. ET
- Participate remotely via Zoom or watch on NIH VideoCast



<https://www.nigms.nih.gov/news/meetings/ECI>

Upcoming Event: NIGMS Stetten Lecture

- **Emery N. Brown, Ph.D.**
Institute for Medical Engineering & Science
Massachusetts Institute of Technology
- “Rethinking General Anesthesia”
- November 18, 2020
3:00-4:00 p.m. ET
- Participate remotely via WebEx or watch on NIH VideoCast



<https://www.nigms.nih.gov/news/meetings/stetten>

NIGMS Training Webinars on Demand

- Series of 14 webinars held over the summer for students, postdocs, and faculty—now available for viewing on YouTube
- Range of biomedical and career development topics
- 2,664 live views; 4,320 views on YouTube (as of 8/31/20)



<https://www.nigms.nih.gov/News/meetings/Pages/webinars-for-trainees.aspx>

NIGMS Grantee Receives Top U.S. Mentoring Award

2020 Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring

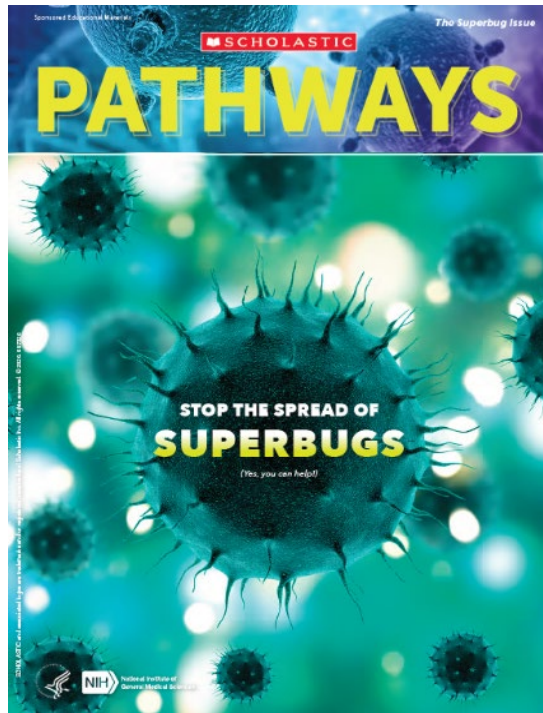


Angela Wandinger-Ness, Ph.D.

IRACDA Program Director
University of New Mexico
Health Sciences Center

Pathways: NIGMS & Scholastic, Inc.

New issue on super bugs coming soon!



- Will reach an estimated 2.5 million middle and high school students and 19,000 teachers across all 50 states
- Student magazine in Scholastic's *Science World* October issue
- Lesson plans for teachers that map to curricular standards
- Online activities and videos featuring NIGMS-funded scientists and research

<http://www.scholastic.com/pathways>

COVID-19 – Urgent Competitive Revisions

- NIGMS issued 2 Notices of Special Interest ([NOT-GM-20-025](#), [NOT-GM-20-027](#)) to support areas of critical research need related to COVID-19
- *NIGMS has made 22 awards to 21 projects, with an investment of \$7.4M in work focusing on:*
 - Research on modeling and forecasting the spread of SARS-CoV-2 and the effects of possible intervention strategies
 - Repurposing of diagnostics or therapeutics currently under development by small businesses for use against COVID-19

MIDAS Coordination Center



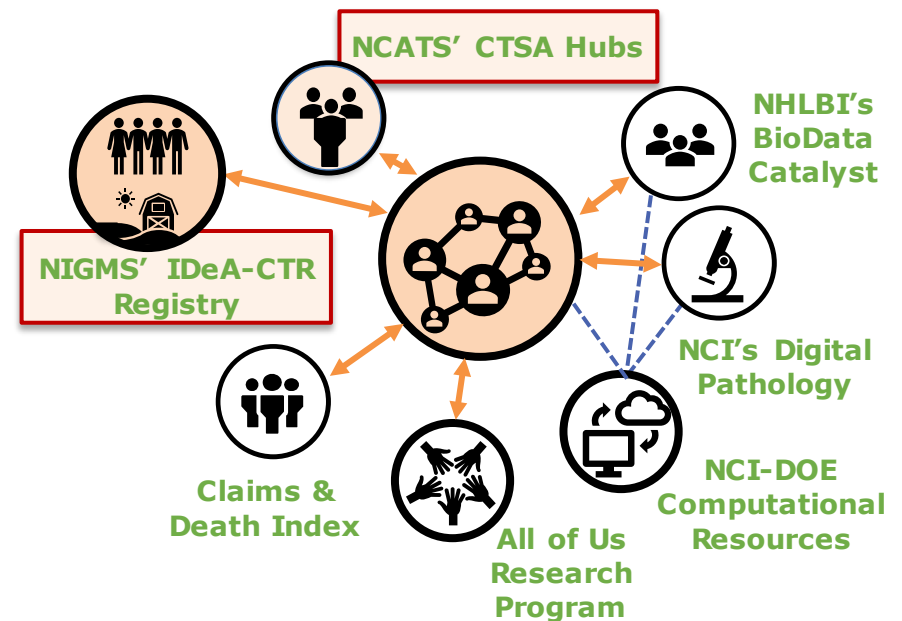
- Coordinates and facilitates infectious disease modeling research
- Provides access to curated data sets, models, algorithms, code, parameters, and cloud computing services
- Serves as point of contact for public health agencies
- MIDAS network currently has nearly 400 members funded by NIH, NSF and other U.S. and international organizations

<https://midasnetwork.us>

IDeA-CTR Patient Data Registry to Address COVID-19 Disparities

- A newly funded consortium of 8 IDeA-CTRs with 9.3 million patient EHRs for mostly rural and/or medically underserved populations (UP) will harmonize and share COVID-19 data
- The Registry is key component of the **National COVID Cohort Collaborative (N3C)**. The data are available for all researchers studying COVID-19
- Supported by NIGMS, NIH Office of Data Science Strategy, and NCATS

National COVID Cohort Collaborative (N3C)



Watch N3C demo video at
<https://ncats.nih.gov/n3c/about>

The IDeA-CTR COVID-19 Registry: Focusing on the Underserved

8 CTRs led by Sally Hodder, MD, of the WVU will collect COVID-19 testing and other clinical data and collaborate with N3C on data harmonization and management

IDeA-CTR	Database Demographics	Unique Patients	# Tested for CoV-2	# Positive Cases
DE	Children: 19.4% Black, 19.8% Hispanic	2 M	3600	Unknown
NE	Rural and Aging: includes data from KS, ND, SD	1.4 M	20,000	2,000
LA	Inner City & Rural Disparities: 55% Black	Unknown	55,000	13,000
MS	Rural and Obesity: 52.8% Black, 6% multi-racial, Hispanic, Asian, or Choctaw Indian	904,781	21,920	1,968
ME	Rural and Aging: includes data from NH, VT	2 M	Unknown	692
OK	Disparities: 4% American Indian, 14% Black, 12% Hispanic	~ 1 M	11,041	1,452
RI	Longitudinal EHR data for half the state	537,000	80,000	7,000
WV	Economically Disadv., Rural: 9.7% Black, 3.7% Hispanic	1.5 M	15,409	555
Totals as of June 2020		~9.3 M	209,970	26,667

Supplements – Training Programs

NIGMS provided 60 supplements in 4 areas to a broad range of training programs (\$4.7m)

Funding Notice	Topic Area	Applications	Funded
NOT-GM-20-016	Lab, chemical, and physical safety	6	4
NOT-GM-20-018	Safe and Inclusive Training Environments	10	10
NOT-GM-20-019	Undergraduate Courses	36	27
NOT-GM-20-020	Enhanced Evaluation Capacity	27	19
Grand Total		79	60

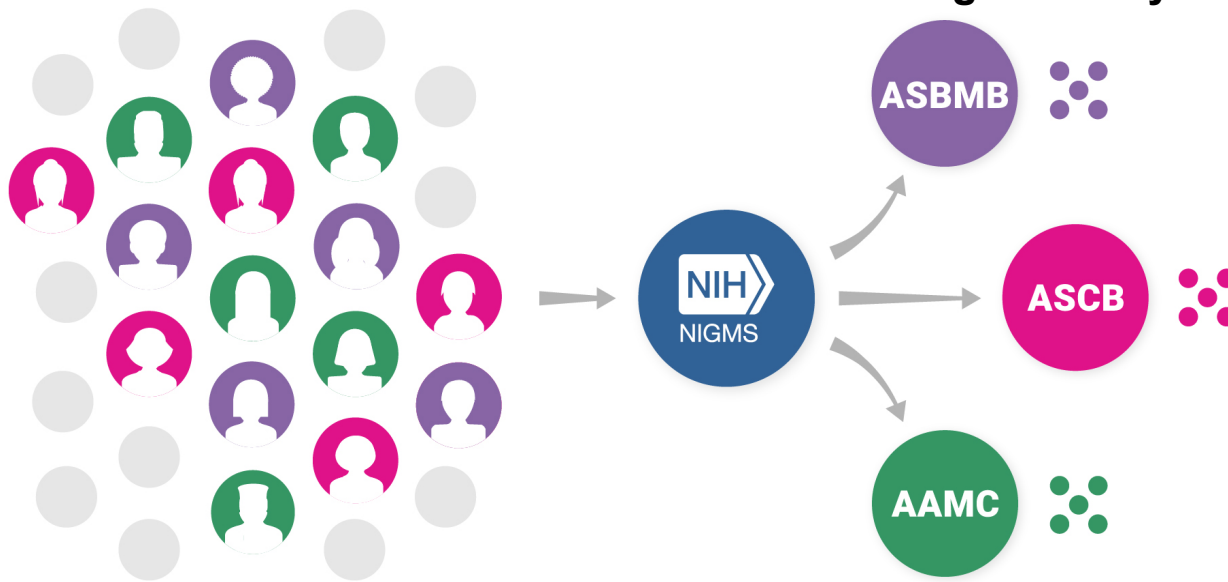
Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC)

Postdoctoral Career Transition Award to Promote Diversity (K99/R00) – [PAR-19-343](#)

Institutionally Focused Research Education Cooperative Agreement to Promote Diversity (UE5) – [PAR-19-342](#)

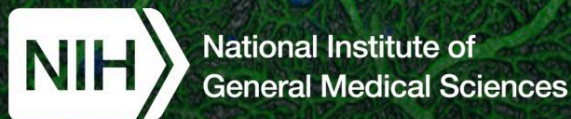
MOSAIC K99/R00 Applicants

MOSAIC K99/R00 Scholars Participate in Cohorts Organized by UE5



*Other ICs Participating in MOSAIC K99/R00: NIBIB, NINR, NIMHD, NHGRI, NIA, NIDA, NIAAA, NIEHS, NIDCD, NIDCR, **NHLBI***, **NLM***, **NIMH***, **NCCIH*** (*also participating in UE5)*

How Do We Change the Culture of the Biomedical Research Enterprise to Make It More Inclusive, Safe and Equitable?



NIGMS Feedback Loop Blog – National Institute of General Medical Sciences

A catalyst for interaction with the scientific community

JUNE 10, 2020

What Can We Do to Combat Anti-Black Racism in the Biomedical Research Enterprise?

BY DR. JON LORSCH, DR. KENNETH GIBBS, AND DR. ALISON GAMMIE

20 comments

Search...



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<https://loop.nigms.nih.gov/2020/06/what-can-we-do-to-combat-anti-black-racism-in-the-biomedical-research-enterprise/>

Common Fund Transformative Cryo-EM Initiative



- Co-led by NEI and NIGMS
- Three national cryo-EM user facilities

 **National Center for CryoEM Access and Training**

<https://nccat.nysbc.org>

PACIFIC NORTHWEST
Cryo-EM
Center

<https://pncc.labworks.org>

 **Cryo-EM** | Stanford-SLAC
Cryo-Electron Microscopy

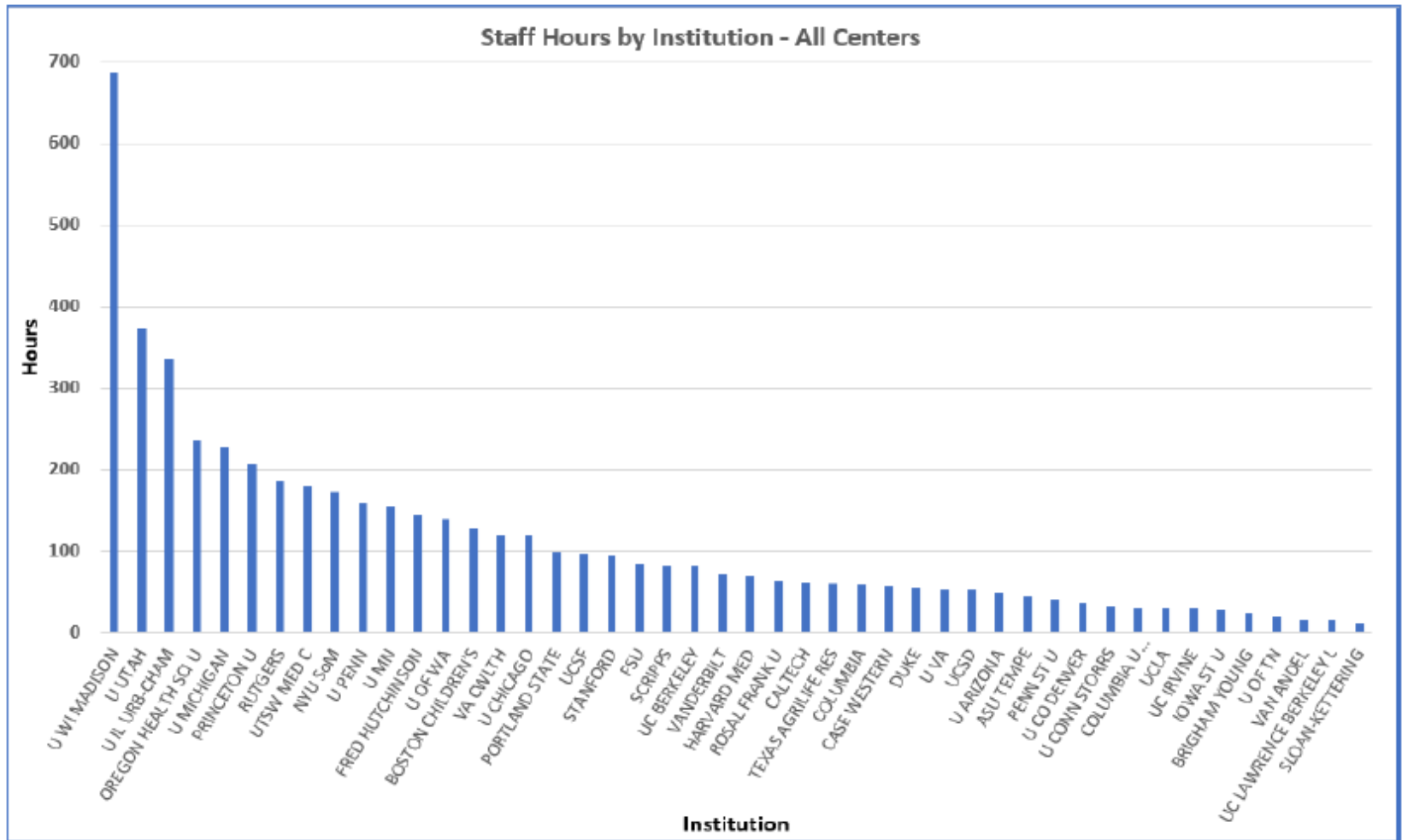
<https://cryoem.slac.stanford.edu>

Coming Soon: Cryo-Electron Tomography Centers!

<https://commonfund.nih.gov/cryoem>

National Network

Figure 18E: Staff Service Hours over Institutions – All Centers



IDeA States: Do Not Stop Doing Basic Science!!!

- Basic science is the foundation on which all applied advances are built
- If the IDeA states don't have a healthy and vibrant basic research enterprise, they will be reliant on work done elsewhere, which will put them at a serious disadvantage
- The synergies among basic, translational and clinical research are very strong

NIGMS has supported work leading to 89 Nobel Prizes, out of a total of 160 supported by NIH, the most of any of NIH's 27 institutes and centers



Questions & Comments

