NIH’s Scientific Approach to Inclusive Excellence

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NIH Chief Officer for Scientific Workforce Diversity

AAI Immunology 2019
Fostering Diversity and Preventing Harassment in the Biomedical Research Workforce
May 11, 2019
NIH’s Scientific Approach to Inclusive Excellence

*Presentation Outline*

- National diversity data
  - Debunking the pipeline myth
- Institutional change: NIH intramural research program as a testing ground
  - Tools and strategies
- Systemic issues related to women in biomedicine
  - Work-life integration
  - Peer review
  - Sexual harassment
Diminishing Representation for Women and URG Scientists

Representation in the Biomedical Sciences, 2015 - 2016

Women - Underrepresented
Women - Well-represented

Men - Underrepresented
Men - Well-represented

Myth: Diverse Talent Doesn’t Exist

Gibbs, K. D., et al. (2016). Decoupling the minority PhD talent pool and assistant professor hiring in the medical school basic science departments in the US.
Myth: Diverse Female Talent Doesn’t Exist

Gibbs, K. D., et al. (2016). *Decoupling the minority PhD talent pool and assistant professor hiring in the medical school basic science departments in the US.*
Top Research Institutions:
Tenured Women Professors 2018 (%)

Sources: AAMC Faculty Roster, December 31, 2018 snapshot, as of January 31, 2019; NIH Office of Intramural Research (Oct 2017 data)

National Average (Tenured) = 27%

National Average Tenure-Track = 40.6%
NIH Tenure-Track = 42%
NIH Scientific Workforce Diversity

Interventions at \textit{Individual} Level

\textit{Necessary but not sufficient}

Interventions needed at \textit{Institutional} Level
Institutional Transformation and Culture Change

**NIH Intramural Program Testing New Strategies**

Promote Transparency and Accountability

- Systematic review and transparency of hiring and promotion procedures, policies
- Transparency: collect and publicize aggregate diversity metrics
- Provide tools to Divisions, Departments for enhancing recruitment and retention
- Evaluation of impact

Link to Institutional Values and Reward Systems
NIH IRP Institutional Approaches to Inclusive Excellence

• NIH SWD Interactive Toolkit
  – Identity diverse talent pool – systematic unbiased approach
  – Implicit-bias mitigation
• Trans-NIH searches for tenure track positions
• NIH Equity Committee
  – Transparency and accountability
• Distinguished Scholars Program
  – Build a self-reinforcing community of PIs committed to diversity and inclusion
Integrated strategies:

- Systematic unbiased search to diversify applicant pools
- Trans-NIH searches:
  - Hiring of women tenure-track investigators exceeds their representation in applicant pool
  - 40% tenure-track investigators are now women
- Mitigate implicit bias
- Conduct proactive outreach
- Foster mentoring relationships
Expanding Diversity of NIH Candidate Pools: Senior Career Stage (Associate and Full Professors)

~ 896 total, top 1/2 culled
Authorship in top journals
100+ publications: 369
500+ citations: 758
2000+ citations: 531

Updated December 27, 2018
Expanding Diversity of NIH Candidate Pools: 
**Senior Career Stage (Associate and Full Professors)**

**Race/Ethnicity**
- White/Caucasian: 49%
- Hispanic/Latino: 22%
- African-American/Black: 1%
- Native American: 6%
- Asian: 3%
- Other: 1%

**Gender**
- Female: 58%
- Male: 42%

Updated December 27, 2018
Impact of Trans-NIH Searches on Hiring Underrepresented Tenure Track Investigators (2010-2017)

As of Oct. 1, 2017 Source: OIR Database N = 211

Number Hired

- Asian
- American Indian / Alaska Native
- Black / African America
- Hispanic
- White

As of Oct. 1, 2017 Source: OIR Database N = 211
NIH Distinguished Scholars Program: Cohort Model for Intramural Research program

- Institutional transformation by recruiting a substantial number of PIs with demonstrated commitment to diversity and inclusion (15 per year)
- Build self-reinforcing community of PIs committed to diversity and inclusion
- Provide professional development and culture that values mentoring and inclusion
- Send the message that NIH values a commitment to diversity and inclusion

Extramural: Request for Information (RFI): Institutional Accountability to Promote Inclusive Excellence
Release Date: February 25, 2019; Response Date: June 14, 2019
Projected Impact of Centralized Hiring and Distinguished Scholars Program

% URG IRP Tenure-Track Investigators

Year


% URG

0 5 10 15 20 25 30

Distinguished Scholars Program

Trans-NIH hiring

Slide courtesy of Roland Owens
The NIH Equity Committee (NEC) Metrics, Accountability and Transparency

• NEC - First organizational meeting November 3, 2017

• Membership – 50% women:
  – 20 Senior Investigators; Scientific Directors (SDs), a Deputy Director, and an Executive Officer

• Meet monthly to review reports submitted by each SDs
  – Diversity and Inclusion metrics
  – Recommendations for closing identified gaps

• Reports available to leadership to share best practices:
  – Board of SDs
  – Director of the host IC
## NIH Equity Committee

### Metrics for Annual Evaluation

<table>
<thead>
<tr>
<th>Tenured and tenure-track investigators analyzed separately</th>
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<tbody>
<tr>
<td>- Demographic data,</td>
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<td>- Salaries, resources for hiring</td>
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<td></td>
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<tr>
<td>Equity of review practices</td>
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<td>- BSC and ad hoc reviewers, promotion, and tenure</td>
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<td>committees</td>
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<td></td>
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<tr>
<td>Efforts to correct identified inequities</td>
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<table>
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<tr>
<th>Efforts to promote diversity, equity, inclusion</th>
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<td>- Diversity of speakers at seminars hosted by the IC</td>
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<tr>
<td>- Promote awareness of implicit bias</td>
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<tr>
<td>- Best practices for search committees and outreach</td>
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<td>- Award nominations</td>
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<th>Input on how Office of Intramural Research and SWD can support the ICs</th>
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Gender Gaps in NIH Research Project Grant Success Rates
R01 Renewals (Type 2)

Problem with Peer Review?

Analysis of National Institutes of Health R01 Application Critiques, Impact, and Criteria Scores: Does the Sex of the Principal Investigator Make a Difference?

Anna Kaatz, PhD, MPH, You-Geon Lee, PhD, Aaron Potvien, MS, Wairimu Magua, PhD, MS, Amarette Filut, Anupama Bhattacharya, Renee Leatherberry, Xiaojin Zhu, PhD, MS, and Molly Carnes, MD, MS

“Reviewers assigned significantly worse priority, approach, and significance scores to female than male PIs’ Type 2 applications, despite using standout adjectives (e.g., ‘outstanding,’ ‘excellent’) and making references to ability in more critiques…”

R01 Renewals: Different Descriptors for Men vs. Women Applicants

• Summary statements for 51 R01 renewals

• Applications from men:
  – “leader” and “pioneer”
  – “highly innovative”
  – “highly significant research”

• Applications from women:
  – “expertise”
  – working in “excellent environments”
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Bias thrives in ambiguous scenarios
Family-Friendly Policy Changes for NIH Intramural Research Investigators

- Extended paid parental leave for NIH trainees to 8 weeks
- Extended tenure clock for NIH scientists to 1 year
- Temporary lab manager program for NIH investigators
- Leave-bank program for NIH employees
- Program to provide backup care for children, elders, and adult dependents
- “Keep the Thread” program, offers alternative career development schedules for NIH intramural fellows.
Sexual Harassment is a Problem in Science

“Gender harassment is by far the most common type of sexual harassment.”

“Insufficient attention to a climate that tolerates gender harassment increases the chance that other forms of sexual harassment will occur.”

Source: National Academies Consensus Study Report - June 2018
NIH Anti-Harassment Program

**OVERSIGHT**
- Established the NIH Anti-Harassment Steering Committee
- Oversees process improvements and program design
- Increase Civil Advisory Committee membership

**PROGRAM**
- Civil Program expanded to address all allegations of harassment and related inappropriate conduct, and to oversee the administrative inquiry process

**POLICIES**
- Preventing and Addressing Harassment and Inappropriate Conduct Manual Chapter (1311)
- Personal Relationships in the Workplace Policy Statement

**TOOLS**
- New webform and hotline: Enhanced allegation reporting systems for both anonymous and non-anonymous reports
- Web presence spanning all partner sites
- Training & Education
NIH Workplace Climate Survey

Response rate: 57%; Interim Report June 2019

• Assess NIH workplace climate
• Identify potential elements of NIH organizational climate associated with sexual harassment for intervention
• Determine impact of sexual harassment on career choices
• Measure outcomes of sexual harassment (job, psychological, health)
• Design new activities to improve workplace climate
Sexual Harassment in Extramural Community: NIH Statement

- Accountability and transparency
  - Follow-up on sexual harassment concerns at > two dozen institutions

- Expectations for institutions and investigators:
  - Ensure a safe workplace and inform the agency

- Provide clear channels of communication to NIH
  - GranteeHarassment@od.nih.gov

- Listening to victims of sexual harassment and incorporating their perspectives into future actions

- ACD Working Group on Changing the Culture to End Sexual Harassment
  - Recommendations due Dec. 2019
Institutional Leadership Drives Culture Change

- Climate
  - Endorse value
  - Flexibility
  - Resources $, time

- Work-Life
  - Mentoring
  - Bias Mitigation
  - Tools for Recruitment & Retention

- Equity
  - Sponsorship: awards, positions
  - Salary/resource equity
  - Understand diversity data
  - Sexual Harassment
Institutional Leadership Drives Culture Change

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Great minds think differently …

@NIH_COSWD