



Center for
Scientific Review

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

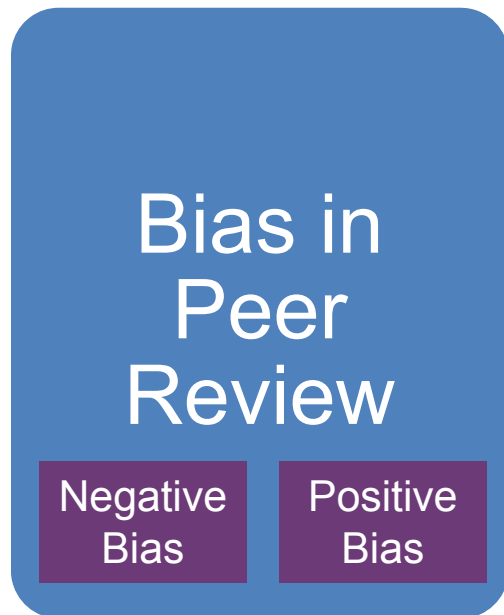
Recommendations of the ACD Working Group on Diversity in the Biomedical Research Workforce

- 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?



Is there bias in peer review practices?

Bias in Peer Review

Negative Bias

Methods

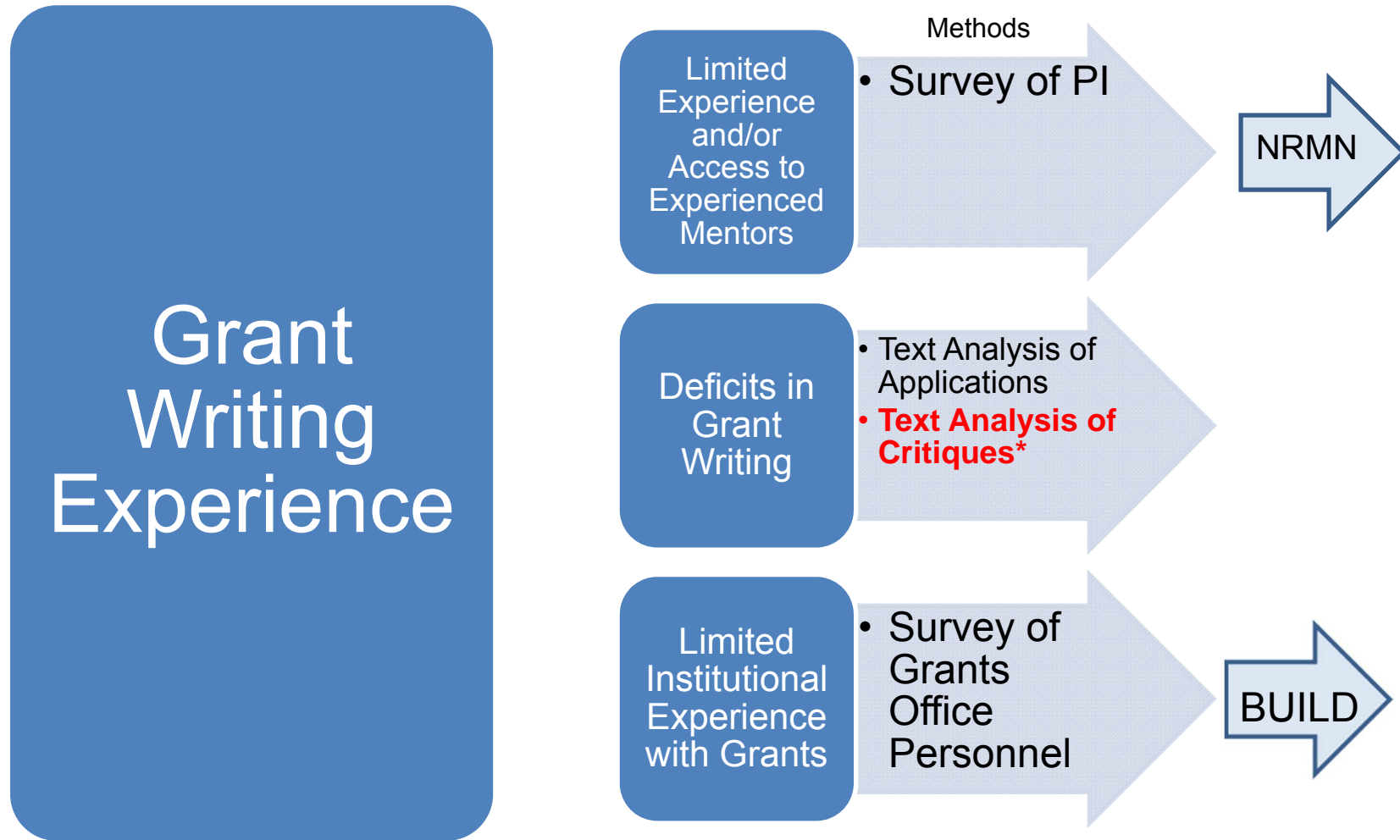
- **Anonymizing Experiments**
- **Text Analysis of Critiques**
- **Bias Awareness Training**
- Constructed applications

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?



Is it the science?

Quality or Type of Science

Methods

Under-recognized or under-valued areas of science

- Analysis of RCDC terms for applications

Unconvincing Significance of proposed work

- Analysis of relationship between significance and overall scores by race

Problems with the approach

- **Text Analysis of Critiques**
- Analysis of relationship between approach and overall scores by race

Progress To Date

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

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