NIH Director's Update

Council of Councils
January 27, 2022

Lawrence A. Tabak, DDS, PhD
Acting Director, NIH
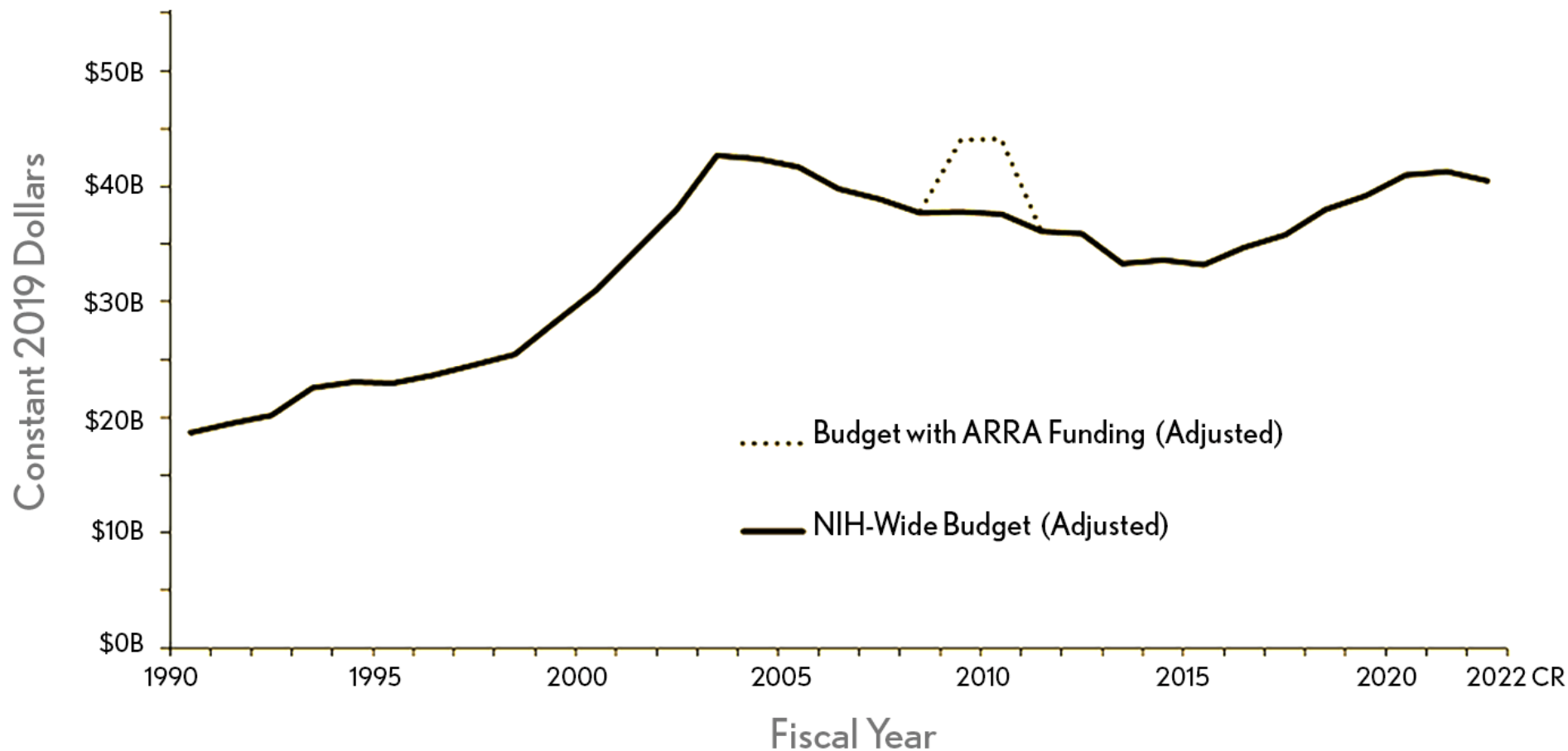Department of Health and Human Services

Topics for Today

- NIH budget update
- NIH leadership changes
- ARPA-H update
- DEIA activity highlights
- *Neuron* commentary: Gender Bias in Academia

National Institutes of Health Funding
1990-2022

Constant 2019 Dollars

- $50B
- $40B
- $30B
- $20B
- $10B
- $0B

.... Budget with ARRA Funding (Adjusted)

——— NIH-Wide Budget (Adjusted)

Fiscal Year

1990 · 1995 · 2000 · 2005 · 2010 · 2015 · 2020 · 2022 CR

COVID-19 Emergency Supplementals

($ in Millions)

IC	FY 2020	FY 2021	Total	Purpose
NIAID	$1,532		**$1,532**	Vaccines, Therapeutics, Basic Research, Facilities, Diagnostics
OD	$1,030	$1,250	**$2,280**	RECOVER, RADx, Common Fund
NIBIB	$560		**$560**	RADx Tech, Diagnostics
NCI	$306		**$306**	Diagnostics (Serology)
NHLBI	$103		**$103**	Therapeutics (Cardiovascular)
NCATS	$36		**$36**	Therapeutics (Screening)
NIEHS	$10		**$10**	Worker Training
NLM	$10		**$10**	Clinical Data Access
TOTAL	**$3,587**	**$1,250**	**$4,837**	

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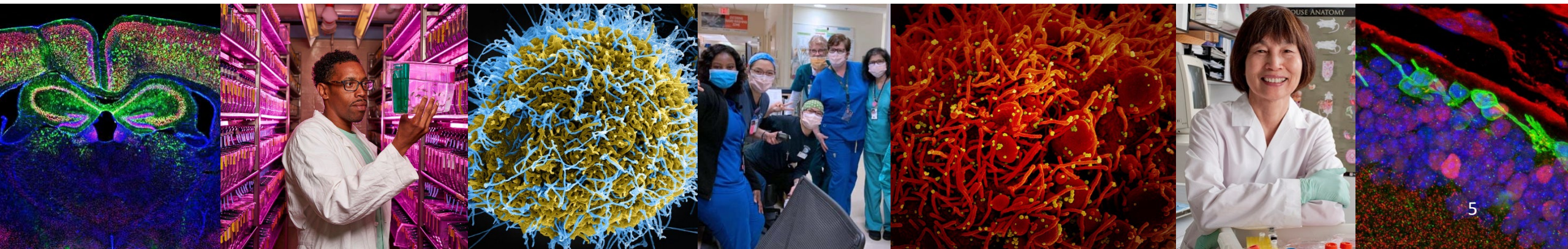
Former Upstate NY dentist takes over NIH, becomes Dr. Fauci's boss

Updated: Dec. 21, 2021, 1:08 p.m. | Published: Dec. 21, 2021, 1:08 p.m.

Dr. Lawrence Tabak, a University at Buffalo alumnus who served on the faculty at the University of Rochester from 1986-2000, has been named Acting Director of the NIH. (Video still)

By **Geoff Herbert | gherbert@syracuse.com**

A former Upstate New York dentist has taken over the National Institutes of Health (NIH), becoming Dr. Anthony Fauci's boss as the Covid-19 pandemic continues.

Lawrence A. Tabak, D.D.S., Ph.D., has been named the Acting Director of the NIH, effective Monday, December 20. He replaces retiring director Francis Collins, and is believed to be the first dentist to take the helm at the federal government's focal point for health research.

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Acting NIH Principal Deputy Director

Tara A. Schwetz, Ph.D.

Acting Associate Deputy Director, NIH

Acting Director of the Office of Science Policy

Courtney Aklin, PhD

Lyric Jorgenson, PhD

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Draft Mission and Approach

Mission

To benefit the health of all Americans by catalyzing health breakthroughs that cannot readily be accomplished through traditional research or commercial activity

Leverages Approach Pioneered at DARPA

Guiding Principles Driving Culture

Linked to NIH – draw on vast knowledge, expertise, and infrastructure, but remain distinct, with unique culture and organization

Seek innovative ideas and collaborative, diverse people

Be nimble and urgent, time-bound

Be open and transparent, engage stakeholders

Fail early and accept risk

Be accountable – milestone driven – yet independent

Congressional Update

Appropriations Activity

FY22 President's budget request:
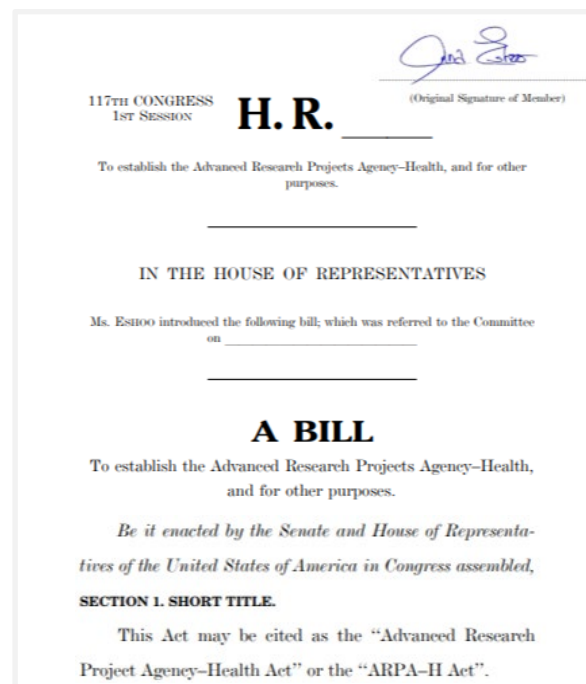## $6.5B

FY22 House Draft Appropriation bill:
$3.0B
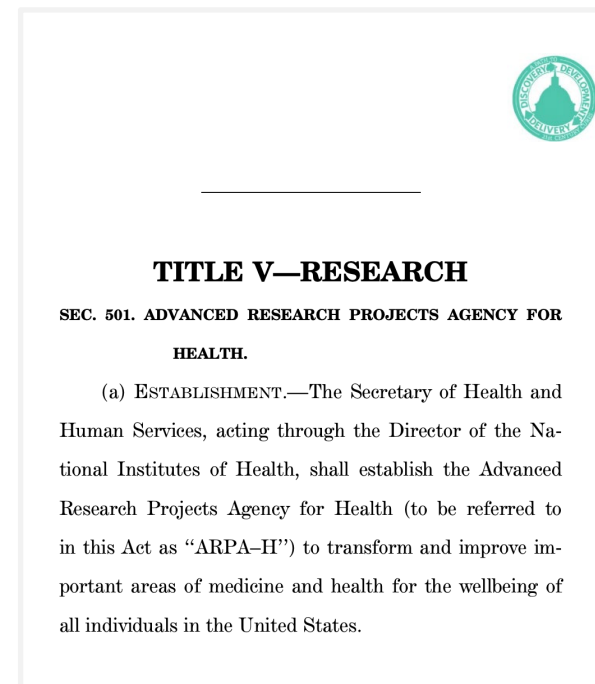
FY22 Senate Draft Appropriation bill:
$2.4B

Funds available over 3 years in each

Potential Authorization Pathways

H.R. 5585, the Advanced Research Project Agency-Health (ARPA-H) Act

H.R. 6000, Cures 2.0 Act

117TH CONGRESS
1ST SESSION

(Original Signature of Member)

H.R. _____

To establish the Advanced Research Projects Agency–Health, and for other purposes.

_____

IN THE HOUSE OF REPRESENTATIVES

Ms. Eshoo introduced the following bill; which was referred to the Committee on _____

_____

A BILL

To establish the Advanced Research Projects Agency–Health, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Advanced Research Project Agency–Health Act" or the "ARPA–H Act".

TITLE V—RESEARCH

SEC. 501. ADVANCED RESEARCH PROJECTS AGENCY FOR HEALTH.

(a) ESTABLISHMENT.—The Secretary of Health and Human Services, acting through the Director of the National Institutes of Health, shall establish the Advanced Research Projects Agency for Health (to be referred to in this Act as "ARPA–H") to transform and improve important areas of medicine and health for the wellbeing of all individuals in the United States.

Listening Session
Feedback and Summary Report

5100+
Participants

Nearly **250**
Organizations

16
Sessions

BRIEFING ROOM

White House and National Institutes of Health Release Report Summarizing the Listening Sessions with Stakeholders on the Proposed Advanced Research Projects Agency for Health

SEPTEMBER 30, 2021 • PRESS RELEASES

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UNITE RFI Solicited Input on How NIH Can Advance DEI and Health Disparities Research

- Over 1,100 responses from a wide range of respondents, with most from academia
- Three preliminary cross-cutting themes emerged:

1. Actions Beyond Words	**2. Enhance Programs & Activities**	**3. There is no "easy button"**

A small number of respondents did not perceive issues or denied issues related to structural racism or other forms of bias, inequitable treatment, or discrimination within NIH or the greater biomedical workforce

UNITE External Listening Sessions

December 2021 – February 2022

- Moderated by an outside consultant, with welcome remarks from NIH leadership
- 90-minute sessions

14 sessions by stakeholder group:

- Historically Black Colleges and Universities (HBCUs)
- Minority Serving Colleges and Universities (MSIs)
- Colleges and Universities
- Foundations and Professional Societies
- Tribal Communities and Organizations
- Faith Based Organizations and Houses of Worship
- Health Centers and Systems
- Nonprofit, Community-Based Organizations, Advocacy Organizations
- Students and Trainees
- Research Staff (Assistants, Associates, Technicians)

Topics of interest:

- Changing culture to promote equity, inclusivity, and justice
- Improving policies, transparency, and oversight
- Strengthening career pathways, training, mentoring, and the professoriate
- Ensuring fairness in review and funding deliberations
- Enhancing funding and research support for diverse institutions and historically under-resourced research areas
- Structural racism in the biomedical research enterprise

NIH Common Fund Transformative Research to Address Health Disparities and Advance Health Equity

Goal: To support unusually innovative research projects, which, if successful, would have a major impact in developing, disseminating, or implementing innovative and effective interventions that prevent, reduce, or eliminate health disparities and health inequities

Two FOAs released 3/26/21: **11 awards announced 10/13/21**

1) RFA-RM-21-021 Transformative Research to Address Health Disparities and Advance Health Equity (U01 Clinical Trial Allowed) – **6 awards**
2) RFA-RM-21-022 Transformative Research to Address Health Disparities and Advance Health Equity at Minority Serving Institutions (U01 Clinical Trial Allowed) - **5 awards; additional competition FY 22**

Up to $58M committed

Faculty Institutional Recruitment for Sustainable Transformation (FIRST)

Goal: Create cultures of inclusive excellence
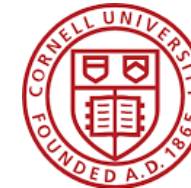
Program Objectives

- Faculty cohort model for hiring, multi-level mentoring, professional development

- Integrated, institution-wide systems to address bias, faculty equity, mentoring, and work/life issues

- Coordination and Evaluation Center (CEC): Independent program evaluation - faculty and institutional level

Estimated Funds: $241M over 9 years

Coordination and Evaluation Center

MOREHOUSE SCHOOL OF MEDICINE

Initial Cohorts

TUSKEGEE UNIVERSITY

CORNELL UNIVERSITY FOUNDED A.D. 1865

FLORIDA STATE UNIVERSITY 1851

Drexel UNIVERSITY

Icahn School of Medicine at Mount Sinai

SAN DIEGO STATE UNIVERSITY

UAB THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

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Gender Bias Persists in the Biomedical Workforce

Despite progress, women constitute…

- **57%** of applicants in PhD programs
  - Just **30%** of all faculty

- **35%** of NIH RPG awardees

- **46%** of NIH IRP tenure-track scientists
  - Just **26%** of IRP tenured investigators

Women also face rates of sexual harassment of up to **58%** for academic faculty and staff

These disparities are **even greater** for women of color
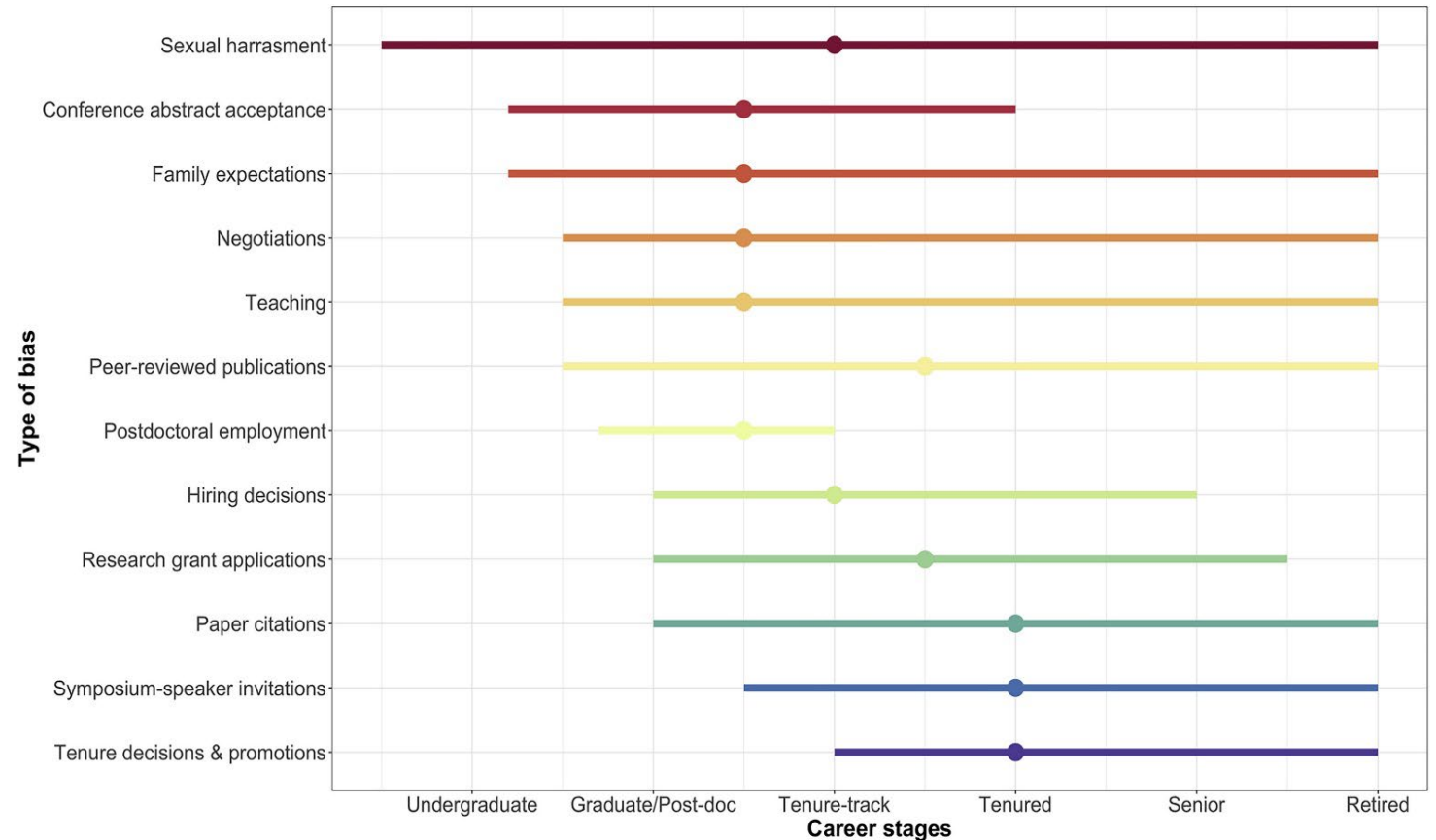
Barriers throughout the career span cumulatively increase gender disparities. Sustained action is needed to tear down barriers and achieve gender equity.

Perspective

Gender bias in academia: A lifetime problem that needs solutions

Anaïs Llorens,[1,39,*] Athina Tzovara,[1,2,3,39,*] Ludovic Bellier,[1,40] Ilina Bhaya-Grossman,[4,40] Aurélie Bidet-Caulet,[5,40] William K. Chang,[1,40] Zachariah R. Cross,[6,40] Rosa Dominguez-Faus,[7,40] Adeen Flinker,[8,40] Yvonne Fonken,[1,9,40] Mark A. Gorenstein,[1,10,40] Chris Holdgraf,[1,11,40] Colin W. Hoy,[1,40] Maria V. Ivanova,[10,40] Richard T. Jimenez,[1,40] Soyeon Jun,[1,12,40] Julia W.Y. Kam,[1,13,40] Celeste Kidd,[10,40] Enitan Marcelle,[1,40] Deborah Marciano,[1,14,40] Stephanie Martin,[1,15,40] Nicholas E. Myers,[1,16,40] Karita Ojala,[17,40] Anat Perry,[18,40] Pedro Pinheiro-Chagas,[19,40] Stephanie K. Riès,[20,40] Ignacio Saez,[21,40] Ivan Skelin,[22,40] Katarina Slama,[1,40] Brooke Staveland,[1,14,40] Danielle S. Bassett,[23,24,41] Elizabeth A. Buffalo,[25,41] Adrienne L. Fairhall,[26,41] Nancy J. Kopell,[27,41] Laura J. Kray,[14,41] Jack J. Lin,[28,29,41] Anna C. Nobre,[16,41] Dylan Riley,[30,41] Anne-Kristin Solbakk,[31,32,33,34,41] Joni D. Wallis,[1,10,41] Xiao-Jing Wang,[35,41] Shlomit Yuval-Greenberg,[36,41] Sabine Kastner,[37,41,42] Robert T. Knight,[1,10,41,42] and Nina F. Dronkers[10,38,41,42]
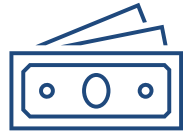
Funding and Awards

Recommended Actions:
- Create funding mechanisms awarded exclusively on the merit of the scientific proposal, regardless of the merit of the PI
- Alerting review committee to potential gender bias and possibly prefacing grant reviews with bias training

NIH Steps

- Pilot of multi-stage, partial double-blinded review of R01 applications (April 2021)
- Working Group of CSR Advisory Council
- Removal of those accused of sexual harassment from peer review committees
- Publication of CSR reviewer demographic data
- "Bias awareness in review" training for SROs, Reviewers, and Chairs (launched 2021)
- Provide contacts for reporting concerns around fairness in review

Sexual Harassment

Recommended Actions: Sexual harassment to be equated to scientific misconduct, including similar mechanisms for reporting, investigation, and adjudication

NIH Steps

Extramural

- **Reporting requirements** when:
  - Investigator removed from a grant due to harassment findings/allegations
  - PIs/key personnel removed from their position or disciplined due to concerns about harassment, bullying, retaliation, or hostile working conditions (starting in FY22)
- Safe work environment, free of harassment= explicit condition of all awards
- Published new guidelines for creating a safe and inclusive environment (2021)
- Provide mechanisms for harassment to be reported to NIH

At NIH:

- **Strengthened policies** on preventing and addressing harassment and **centralized the reporting and inquiry process** (2018, 2021), including:
  - Options for anonymous reporting and reporting by witnesses
  - NIH Policy Statement on Personal Relationships
- Added language to **clarify the policy**, including adding additional **information for contractors** (2021)

Hiring, Tenure, and Promotion

Recommended Actions:
- When legally possible, academic institutions can set policies on gender equity, set goals for gender ratios in different position categories, and develop recruitment strategies to achieve these goals
- Include mediators from equity committees to participate through the hiring/promotion procedure

NIH Steps (Intramural)

- New guidelines for hiring Scientific/Clinical Directors with best practices to ensure diverse hiring

- Requirement of EDI representative on search committee for tenure-track, tenure, and senior scientist positions

- Formation of the NIH Equity Committee to assess hiring, resource allocation, and promotion

- NIH Distinguished Scholars Program

- NIH Scientific Workforce Recruitment Tool

Conferences

Recommended Actions:
- Conferences can require the inclusion of both men and women speakers or provide a justification for single-gender symposia
- Conferences required to have a code of conduct, including clear plans of action in the case of harassment and the procedure for removing confirmed harassers

NIH Steps

- U13/R14 grants must include diversity plans (Starting 2021)
- Reiterated expectations that conferences organizers employ strategies to prevent/mitigate effects, such as establishing codes of conduct
- Commitment of former NIH Director to no longer participate in "manels"
- Next steps:
  - o Required submission of safety plans prior to award

Family Responsibilities

Recommended Actions:
- Extend eligibility window for grants and awards based on parental leave
- Provide bridge funds at department and university level to support trainees during gaps in funding, especially during parental leave

NIH Steps
- Career development awardees may request adjustment to appointment status or % effort for family situations (2018)

- Supplements for time off for childcare (postdocs, faculty members)

- 2020 pilot program: supplements for research continuity and retention of eligible investigators facing QLE

- ESI eligibility extension for childbirth

- NRSA child-support allowance

- Keep the Thread Program for postdocs to retain fellows through times needed for family responsibilities (Intramural)

NIH welcomes open discussion on this topic.

Stay tuned for upcoming manuscript expanding on NIH's efforts on tackling gender bias – to be published this year.
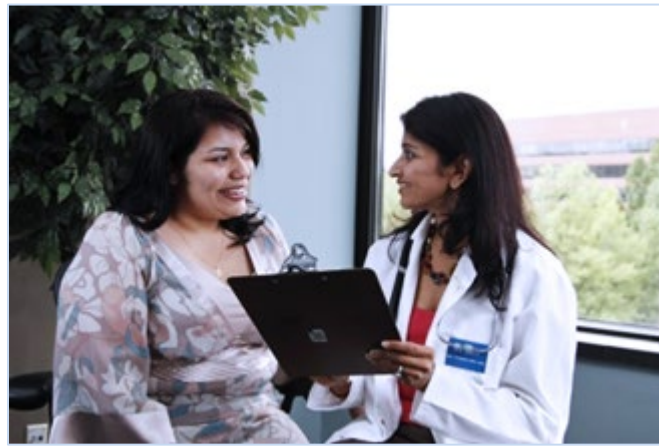
NIH...
Turning Discovery Into Health

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