Ginther et al. (2011) Findings

- African American applicants were 10 percentage points less likely to receive NIH research funding compared to Whites.
- A suggested explanation: “Cumulative advantage” of non-Black applicants.
- Applications with strong priority scores were equally likely to be funded regardless of race. This suggests that disparities develop at the peer review stage or earlier.
- Tabak and Collins, 2011: Disparity of awards survived several controls for career quality and NIH must face the possibility of bias.
ACD Recommendations for Peer Review (12/2012)

• Provide more information to applicants whose applications were not discussed
• Create a working group with expertise in social and behavioral science to: a) study the possibility of real or perceived bias in peer review and b) conduct text and discourse analysis of peer review to evaluate bias
• Attempt an intervention by conducting a trial of validated bias or diversity awareness training
• Determine if bias can be eliminated by anonymizing the identity of the PI and institution in grant review
Applicant Guidance: Next Steps
"Your application was reviewed; what to do next..."

http://grants.nih.gov/grants/next_steps.htm
Now appears on each summary statement

Created by Sally Amero and OER
Subcommittee on Peer Review
Established April 2012 w/ 18 month lifespan

Joan Y. Reede, M.D., M.P.H., M.S., M.B.A.
Co-Chair
Dean of Diversity and Community Partnership
Harvard Medical School

Valerie Reyna, Ph.D.
Professor of Human Development and Psychology
Cornell University

John F. Dovidio, Ph.D.
Professor of Psychology
Yale University

Gordon B. Moskowitz, Ph.D.
Professor and Chair of Psychology
Lehigh University

Dana Y. Takagi, Ph.D.,
Co-Chair
Professor of Sociology and Chair of the Department of Education
University of California, Santa Cruz

Jenessa R. Shapiro, Ph.D.
Assistant Professor of Psychology
University of California, Los Angeles

Oscar Ybarra, Ph.D.
Professor in Social Psychology
University of Michigan

Richard Nakamura, Ph.D.
Co-Chair
Director, Center for Scientific Review
Subcommittee support: CSR Staff and OER Collaborators

Monica Basco, Ph.D.
Executive Secretary
Subcommittee of Peer Review
Coordinator, Early Career Reviewer Program

Denise McGarrell, BS
Program Analyst
Subcommittee on Peer Review

David Benn, BS
Program Analyst
Early Career Reviewer Program

Frances Carter-Johnson, Ph.D.
AAAS S & T Policy Fellow

Kimberly Firth, Ph.D.
Scientific Review Officer Contractor

Sally Rockey, Ph.D., Director
Office of Extramural Research

Della Hann, Ph.D. Director
Office of Planning, Analysis and Communication

Robin Wagner, Ph.D., Director
Division of Statistical Analysis and Reporting

Luci Roberts, Ph.D., Director Division of
Planning & Evaluation

Sally Amero, Ph.D., NIH Review Policy Officer
Office of Extramural Programs

Lisa Evans, JD, Scientific Workforce Diversity
Specialist
Office of Extramural Programs
Development of Measures, Tools, Solicitations

I. Survey and focus group contract awarded to assess views of minority and non-minority New Investigators regarding the fairness and impartiality of the NIH peer review process

II. CIT text analysis software development project

III. Challenge.gov solicitation - *Strategies to Detect Bias in Peer Review*

IV. Future Contract to develop the prize winning strategy

V. To make our 18 month deadline there is a focus on competitive solicitations to be awarded in 2014.
Baseline Assessment of Bias in Peer Review

1-R01-GM-111002-01
Transformative R01 – Common Fund
Exploring the Science of Scientific Review
Molly Carnes, PI ($2,900,000)

I. Text analysis of Summary Statements
II. Analysis of Discourse during Study Section Discussions (Carnes)
Intervention Development and Testing

I. Consultation with NSF and OPM

II. NIH Diversity Workshop
   Roderic I Pettigrew, Ph.D., MD,
   Michael Gottesman, MD
   L. Michelle Bennett, Ph.D.

III. Challenge.gov Solicitation –
   Training to Strengthen Fairness and Impartiality in Peer Review

IV. Future RFP to develop the training program
Anonymizing Experiments

I. 2-Stage review with anonymized Aims and Research Strategy (RFP under development)

II. Alteration of PI race, gender, institution (Carnes)

  White male, high prestige
  White female, high prestige
  Black male, high prestige
  White male, moderate prestige
Recommendations of Subcommittee on Peer Review

I. Conduct additional analyses on funding disparities (OER)

II. Explore alternative hypotheses for disparity in funding
   - Grantsmanship skills
   - Grammar and Spelling Assessment (OER)

III. Evaluate availability of Institutional Resources, Mentors
   - Survey of PIs
   - Review of Institutional Resources

IV. Evaluate the efficacy of the Early Career Review Program
Supplementary programs in CSR Peer Review:

Early Career Reviewer Program

Increases in Reviewers from Under-represented Groups
Progress to Date

- **3,200 applications received** from 636 institutions*
- 2,384 ECRs have been **accepted** into the program
- 1,086 study sections to date have included an ECR
  - 785 have **served** on at least **one** study section
  - 301 have **served** on **two** study sections
- All IRGs have included ECR on their rosters
  - 222 Study Sections have included ECRs on their rosters

*as of 9/18/13
## ECR database Demographics

<table>
<thead>
<tr>
<th>Group</th>
<th>% of 2,379 in database</th>
<th>% of 786 who served as reviewers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black/African American</td>
<td>7.7%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>5.9%</td>
<td>10.4%</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>1%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Overall Under-Represented Minority</td>
<td>14.4%</td>
<td>27.4%</td>
</tr>
<tr>
<td>Female</td>
<td>42.8%</td>
<td>50%</td>
</tr>
</tbody>
</table>
Questions? Comments?