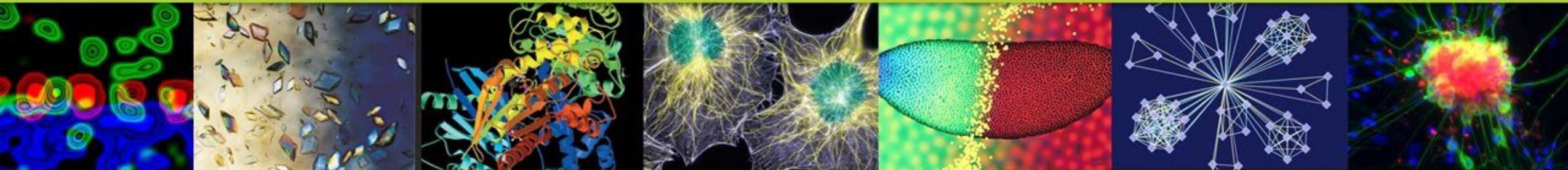


Jon R. Lorsch, Ph.D., Director
National Institute of General
Medical Sciences
September 15, 2022

National Advisory General Medical Sciences Council



Retiring Council Members

- **Darrin Akins, Ph.D.**

Professor

Department of Microbiology and Immunology

Associate Vice President for Health Sciences

Research

University of Oklahoma Health Sciences Center



- **Squire J. Booker, Ph.D.**

Evan Pugh Professor of Chemistry

Professor of Biochemistry and Molecular Biology

Eberly Family Distinguished Chair in Science

Investigator, Howard Hughes Medical Institute

Pennsylvania State University



Retiring Council Members (cont.)

- **Peter J. Espenshade, Ph.D.**
Professor
Department of Cell Biology
Associate Dean for Graduate Biomedical Education
Johns Hopkins University School of Medicine



Ad hoc Council Participants

- **Nicole Sampson, Ph.D.**
Distinguished Professor of Chemistry
Dean, College of Arts and Sciences
Department of Chemistry
Stony Brook University
- **Susan S. Smyth, M.D., Ph.D.**
Executive Vice Chancellor
Dean, College of Medicine
University of Arkansas for Medical Sciences



Early Career Investigator *Ad hoc* Council Participants

- **Fred Heberle, Ph.D.**
Assistant Professor
Department of Chemistry
University of Tennessee, Knoxville
- **Alexis C. Komor, Ph.D.**
Assistant Professor
Department of Chemistry and Biochemistry
University of California, San Diego



NIGMS Personnel Changes

New Hires

- **Lameese Akacem, Ph.D.**, Program Director, Undergraduate and Predoctoral Cross-Disciplinary Training Branch, Division of Training, Workforce Development, and Diversity
- **Pauline Cupit, Ph.D.**, Program Director, Research Advancement Programs Branch, Division for Research Capacity Building
- **Marie Harton, Ph.D.**, Program Director, Undergraduate and Predoctoral Cross-Disciplinary Training Branch, Division of Training, Workforce Development, and Diversity
- **Olga Kovbasnjuk, Ph.D.**, Program Director, Research Advancement Programs Branch, Division for Research Capacity Building



NIGMS Personnel Changes (cont.)

New Hires

- **Mercedes Rubio, Ph.D.**, Chief, Predoctoral Basic Biomedical and Medical Science Training Programs Branch, Division of Training, Workforce Development, and Diversity
- **Kalynda Gonzales Stokes, Ph.D.**, Program Officer, Postdoctoral, Early Career, and Workforce Development Branch, Division of Training, Workforce Development, and Diversity
- **Yogesh Wairkar, Ph.D.**, Program Director, Genetic Mechanisms Branch, Division of Genetics and Molecular, Cellular, and Developmental Biology
- **Jean Yuan, Ph.D.**, Chief, Bioinformatics and Computational Biosciences Branch, Division of Biophysics, Biomedical Technology, and Computational Biosciences



NIGMS Personnel Changes (cont.)

Promotions

- **Clau González, Ph.D.**, Senior Program Manager for Diversity, Division of Management
- **Kevin Lauderdale**, Staff Assistant, Division of Extramural Activities



NIGMS Personnel Changes (cont.)

Departures

- **Peter Lyster, Ph.D.**, Program Officer, Biophysics Branch, Division of Biophysics, Biomedical Technology, and Computational Biosciences (retirement)
- **Ruth Grossman, D.D.S.**, Scientific Review Officer, Scientific Review Branch, Division of Extramural Activities (retirement)
- **Eileen Oni, Ph.D.**, Health Science Policy Analyst, Data Integration and Dissemination Branch, Division of Data Integration, Modeling, and Analytics (move to the NIH Office of the Director)
- **Romeo Tengey**, Grants Management Specialist, Grants Administration Branch, Division of Extramural Activities (move to the NIH Office of the Director)



New Director: NIH's National Cancer Institute

Monica M. Bertagnolli, M.D.

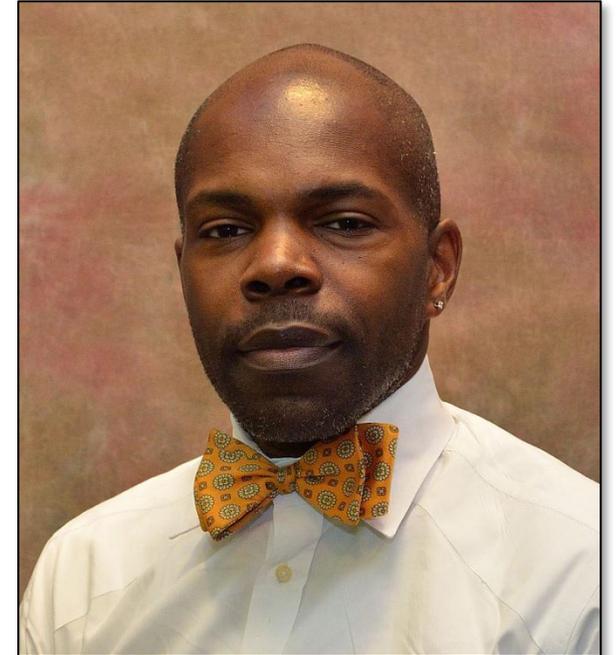
- President Biden intends to appoint Dr. Bertagnolli as the 16th director—and first female director—of the National Cancer Institute
- Is a surgeon-oncologist; was previously the Richard E. Wilson professor of surgery in the field of surgical oncology at Harvard Medical School, as well as a surgeon at Brigham and Women's Hospital and a member of the Gastrointestinal Cancer and Sarcoma Disease Center at Dana-Farber Cancer Institute
- Specializes in treating gastrointestinal cancers and advocates for increasing the diversity of patients enrolled in clinical trials



New Director: NIH Office of Equity, Diversity, and Inclusion

Kevin D. Williams, J.D.

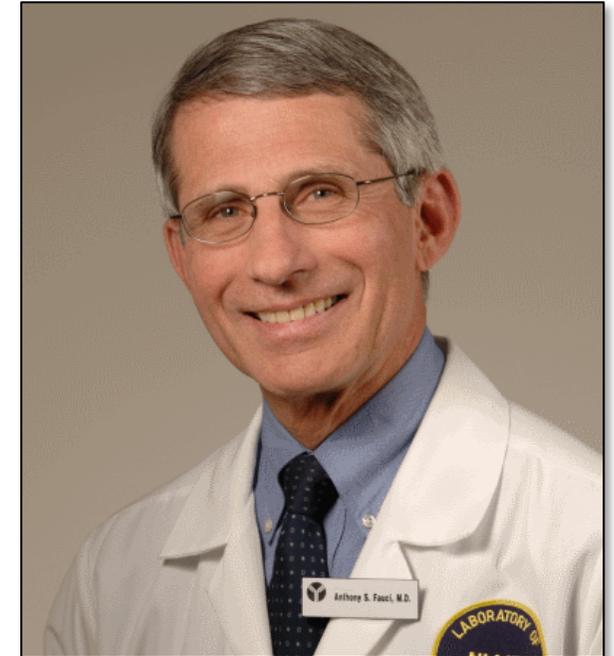
- Selected as director of the NIH Office of Equity, Diversity, and Inclusion and began his role in June; replaces Debra C. Chew, J.D.
- Will guide the strategic direction for NIH on diversity, equity, inclusion, and accessibility matters and will serve as the NIH equal employment opportunity officer
- Joins NIH from the U.S. Federal Trade Commission, where he was a deputy executive director



NIH Departure

Anthony S. Fauci, M.D.

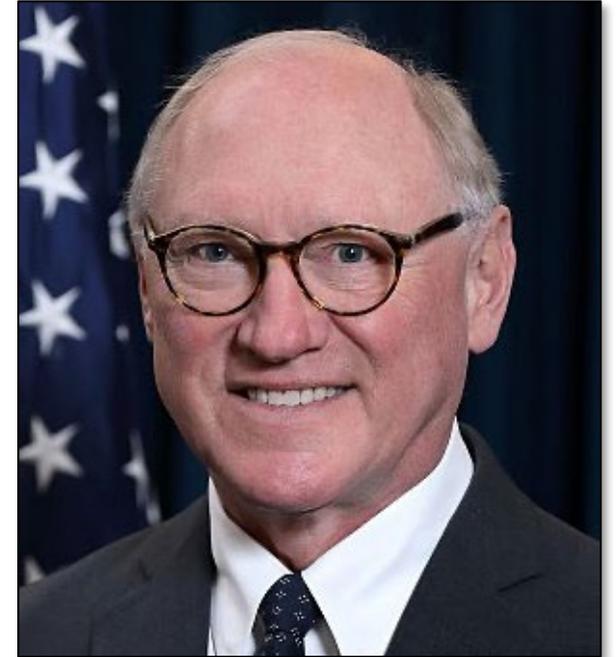
- Will step down as the director of the National Institute of Allergy and Infectious Diseases (NIAID), chief of the NIAID Laboratory of Immunoregulation, and chief medical advisor to President Biden in December
- Has served as NIAID director for 38 of his 54 years at NIH; has advised seven U.S. Presidents on infectious disease threats including HIV/AIDS, West Nile virus, the anthrax attacks, pandemic influenza, Ebola, Zika, COVID-19, and more
- Plans to pursue the next phase of his career; seeks to continue advancing science and public health, as well as inspiring and mentoring the next generation of scientific leaders



NIH Departure

James M. Anderson, M.D., Ph.D.

- Served as the director of the Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI) in the NIH Office of the Director and NIH deputy director for program coordination, planning, and strategic initiatives for almost 12 years
- The first non-acting director of DPCPSI, helped the division become the central NIH-wide coordinator for many thematic areas of science, including NIH Common Fund programs
- Retired from federal service in June



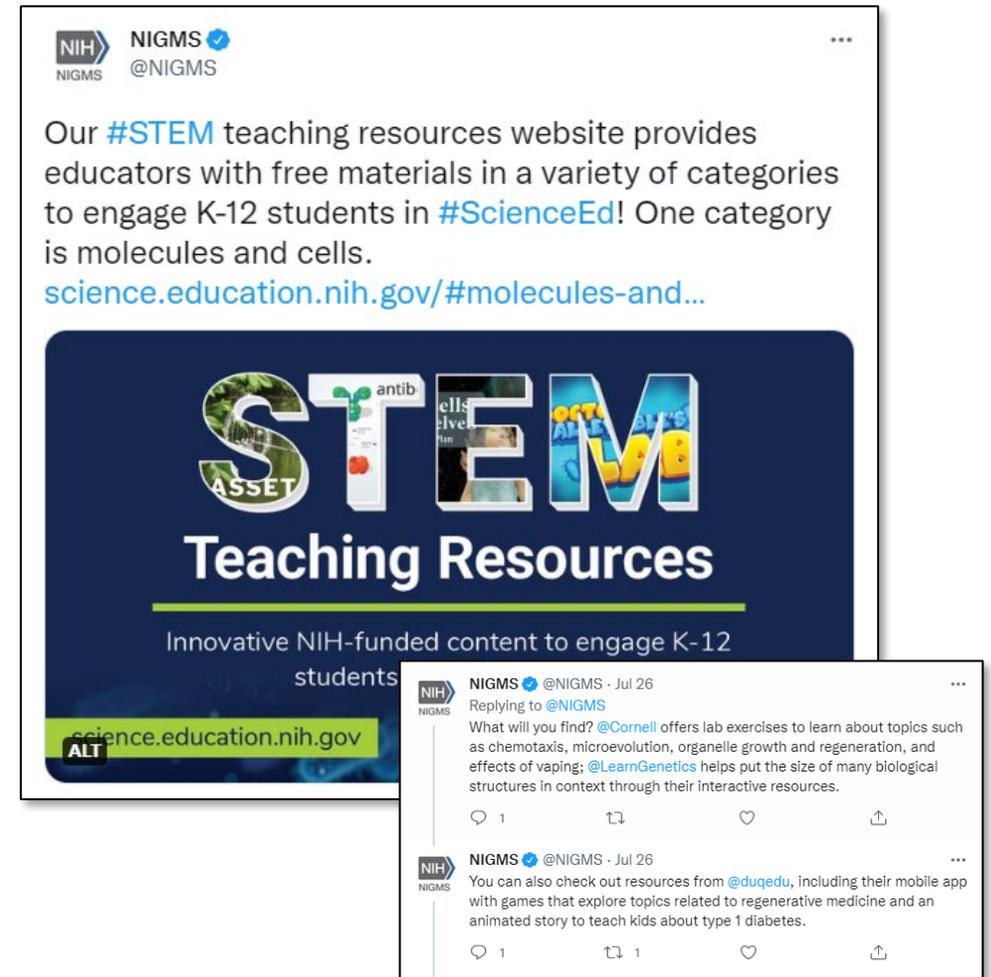
NIGMS Job Vacancies

- **Program Director**, Developmental and Cellular Processes Branch, Division of Genetics and Molecular, Cellular, and Developmental Biology
- **Program Director**, Bioinformatics and Computational Biology Branch, Division of Biophysics, Biomedical Technology, and Computational Biosciences
- **Positions will open September 21 and close September 30 as part of NIH's global recruitment for health scientist administrators (GS-601-12/13/14):**
nigms.nih.gov/about/job_vacancies



STEM Teaching Resources Portal

- Launched in April; NIH-wide collection of free, easy-to-access materials educators can use to engage K–12 students in science
- Managed by NIGMS with contributions from an NIH-wide STEM coordinating committee; portal features material from 11 different ICs and a wide variety of SEPA-funded programs
- Portal has received 20,064 visitors since launch
- NIGMS is leading continued outreach efforts by regularly spotlighting different portal resources
- See more: science.education.nih.gov



Three-Part Grant Writing Webinar Series

- Designed for faculty and sponsored programs/research development personnel at institutions building research and research training capacity
- First webinar was August 16; the remaining two are September 26 and November 1
- Topics include considerations for determining research idea and grant writing readiness, selecting opportunities to apply for, effectively writing an application, seeking appropriate feedback, and more
- Registration required; learn more:
<https://mregs.nih.gov/channels/D1PF-C4D2>



Judith H. Greenberg Early Career Investigator Lecture

César de la Fuente, Ph.D.

Presidential Assistant Professor

Departments of Bioengineering, Microbiology, and Psychiatry
University of Pennsylvania

- “Artificial Intelligence Approaches for Antibiotic Discovery”
- September 28, 1-2 p.m. ET
- Lecture followed by Q&A session
- Participate remotely via Zoom or watch on NIH Videocast:
<https://www.nigms.nih.gov/news/meetings/ECl>



DeWitt Stetten Jr. Lecture

Sally L. Hodder, M.D.

Director, West Virginia Clinical and Translational Science Institute
Associate Vice President, Clinical and Translational Research
Professor of Medicine
West Virginia University

- “Biomedical Research in Rural America: Much Accomplished, Much To Do”
- November 30, 3-4 p.m. ET
- Lecture followed by Q&A session
- Participate remotely via Zoom or watch on NIH Videocast:
<https://www.nigms.nih.gov/news/meetings/stetten>



Monitoring Outcomes and Trends in the MIRA Program



National Institute of
General Medical Sciences

NIGMS Feedback Loop Blog – National Institute of General Medical Sciences

A catalyst for interaction with the scientific community

AUGUST 10, 2022

Application, Review, Funding, and
Demographic Trends for Maximizing
Investigators' Research Awards (MIRA): FYs
2019-2021

BY TRAVIS DORSEY AND ANDREW MIKLOS

4 comments

<https://loop.nigms.nih.gov/2022/08/application-review-funding-and-demographic-trends-for-maximizing-investigators-research-awards-mira-fy-2019-2021/>



National Institute of
General Medical Sciences

Review and Funding Trends by Group for EI MIRA, FY 19-21

	White	Asian	Underrepresented	Unknown/Withheld/Multiple	P-Value		Men	Women	P-Value
Apps Received (N)	774	306	52	69	NA	Apps Received (N)	906	291	NA
Apps Received (% of Total)	64%	26%	4%	6%	NA	Apps Received (% of Total)	76%	24%	NA
% Reviewed Within Group	92%	91%	>80%	>80%	0.7	% Reviewed Within Group	91%	94%	0.1
% Discussed Within Group	76%	69%	67%	70%	0.07	% Discussed Within Group	73%	77%	0.2
Mean Score	36.3	40.9	39.5	38.6	0.002	Mean Score	38.2	35.8	0.04
Awards (N)	414	128	22	28	NA	Awards (N)	426	166	NA
% Scored Apps Awarded	70%	60%	63%	58%	0.03	% Scored Apps Awarded	65%	74%	0.01
% Reviewed Apps Awarded	58%	46%	47%	45%	0.003	% Reviewed Apps Awarded	52%	61%	0.01

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Review and Funding Trends by Group for EI MIRA, FY 19-21

Despite initial concerns, MIRA has not disfavored applications from women

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Apps Received (N)	832	456	126	152	NA	Apps Received (N)	977	491	NA
Apps Received (% of Total)	53%	29%	8%	10%	NA	Apps Received (% of Total)	67%	33%	NA
% Reviewed Within Group	90%	87%	87%	87%	0.2	% Reviewed Within Group	89%	89%	0.9
% Discussed Within Group	60%	58%	58%	59%	0.9	% Discussed Within Group	60%	60%	1
Mean Score	41.8	40.7	43.7	41.5	0.5	Mean Score	41.7	41.2	0.6
Awards (N)	322	168	44	53	NA	Awards (N)	375	191	NA
% Scored Apps Awarded	65%	64%	60%	60%	0.7	% Scored Apps Awarded	63%	65%	0.6
% Reviewed Apps Awarded	43%	42%	40%	40%	0.9	% Reviewed Apps Awarded	42%	44%	0.7

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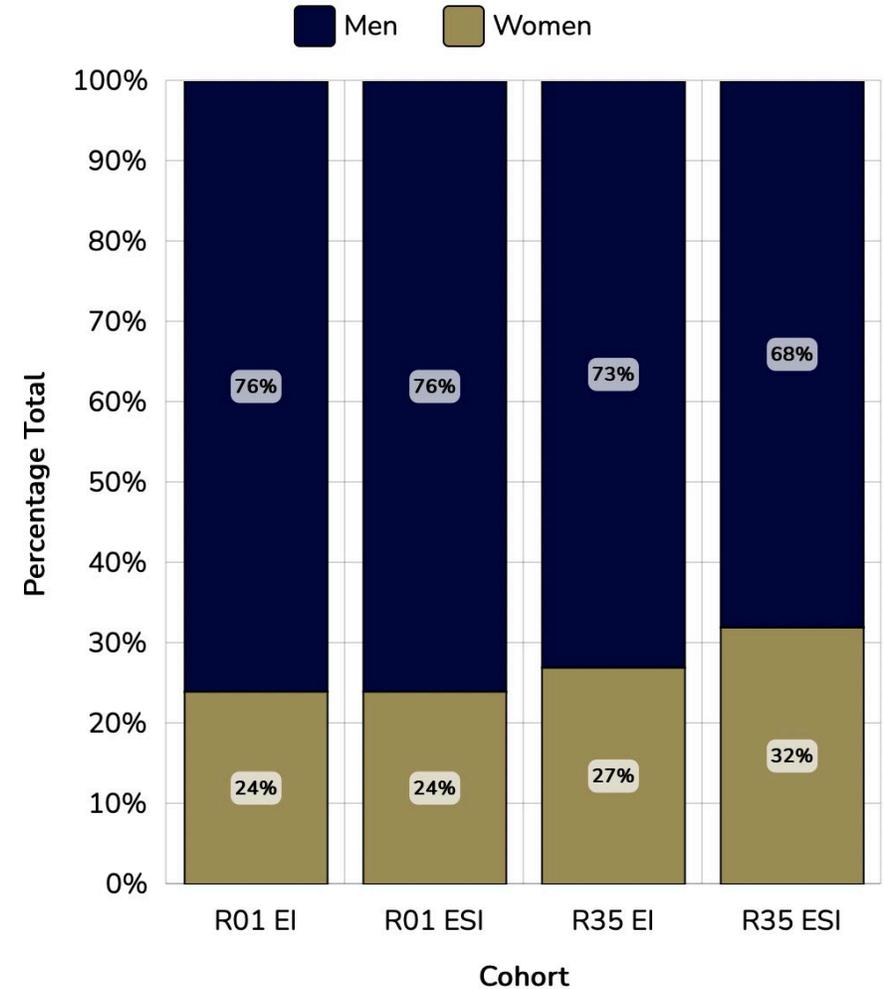
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Comparison of MIRA and R01 PI Demographics, FY 19-21

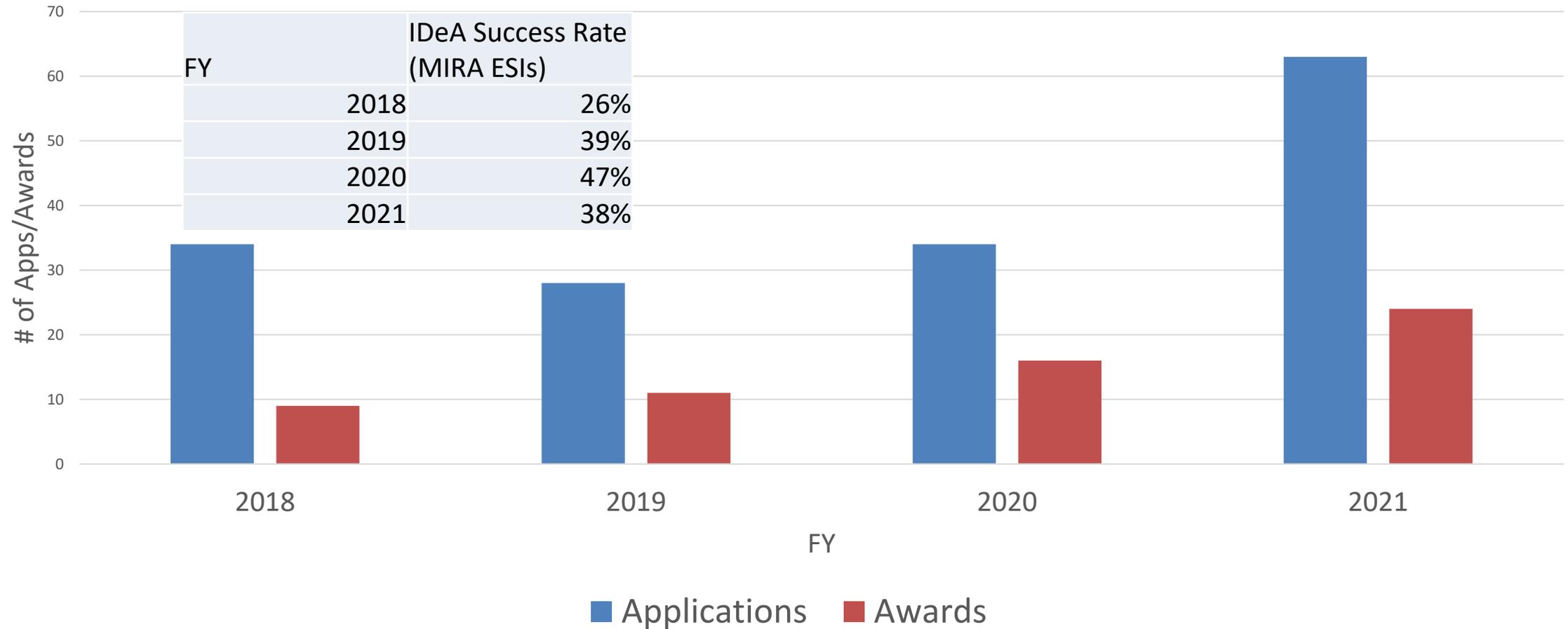


MIRA Demographics Summary and Next Steps

- Review and funding disparities for underrepresented groups and Asians that are present in the EI MIRA program are not evident in the ESI MIRA program
- Women are doing better in review than men in the EI MIRA program
- NIGMS will conduct a strategic outreach campaign to try to increase applications from underrepresented groups to the ESI and EI MIRA programs
 - New Investigators are now eligible
- MIRA reviewers will continue to receive CSR bias awareness training
- Continue multi-stage funding decision process to ensure fairness across groups



ESI MIRA Applications/Awards in IDeA States

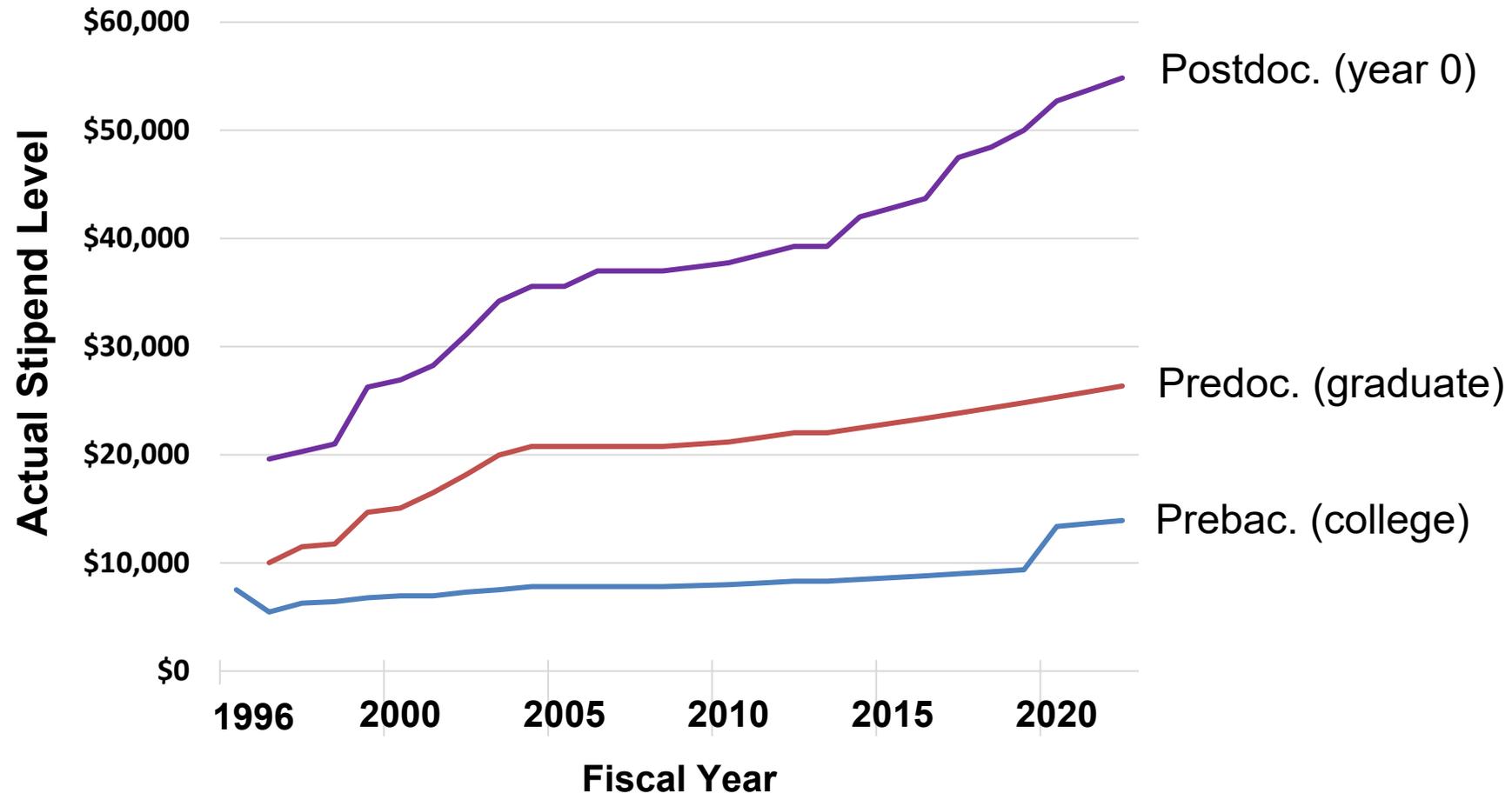


Important Budgetary Questions for Discussion

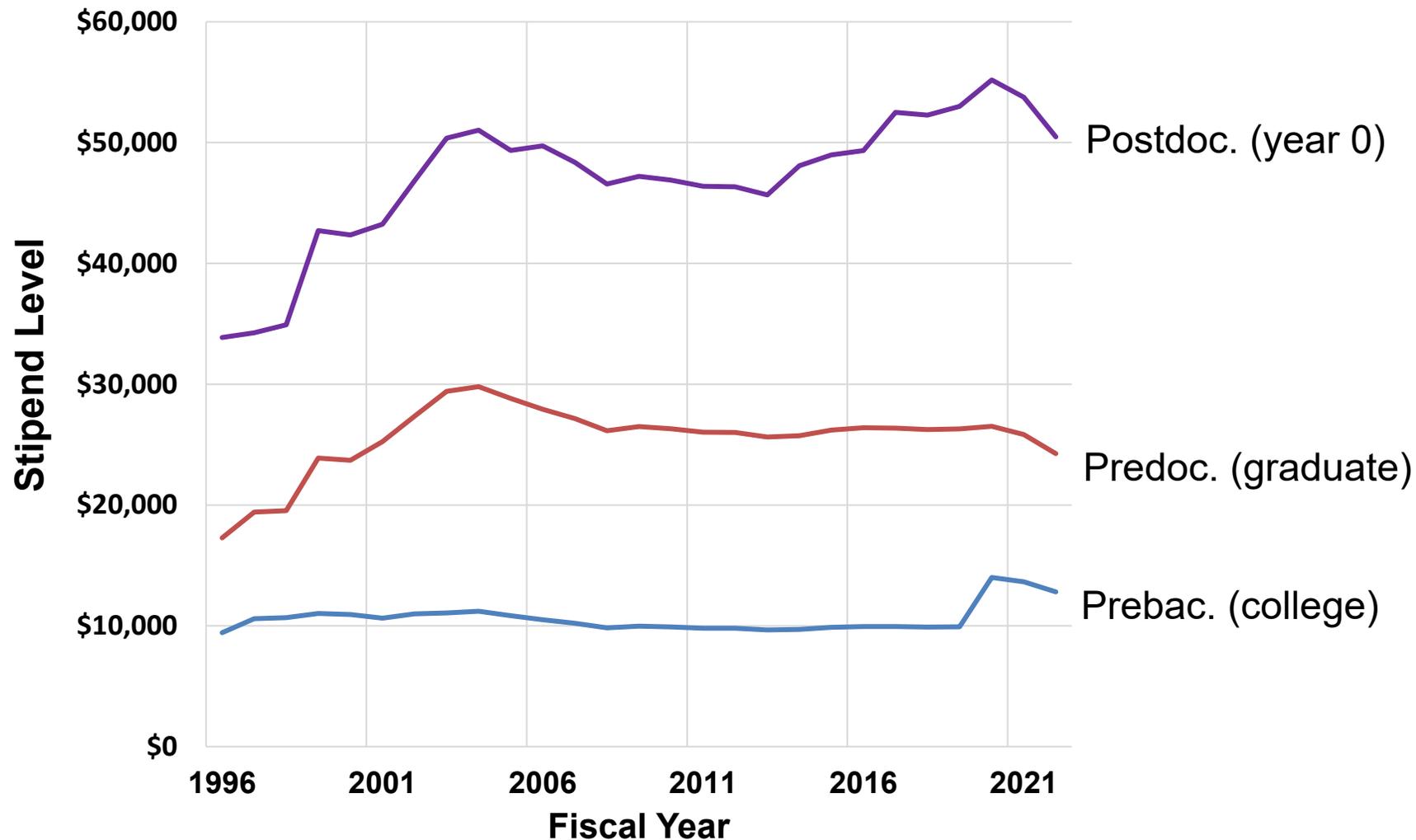
- NRSA predoctoral and prebaccalaurate stipend levels
- MIRA budget “floor” for established investigators



Actual NRSA Stipend Levels Over Time



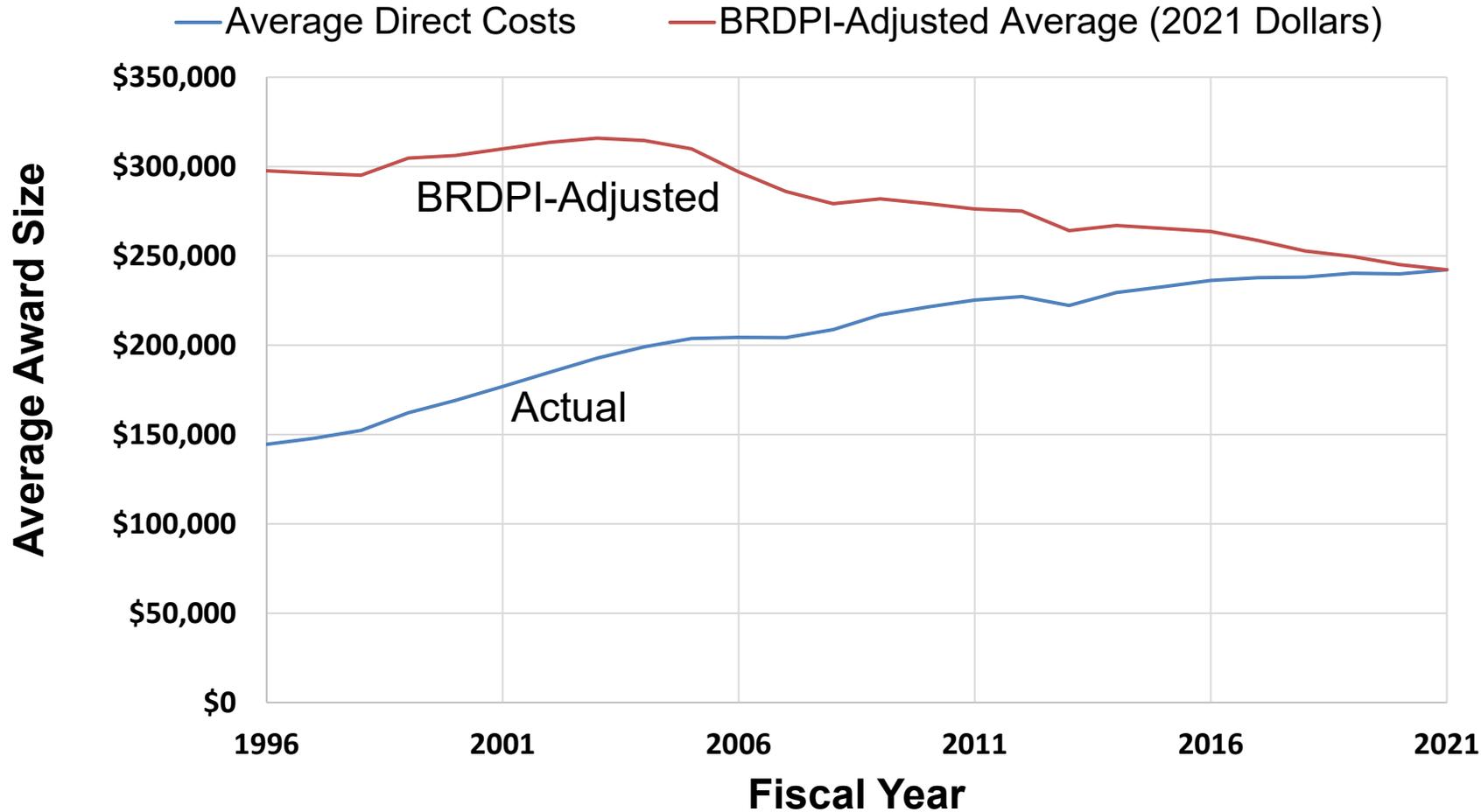
Consumer Price Index Adjusted NRSA Stipend Levels Over Time



Some Considerations for Thinking about NRSA Stipend Increases

- Raising the predoctoral stipend to \$30k would cost NIGMS \$28M
- Raising the predoctoral stipend to \$35k would cost NIGMS \$47M
- Could offset these increases by cutting slots, but that would reduce the number of students receiving support
- Increases in stipends are propagated as costs to research grants without corresponding budget increases for non-competing awards
- Well-resourced institutions currently supplement predoctoral stipends above NRSA levels, so trainees at those institutions might not actually see increases in their stipends if NRSA levels jump
- Trainees at lower-resourced institutions would be likely to get increases if stipend jumped

NIGMS Average Award Sizes (R01/R29/R35/R37) 1996-2021



BRDPI: Biomedical Research and Development Price Index

Goal: Increase Median MIRA Budget for Established Investigators

- Currently, new MIRA grants to EIs have a median budget of ~\$260k direct costs, with the mode at \$250k
- Target of \$300k direct costs as the median and mode might be feasible
- Focus will be on raising the floor but not the ceiling



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- NIGMS Blogs

- *Feedback Loop*: loop.nigms.nih.gov
- *Biomedical Beat*: biobeat.nigms.nih.gov



Questions? Comments?



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General Medical Sciences