ACD Diversity Workgroup
Subcommittee on Peer Review

Richard Nakamura, Co-Chair
Joan Reede (Harvard), Co-Chair
Jenessa Shapiro (UCLA)
Oscar Ybarra (U Michigan)

Dana Takagi (UCSC), Co-Chair
Valerie Reyna (Cornell)
Gordon Moskowitz (Lehigh)
Jack Dovidio (Yale)
Ginther et al. (2011) Findings

- African American applicants were 10 percentage points less likely to receive NIH research funding compared to Whites.
- Suggested explanations:
  - Bias in peer review
  - Deficits in applicants’ grant writing abilities
- Applications with strong priority scores were equally likely to be funded regardless of race.
  - This suggests that problems occur at the peer review stage or earlier.
Recommendations of the ACD Working Group on Diversity in the Biomedical Research Workforce

• Create a permanent Diversity Workgroup
• Provide more information for ND applications
• Establish a Subcommittee on Peer Review to:
  − Examine all hypotheses, including the role of unconscious bias, related to disparities in research awards at NIH.
  − Provide advice on potential interventions to ensure the fairness of the peer review system.
  − Test bias/diversity awareness training of NIH staff
Early Accomplishments

• Established Early Career Reviewer Program
  – Train and educate qualified scientists to be reviewers
  – Help emerging researchers advance their careers by exposing them to review experience
  – Enrich the existing pool of NIH reviewers
• Provided additional advice to Applicants regarding ND applications on the CSR website
• Increased representation of reviewers from URGs on SRGs
• Established the ACD Diversity Workgroup Subcommittee on Peer Review
What factors may contribute to the disparity in grant funding?

- Bias in Peer Review
  - Negative Bias
  - Positive Bias
- Grant Writing Experience
- Quality or Type of Science

Bias in Peer Review

Deficit Hypotheses

Positive Bias

Negative Bias
Is there bias in peer review practices?

- Negative Bias:
  - Anonymizing Experiments
  - Text Analysis of Critiques
  - Bias Awareness Training

- Positive Bias:
  - Bias Awareness Training regarding positive bias
  - Text Analysis of Critiques

*Red Denotes recommendation of ACD Diversity Workgroup
Is it limited grant writing experience?

Grant Writing Experience

Methods
- Survey of PI
- Text Analysis of Applications
- Text Analysis of Critiques*
- Survey of Grants Office Personnel

NRMN
BUILD

Limited Experience and/or Access to Experienced Mentors

Deficits in Grant Writing

Limited Institutional Experience with Grants
Is it the science?

Quality or Type of Science

Methods

- Analysis of RCDC terms for applications
- Analysis of relationship between significance and overall scores by race
- Text Analysis of Critiques
- Analysis of relationship between approach and overall scores by race

Under-recognized or under-valued areas of science

Unconvincing Significance of proposed work

Problems with the approach
## Progress To Date

<table>
<thead>
<tr>
<th>Details</th>
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<tr>
<td>Early Career Reviewer Program: 33% URM among 700 ECRs who have served on SRGs to date</td>
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<td>More information on CSR website for PIs with ND Applications</td>
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<td>25% increase in URM Reviewers on SRGs</td>
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<td>ACD Diversity Workgroup: Meetings, RFI, Recommendations</td>
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<td>ACD Diversity Workgroup Subcommittee on Peer Review was formed</td>
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<td>Co-Chairs created frame for work of the Committee</td>
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<td>Bias Awareness Training resources have been identified</td>
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<td>AAAS Policy Fellow Recruited</td>
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<td>Face-to-Face Meeting on June 17th</td>
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Key Directions

- RFP to conduct survey of and focus groups with new investigators from under-represented minority groups
- RFA development for controlled experiments in collaboration with Extramural Research Community
- Development of Bias Awareness Training program for NIH staff, reviewers, and study section chairs
- Collaboration with other government agencies such as NSF and OPM on bias awareness and reduction