



National Institute of
General Medical Sciences



Jon R. Lorsch, Ph.D.,
Director

National Institute of
General Medical
Sciences

May 16, 2024

National Advisory General Medical Sciences Council

Retiring Council Members

Amy Rosenzweig, Ph.D.

Weinberg Family Distinguished Professor of Life Sciences
Professor, Departments of Molecular Biosciences and of
Chemistry
Northwestern University



Melanie Sanford, Ph.D.

Moses Gomberg Distinguished University Professor of
Chemistry
Arthur F. Thurnau Professor of Chemistry
University of Michigan



Retiring Council Members (cont.)

Pamela Stacks, Ph.D.

Professor Emeritus, Department of Chemistry

Division of Research and Innovation

San Jose State University



Ad hoc Council Participant

Lucy Erin O'Brien, Ph.D.

Associate Professor

Department of Molecular and Cellular Physiology and

Institute for Stem Cell Biology and Regenerative Medicine

Stanford University School of Medicine



Early Career Investigator *Ad hoc* Council Participants

Jeffrey Mugridge, Ph.D.

Assistant Professor

Department of Chemistry and Biochemistry

University of Delaware



Justus C. Ndukaife, Ph.D.

Assistant Professor

Department of Electrical and Computer Engineering

Vanderbilt University



NIGMS Personnel Changes

New Hires

- **Jill Bradshaw**, Supervisory Grants Management Specialist, Grants Administration Branch, Division of Extramural Activities
- **Adam Heuberger, Ph.D.**, Scientific Review Officer, Scientific Review Branch, Division of Extramural Activities
- **Erin Iturriaga, Ph.D.**, Chief, Health Research and Development Programs Branch, Division for Research Capacity Building
- **Peggy Wang, Ph.D.**, Program Officer, Bioinformatics and Computational Biology Branch, Division of Biophysics, Biomedical Technology, and Computational Biosciences



NIGMS Personnel Changes (cont. 1)

New Hires (cont.)

- **Dee Winborne**, Management Analyst, Executive Office Branch, Division of Management
- **Lieutenant Commander Marci Wright, Ph.D.**, Scientific Review Officer, Scientific Review Branch, Division of Extramural Activities



Promotions

- **Robert Altieri**, Supervisory Grants Management Specialist, Grants Administration Branch, Division of Extramural Activities



NIGMS Personnel Changes (cont. 2)

Promotions (cont.)

- **Kelly Aubrecht**, Supervisory Grants Management Specialist, Grants Administration Branch, Division of Extramural Activities
- **Alania Foster**, Supervisory Grants Management Specialist, Grants Administration Branch, Division of Extramural Activities



Departures

- **Irina Krasnova, Ph.D.**, Program Officer, Research Advancement Programs Branch, Division for Research Capacity Building (move to the National Center for Advancing Translational Sciences)



NIGMS Personnel Changes (cont. 3)

Departures (cont.)

- **Christina Liu, Ph.D.**, Chief, Biomedical Technology Branch, Division of Biophysics, Biomedical Technology, and Computational Biosciences (move to the National Institute of Mental Health)
- **Isaah Vincent, Ph.D.**, Scientific Review Officer, Scientific Review Branch, Division of Extramural Activities (move to the National Institute of Arthritis and Musculoskeletal and Skin Diseases)



NIGMS Job Vacancies

- Director, Division of Training, Workforce Development, and Diversity
- Chiefs
 - Biomedical Technology Branch, Division of Biophysics, Biomedical Technology, and Computational Biosciences
 - Postdoctoral, Early Career, and Workforce Development Branch, Division of Training, Workforce Development, and Diversity
- Program Officers
 - Chemistry and Chemical Biology Branch, Division of Pharmacology, Physiology, and Biological Chemistry
 - Research Advancement Programs Branch and Networks and Development Programs Branch, Division for Research Capacity Building

NIGMS Job Vacancies (cont.)

- Scientific Review Officer, Scientific Review Branch, Division of Extramural Activities

Positions are advertised through NIH's global recruitment unit and will be open to applications May 13 to May 22: hr.nih.gov/jobs/global-recruitment.

New NIH Center Director

Kathleen M. Neuzil, M.D.

- Appointed as director of the Fogarty International Center and NIH associate director for international research in early May.
- Previously Myron M. Levine M.D., D.T.P.H., Endowed Professor in Vaccinology and director of the Center for Vaccine Development and Global Health at the University of Maryland School of Medicine.
- Brings decades of experience in global health, specifically in vaccinology; served many years as a vaccine policy advisor to CDC and WHO.



NIH Institute Director Departure

Joshua A. Gordon, M.D., Ph.D.

- Will step down as the director of the National Institute of Mental Health (NIMH) in June; has served as director since 2016.
- Under his leadership, NIMH has made sizable research contributions to mental health practice and services, screening and risk reduction, and the rapid evolution of telemedicine.
- Will return to Columbia University as chair of the department of psychiatry and as psychiatrist-in-chief of the New York-Presbyterian Hospital campus at Columbia University Irving Medical Center.



Congressional Interactions

U.S. Senator Hosts NIH Delegation in West Virginia

- Senator Shelley Moore Capito (R-WV) hosted an NIH delegation including NIH Director Dr. Monica Bertagnoli and NIGMS Director Dr. Jon Lorsch at West Virginia University (WVU).
- Funding has enabled institutions in West Virginia—like WVU—to build their capacity and has led to medical breakthroughs and improvements.



Congressional Interactions (cont.)

April 24, 2024 "NIGMS 101" Briefing for Labor-Health and Human Services Appropriations Subcommittee Staff

- At the request of the House Majority Clerk, NIGMS Director Jon Lorsch gave Labor-Health and Human Services Appropriations staff a 60-minute overview of NIGMS' activities, priorities and challenges
- Significant interest in the MIRA and IDeA programs

Save the Dates: Upcoming NIGMS Lectures

Judith H. Greenberg Early Career Investigator Lecture

- Saad Bhamla, Ph.D., Georgia Institute of Technology
- October 7, 1:00-2:00 p.m. ET
- go.nih.gov/Greenberg2024



DeWitt Stetten Jr. Lecture

- Sudha Chakrapani, Ph.D., Case Western Reserve University
- November 20, 2:00-3:00 p.m. ET
- go.nih.gov/Stetten2024



Outreach Updates: National Science Teaching Association

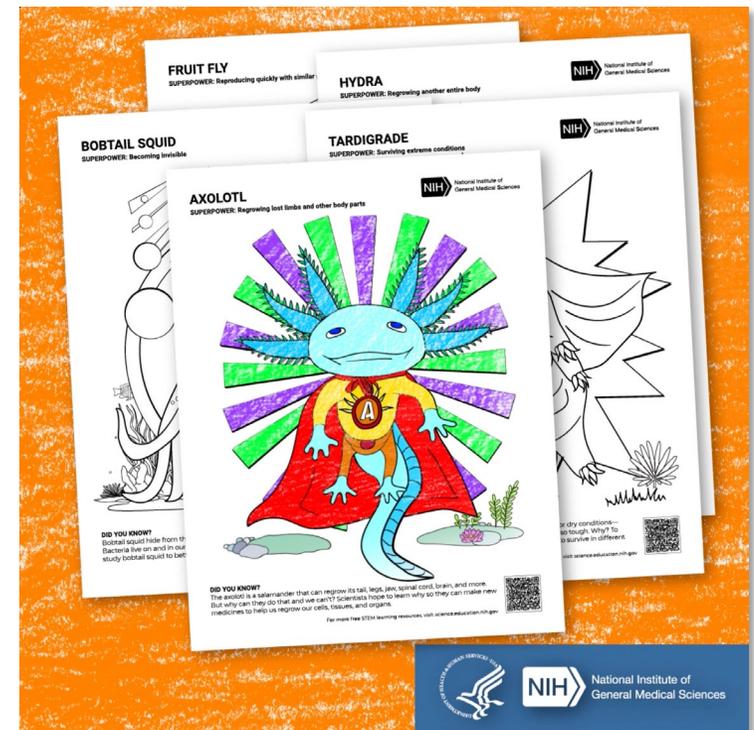
- Exhibited at the March National Science Teaching Association conference to promote NIH and NIGMS educational STEM resources and NIH SEPA.
- Took part in the federal panel along with 8 other agencies.
- The NIH-wide STEM teaching resources portal experienced a 74.4% increase in views from February to March: science.education.nih.gov.



Rachel and Brittany

New and Updated STEM Teaching Resources

- New coloring page collection paired with *Biomedical Beat* blog posts on research organisms and what scientists hope to learn from them: go.nih.gov/coloring-pages.
- NIH *Kahoot!* updates:
 - Managed by NIGMS, the collection offers a total of 17 quizzes from 8 ICs, with more to come.
 - Since its creation, the *Kahoot!* profile now has 8 additional quizzes.
 - To date, NIH *Kahoot!* has 1.4 million players and a total of 523.1K plays: bit.ly/nihkahoot.



Funding Opportunities

NIH Science Education Partnership Award (SEPA)

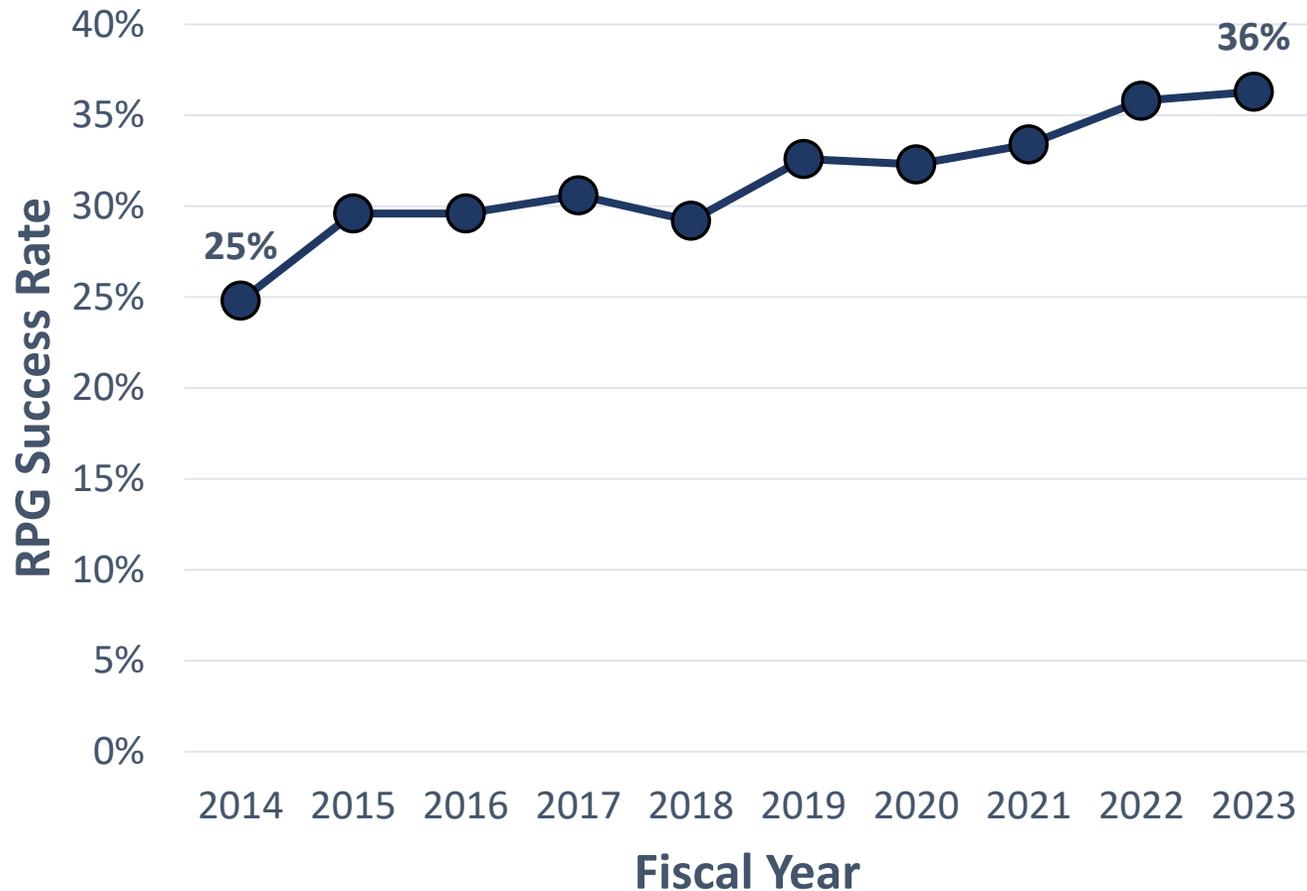
- Supports educational activities for pre-kindergarten to grade 12 to build student interest in biomedical research careers.
- 18 ICs are participating in the funding announcement.
- Institutional cap lifted; institutions can hold multiple awards if they are scientifically distinct.
- Next application due date is June 7, 2024; see *Feedback Loop*: go.nih.gov/heequ5T.

Advancing Research Careers (ARC)

- F99/K00: Supports individual predoctoral to postdoctoral career transition.
- UE5: provide cohorts of scholars with additional mentoring, networking, and professional development.
- First application due date for F99/K00 June 13, 2024; see *Feedback Loop*: go.nih.gov/zjBOcR1.

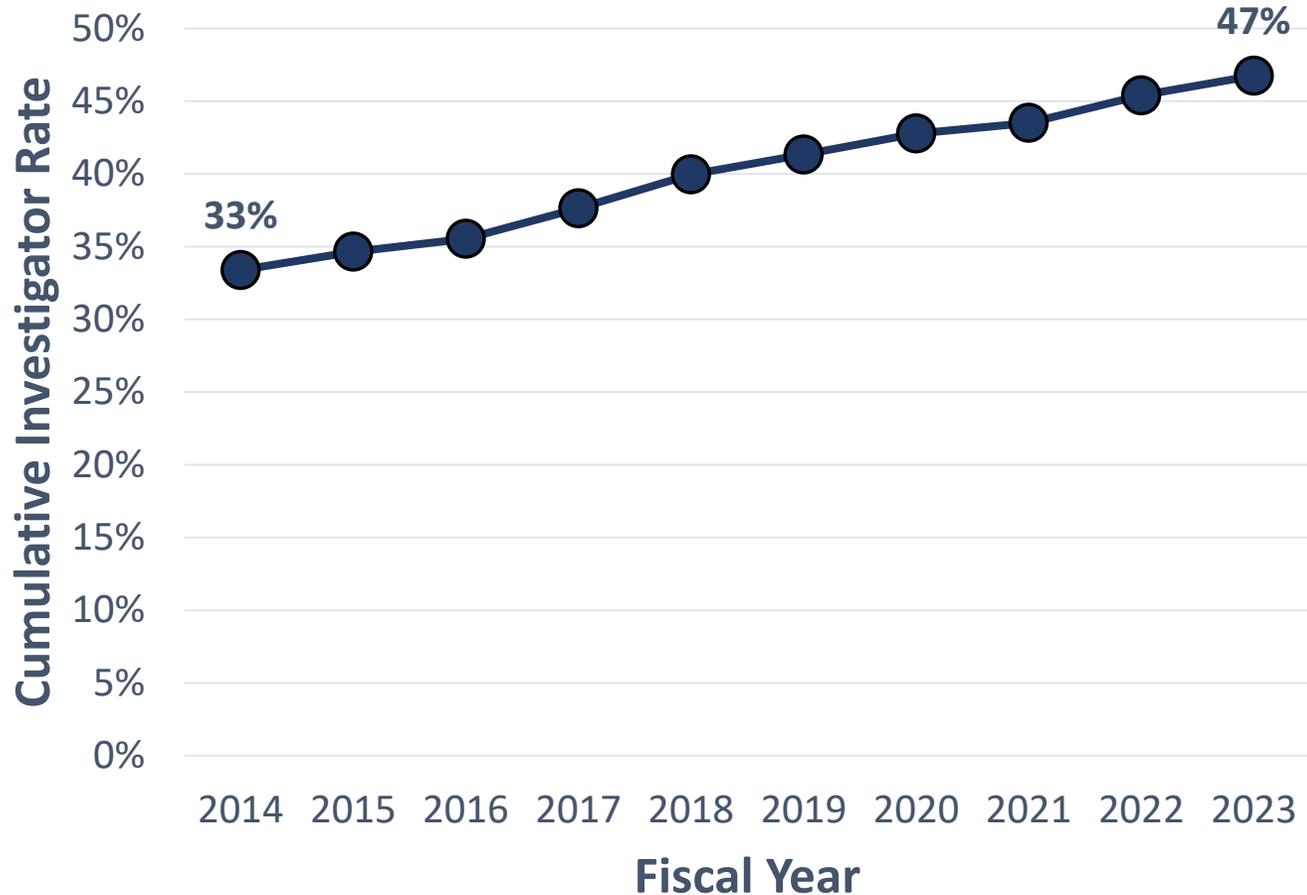
Application and Funding Trends in Fiscal Year 2023

NIGMS Competing RPG Success Rates FY 14 – FY 23



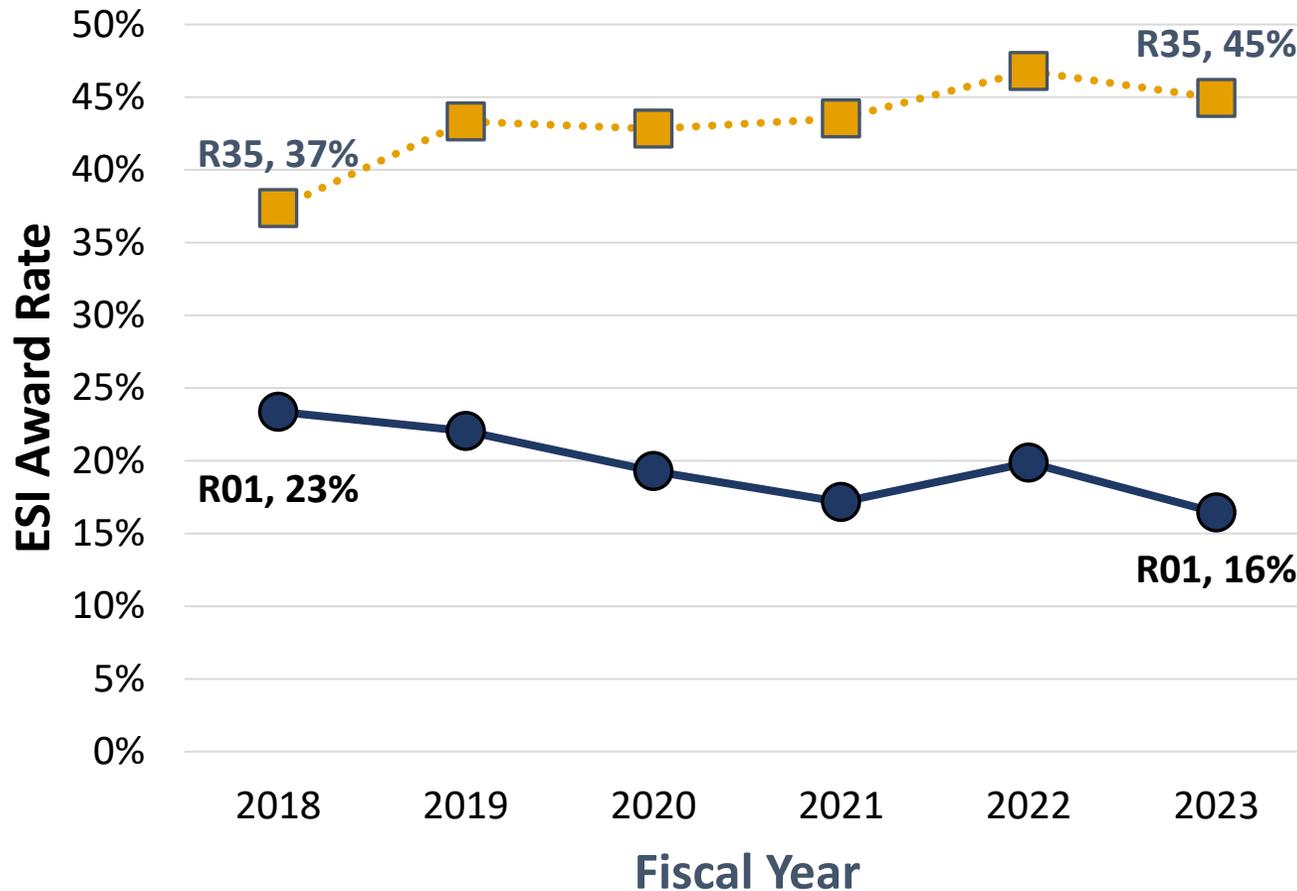
- RPG success rates have continued to climb reaching 36% in FY 23, the highest to date.
- NIGMS awarded 2,413 R35 MIRAs and 1,876 R01s in FY 23.
- The NIGMS budget for FY 24 is \$3.245 billion.
 - IDeA program receives a \$5m increase with no other increases.

NIGMS Competing R01/R35 Cumulative Investigator Rates FY 14 – FY 23



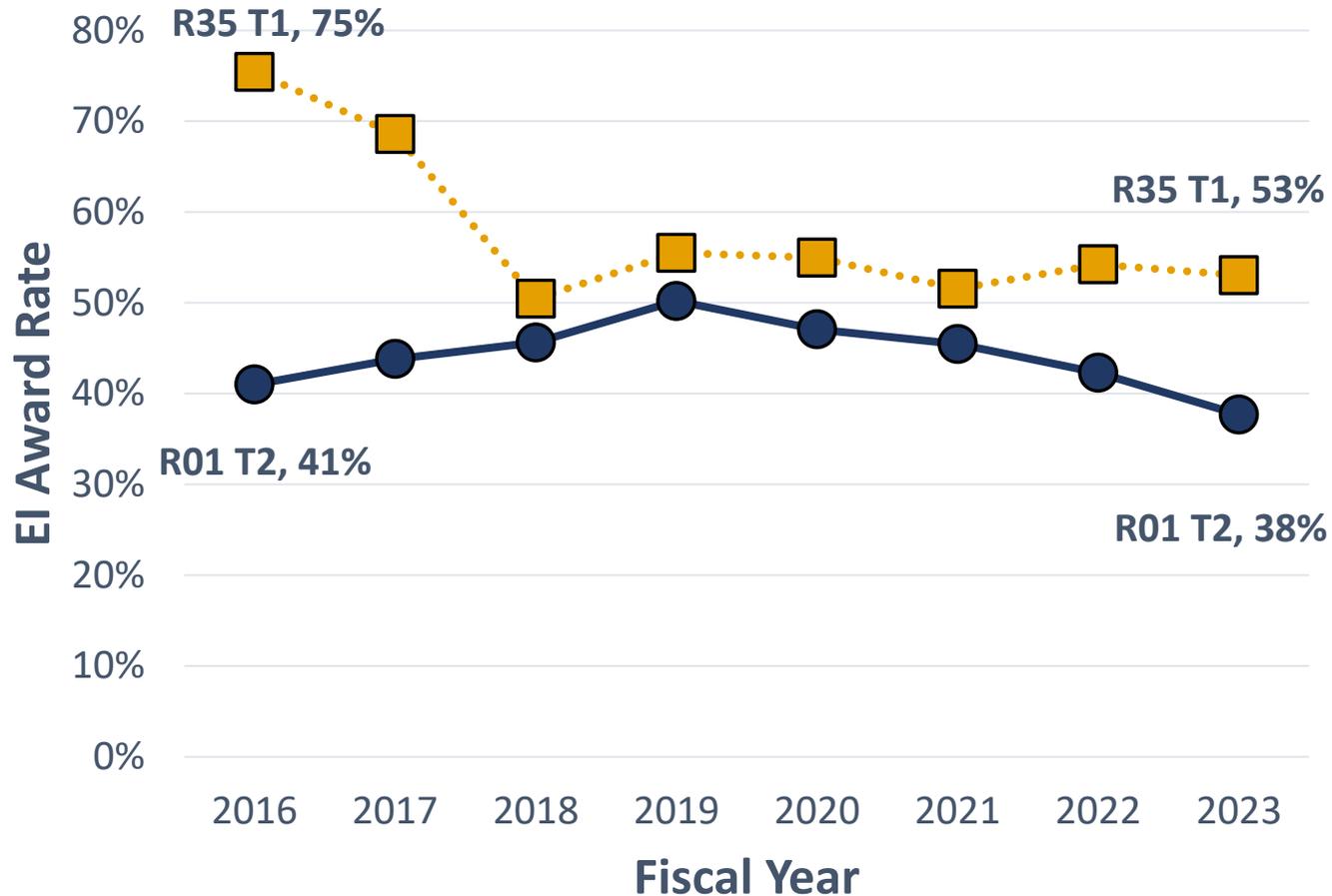
- FY 23 marked the highest R01/R35 cumulative investigator rate in the last decade.
- More investigators received funding in FY 23 despite fewer applying for funding relative to the previous year.
 - This decrease in applicants mirrors NIH-wide trends.

NIGMS Competing Early-Stage Investigator (ESI) MIRA vs ESI R01 Award Rates, FY 14 – FY 23



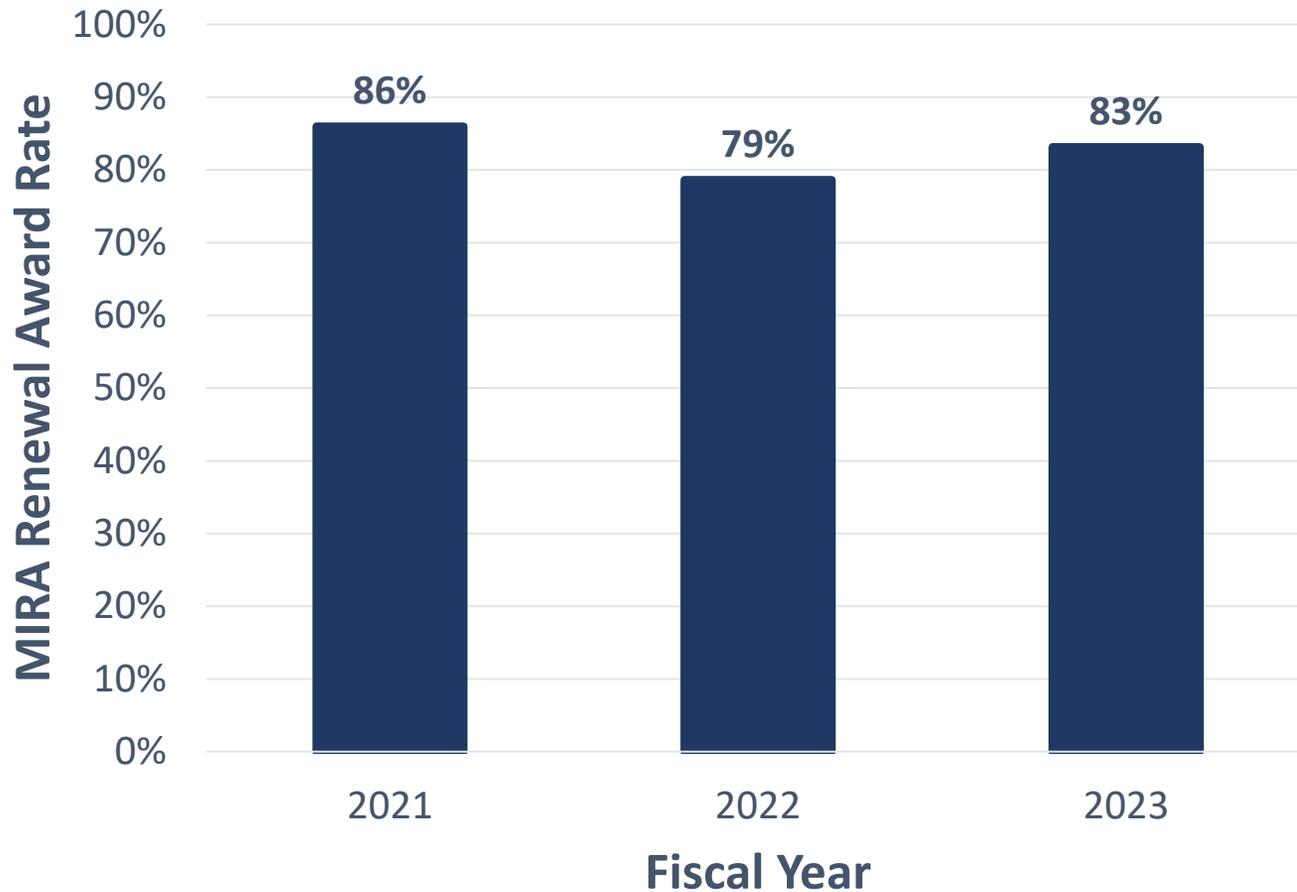
- The award rates for MIRA applications have become increasingly more favorable for ESIs than the award rates for R01s.
- Most ESI MIRA applications with overall impact scores at or below 50 were funded in FY 23.
- In FY 23, MIRA represented 92% of the competing NIGMS ESI awardees.

NIGMS Competing Established Investigator (EI) New (T1) MIRA vs. EI R01 Renewal (T2) Award Rates, FY 14 – FY 23



- In FY 23 the award rate for new MIRA applications was 15 points higher than the renewal award rate for R01s.
- Most EI MIRA applications with overall impact scores at or below 48 were funded in FY 23.
- NIGMS is on track to have at least 60% of the R01-equivalent NIGMS awardee pool supported by MIRA awards by 2025.

NIGMS Competing MIRA Renewal Award Rates FY 14 – FY 23



- MIRA renewal award rates have remained above 78% in the past three years.
- In contrast, R01 renewal award rates have not exceeded 44% in the past three years.

Fiscal Year 2024 NRSA Stipend Increases

- Increasing pre-doctoral NRSA stipends by 4% to \$28,224
- Increasing first-year post-doctoral NRSA stipends by 8% to \$61,008
 - Target of \$70k over the next 3-4 years
- Also increasing training-related expenses/institutional allowance by \$200 and childcare subsidy by \$500
- There will be a ripple effect to the costs of trainees and postdocs supported by research grants
 - Labs will probably have to get smaller
- Depending on future appropriations, NIGMS might have to reduce trainee slots
- NIH Guide Notice: NOT-OD-24-104

NIH Initiative to Enhance the Nation's Clinical Trials Capacity



The health of the U.S. population is declining.

Decline is steepest among the underserved and underrepresented.

Improving Health Outcomes and Research Equity through Integrating Research in Primary Care Settings

Facilitate and accelerate research advances for adoption and implementation into everyday clinical care

Improve health outcomes and advance health equity for all Americans



NIH Common Fund Program to Support Clinical Research in Primary Care Settings

- A **primary care-focused** clinical research infrastructure that is disease-agnostic, facilitating clinical research in **mission areas across all ICs**
- A focus on **integrating innovative research** with routine clinical care in real-world settings
- A foundation for sustained **engagement with communities underrepresented in clinical research** (e.g., minority groups, rural, elderly, children, challenging SDOH characteristics)

Approach

- Expand enrollment efforts of existing NIH studies and pilot new studies as the infrastructure is established
- Partner with existing clinical research networks and resources, expanding with new sites, capabilities, and collaborations as the network grows
- Engage primary care sites and community network partners on prioritizing and planning research
- Implement study designs across the landscape of clinical trial innovations to minimize burden on patients and providers

Timeline & Budget



Spring 2024: Obtain perspectives from external partners to inform planning for the network

- Listening sessions and public workshop (est. June 2024)



Quick Launch in 2024: Expand existing studies to increase engagement with underrepresented populations and to enhance accrual and collaboration

- Anticipated Budget: OD funds \$5M in FY24



Expand in 2025 and Beyond: Launch new studies across the network and further establish and solidify the network infrastructure

- Anticipated Budget: OD funds \$25M in FY25; anticipate ramp up of ~\$50-100M/year after assessing feasibility and budget requirements

Connect, Follow, and Subscribe!

- NIGMS Blogs
 - *Feedback Loop*:
 - loop.nigms.nih.gov (blog)
 - bit.ly/nigmstrainee (trainee list)
 - *Biomedical Beat*: biobeat.nigms.nih.gov
- News
 - NIGMS Media Coverage: go.nih.gov/mediacoverage
- Find NIGMS on Social Media



Discussion Questions

- How should institutions and researchers approach the increases in NRSA stipends?
- Are there technologies that are not currently available at a national or regional user facility that should be?
 - Examples of current facilities: National Cryo-Electron Microscopy Centers; National Magnetic Resonance Facility; IDeA National Resource for Quantitative Proteomics
 - [https://www.nigms.nih.gov/Research/mechanisms/Pages/NIGMS-National-and-Regional-Resources-\(R24\).aspx](https://www.nigms.nih.gov/Research/mechanisms/Pages/NIGMS-National-and-Regional-Resources-(R24).aspx)