



# CSR Advisory Council Update

September 27, 2021

Noni Byrnes, Ph.D.  
Director  
Center for Scientific Review

# Thank You: 'retiring' CSR Advisory Council Members



**Alfred George, M.D.**

Magerstadt Professor and Chair  
Pharmacology  
Northwestern University



**Deanna Kroetz, Ph.D.**

Jere E. Goyan Presidential Professor for the Advancement  
of Pharmacy  
Bioengineering and Therapeutic Sciences  
University of California, San Francisco



**Scott Miller, Ph.D.**

Irénée du Pont Professor of Chemistry  
Chemistry  
Yale University



**Julie Price, Ph.D.**

Professor and Investigator  
Radiology and Biomedical Imaging  
Harvard Medical School



**Denise Wilfley, Ph.D.**

Scott Rudolph University Professor  
Psychiatry, Pediatrics, Psychological and Brain Sciences  
Washington University at St. Louis

# Welcome: CSR Advisory Council Members

to our newest members!



**Michelle C. Janelins-Benton, Ph.D.**

Associate Professor  
Division of Supportive Care in Cancer  
Department of Surgery  
University of Rochester



**Narasimhan Rajaram, Ph.D.**

Associate Professor  
Department of Biomedical Engineering  
University of Arkansas at Fayetteville

and our ad hocs!



**Emilyn Alejandro, Ph.D.**

Associate Professor, Department of  
Integrative Biology and Physiology  
University of Minnesota



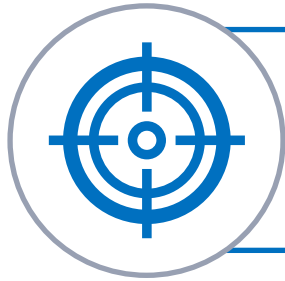
**Anton Bennett, Ph.D.**

Professor, Department of Pharmacology and  
Comparative Medicine  
Yale University



**Andrea Tedeschi, Ph.D.**

Assistant Professor, Department of  
Neuroscience  
Ohio State University



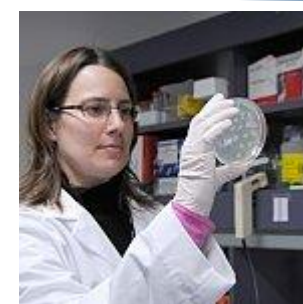
## Overview: Mission, Strategic Framework & Scope

# CSR's Mission



Center for  
Scientific Review

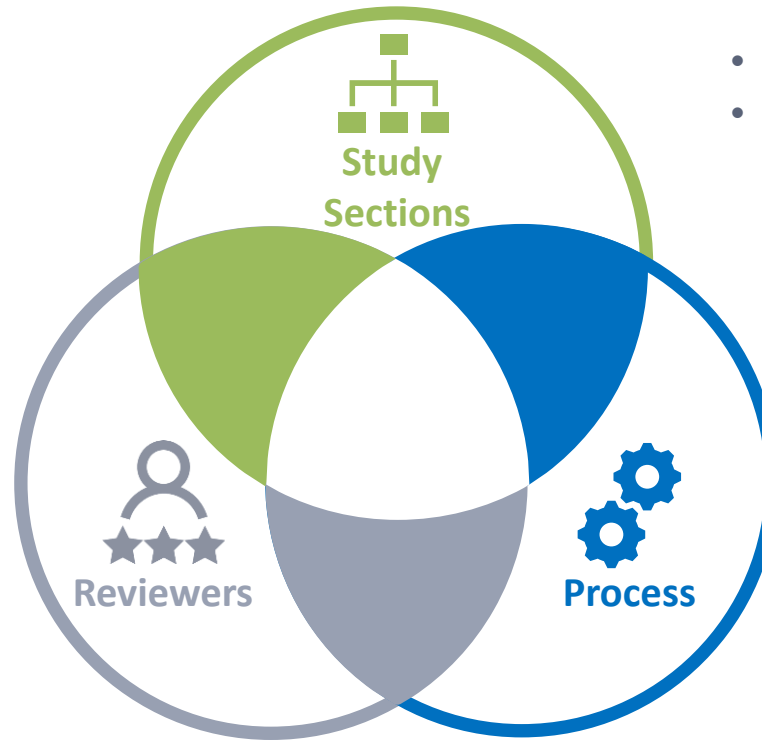
To ensure that NIH grant applications receive fair, independent, expert, and timely **scientific** reviews - free from inappropriate influences - so NIH can fund the most promising research.



# Framework: Quality of Peer Review

## Reviewers

- Reviewer Training
- Broaden/Diversify Reviewer Pool
- Reviewer Evaluation
- Incentivizing service



## Study Sections

- Scientific scope (relevance, adapting to emerging areas, not perpetuating stale science)
- Output (identification of meritorious science)
- Size appropriate for competition

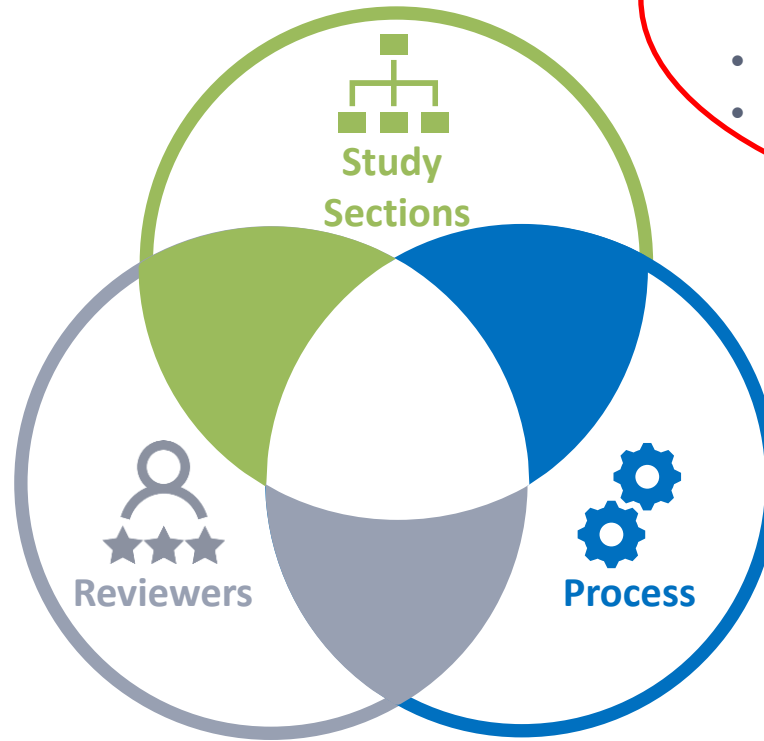
## Process

- Confidentiality/Integrity
- Fairness/bias mitigation
- Assignment/Referral of Applications
- Review Criteria and Scoring System

# Framework: Quality of Peer Review

## Reviewers

- Reviewer Training
- Broaden/Diversify Reviewer Pool
- Reviewer Evaluation
- Incentivizing service



## ENQUIRE

### Study Sections

- Scientific scope (relevance, adapting to emerging areas, not perpetuating stale science)
- Output (identification of meritorious science)
- Size appropriate for competition

### Process

- Confidentiality/Integrity
- Fairness/bias mitigation
- Assignment/Referral of Applications
- Review Criteria and Scoring System

# CSR's Operating Principles



Transparent, data-driven  
decision-making and  
operations



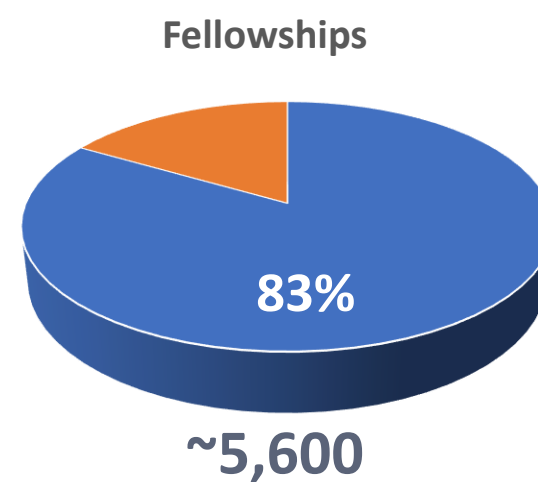
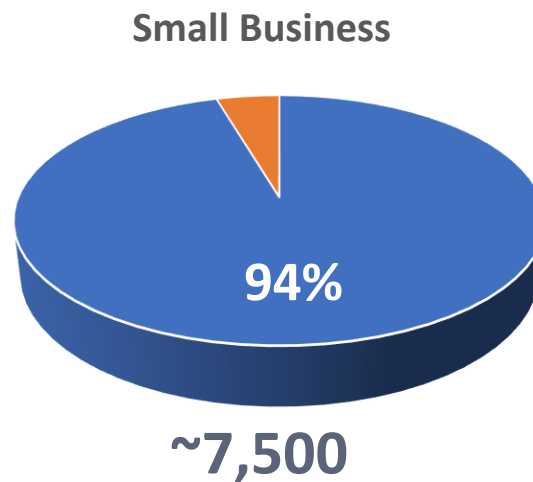
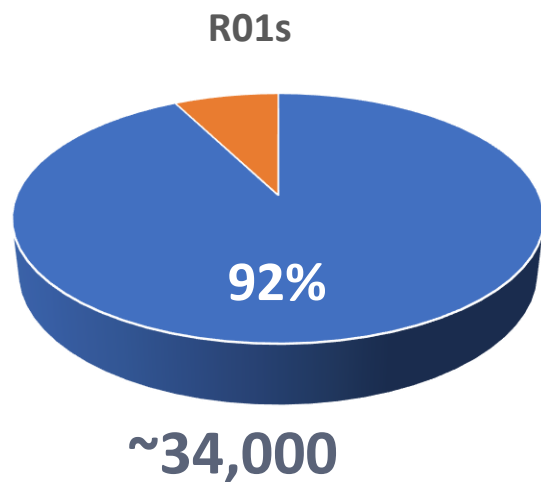
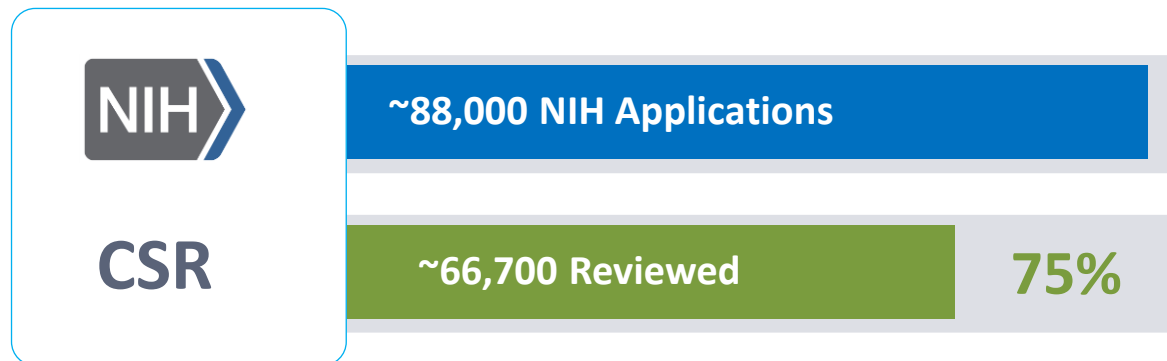
Involvement/engagement of  
stakeholders



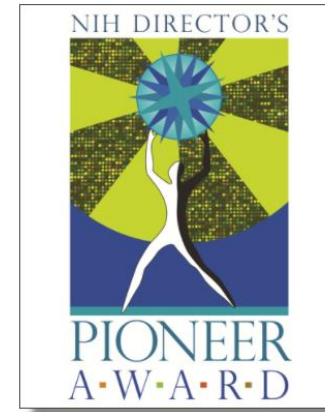
Open, multi-directional,  
respectful communications



# Fiscal Year 2021 Applications, Major Mechanisms



# FY21: 182 Special Initiatives Reviewed by CSR



NOSI: Research to Address Vaccine Hesitancy, Uptake, and Implementation Among Populations that Experience Health Disparities

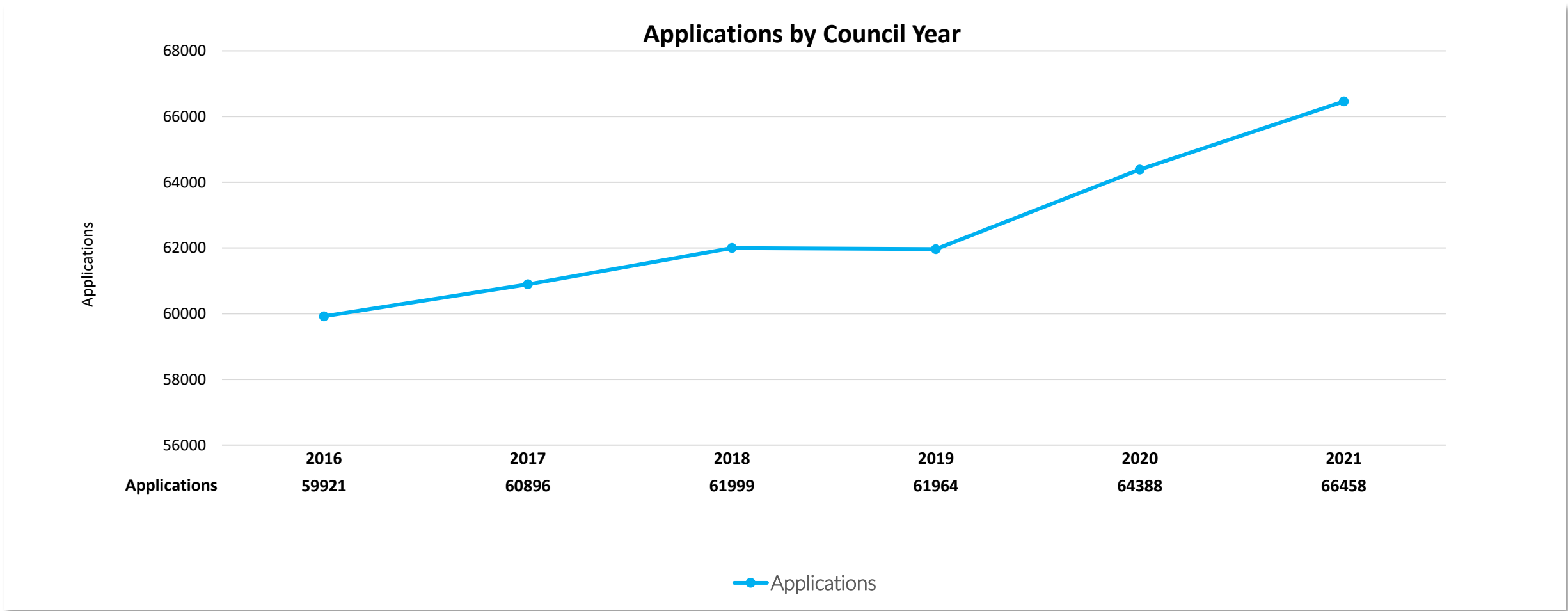


## PLUS

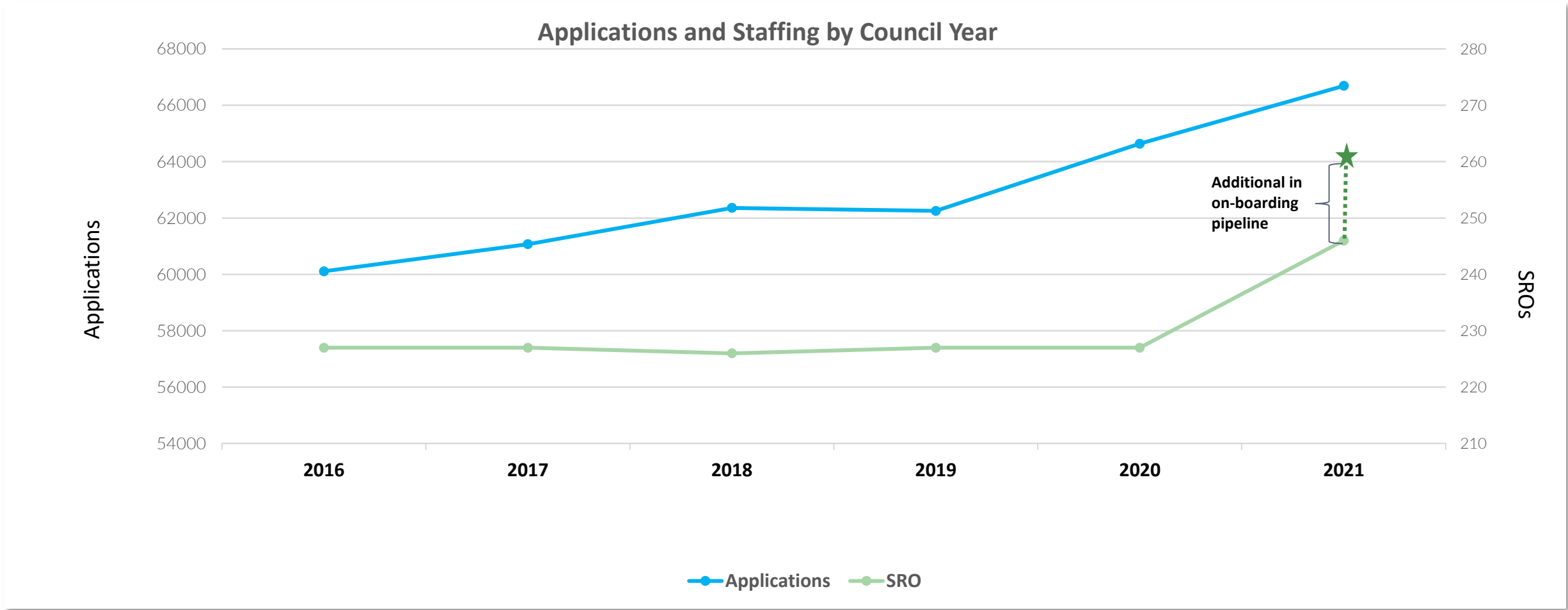
- SBIR Commercial Readiness
- Cancer Nanotechnology
- Chronic Fatigue Syndrome
- Electronic Nicotine Delivery (ENDS)
- Radx-Rad (PREVAIL)
- Sex and Gender Influences on Health
- Tobacco Regulatory Research
- Extramural building projects
- NARCH
- INCLUDE
- MIRA
- Transformative Research
- RM1 Centers
- Trailblazers
- Alzheimer's

*And many more...*

# CSR Application Counts Have Increased Substantially

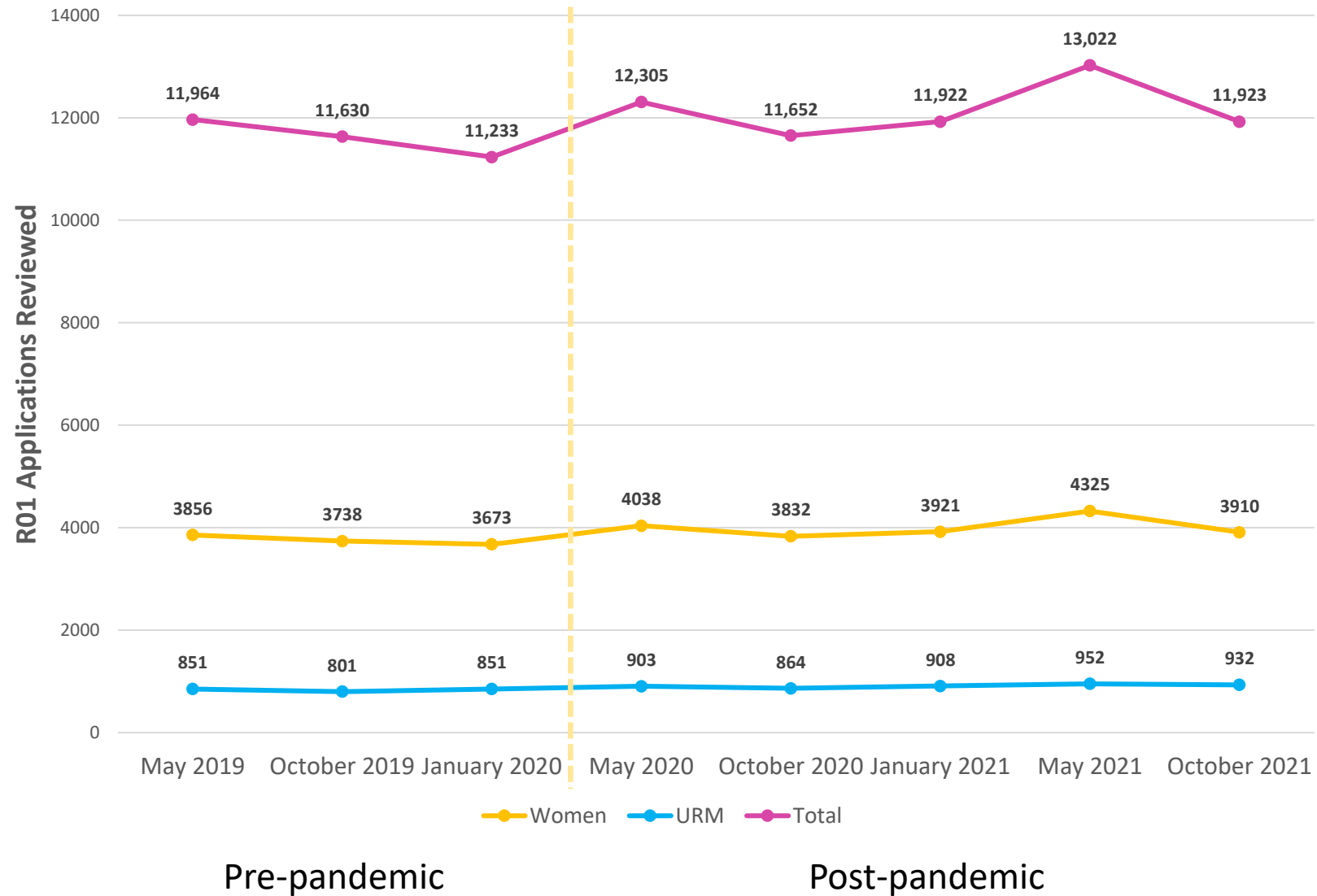


# CSR Application & SRO Counts Have Increased Substantially



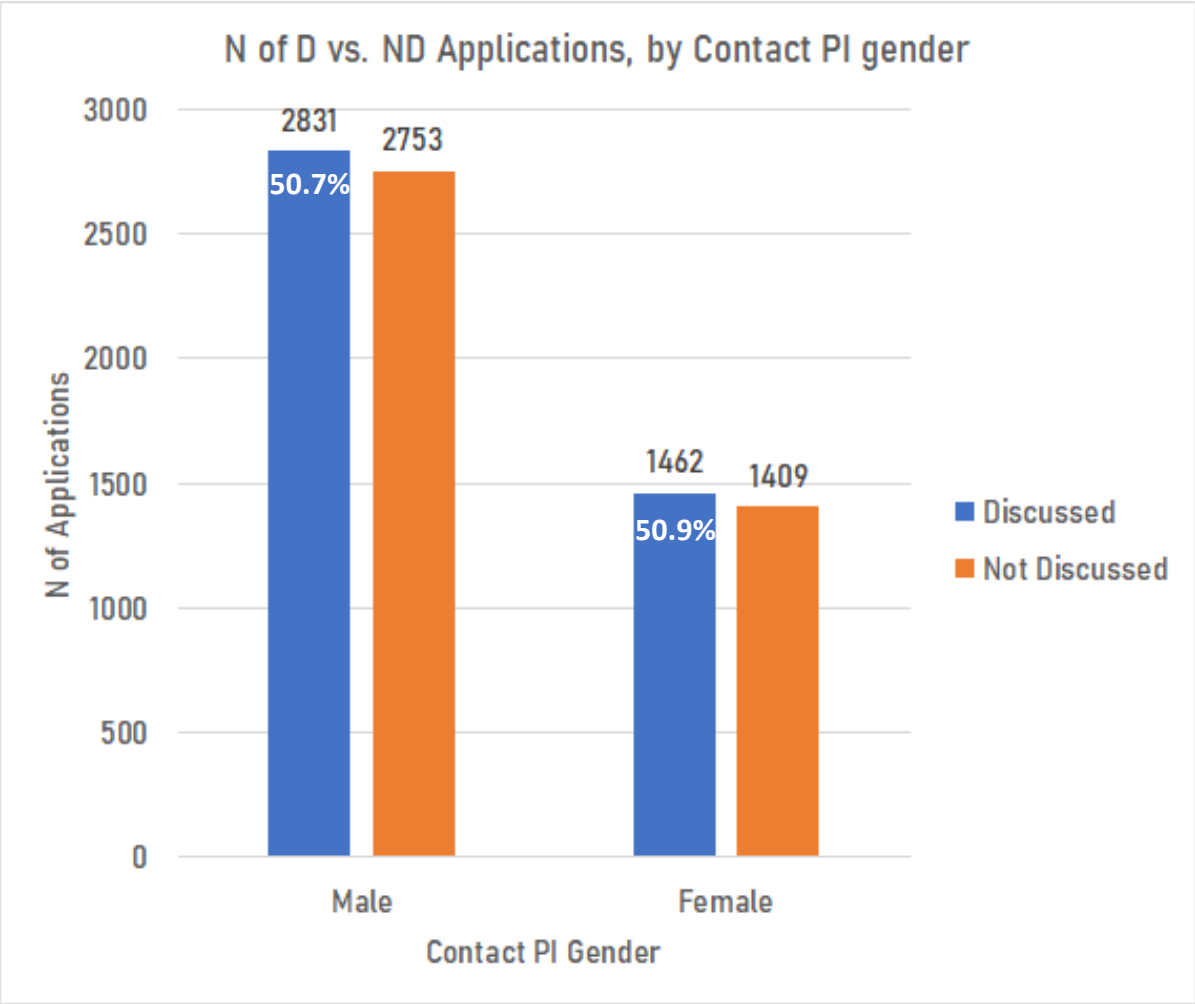
CSR is implementing multi-pronged recruitment and retention strategies with increasing success.

# R01 Submissions (May 2019-October 2021)

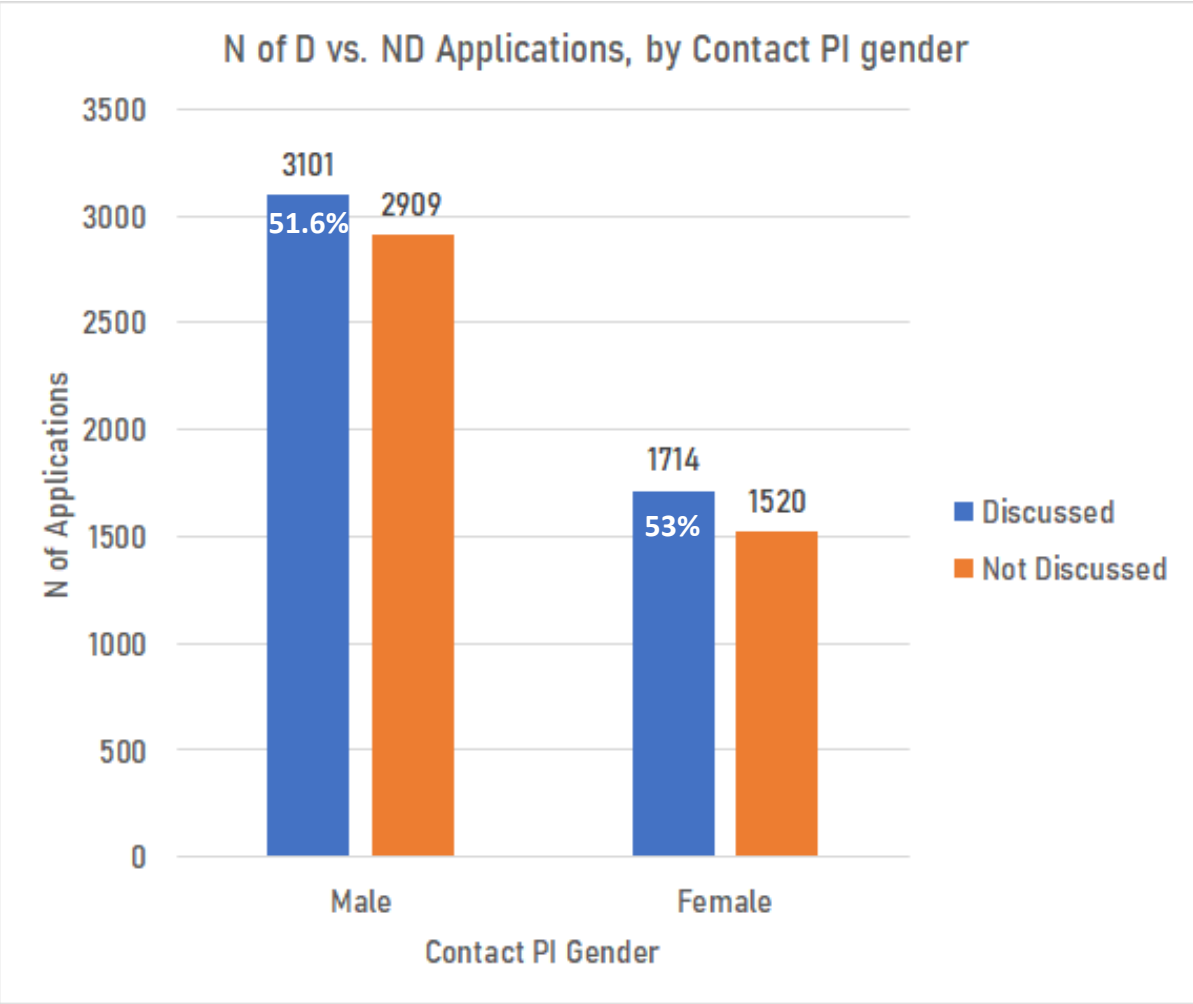


# Discussed versus Not-Discussed Rates – by gender

Feb/Mar 2020 meetings



Feb/Mar 2021 meetings





## CSR News & Update

# Scientific Leadership/Management Transitions

## IRG Chiefs



**Risk, Prevention and Health Behavior**  
**Jacinta Bronte-Tinkew**



**Infectious Diseases and Immunology A**  
**Kumud Singh**

## Acting IRG Chiefs



**Healthcare Delivery and Methodologies**  
**Thomas Beres**



**Applied Immunology and Disease Control**  
**Emily Foley**

## Referral Officers



**Jianxin Hu**



**Srikanth Ranganathan**



**Suzanne Ryan**

## Retiring



**Director**  
**Division of Receipt and Referral**  
**Cathleen Cooper**

## Executive Leadership



**Director,**  
**Division of Neuroscience**  
**Development and Aging (DNDA)**  
**Delia Olufokunbi Sam**



**Acting Director**  
**Division of Planning, Analysis and Information**  
**Management (DPAIM)**  
**Dipak Bhattacharyya**



# A New CSR Office of Training (within CSR Office of the Director)



New SRO  
Training

Reviewer  
Training



Continuing SRO  
Education

SRO Handbook  
Resource



# Annual Summer Chair Orientation Sessions

## Summer 2021 – incorporated bias training and discussion

Home > For Reviewers > MeetingOverview

### Orientation for New Study Section Chairs – 2020



#### CSR provided orientation and guidance

to incoming study section chairs. While the material is geared towards chairs, others in the community might find it useful in better understanding the review process and how meetings are conducted.

#### Videos

- [New Chair Orientation – Key Issues in Peer Review](#)  
– Dr. Noni Byrnes and Dr. Bruce Reed
- [New Chair Orientation – Facilitated Discussion of Issues](#)  
– Dr. Bruce Reed and Dr. Tasmeen Weik

#### Slides sets

- [Key Issues in Peer Review](#)  
– Dr. Noni Byrnes, Director, CSR
- [Preparing to Chair a Study Section Meeting](#)  
– Dr. Bruce Reed, Deputy Director, CSR

### Two-hour, interactive, facilitated session

- 15 min overview
- 15 min nuts-and-bolts of chairing
- 1.5 hours of interactive discussion, using a vignette-based framework

### Fairness of the Peer Review Process

#### What Can You Do As Chair?

- Recognize your influence – in setting and changing the study section culture
- Actively foster a positive study section culture - confidentiality, integrity, encouraging broader participation/inclusion across the committee, call out statements that bias the scientific assessment (institution, career-stage, field, race/gender)
- Promote a focus on significance (ask the question), and consistency in scoring – score/word match, aligned to score guidance.

# Multi-media, Interactive Bias Training for Reviewers, SROs

Launched Aug 2021 – prior to Oct/Nov meetings

## Learning Objectives

We hope this training will:

1. Make you aware of potential sources of bias in peer review.
2. Provide you some tools to intervene if and when, you think you see bias in review.
3. Make you aware of reporting avenues for concerns about bias.



What are your thoughts after reading that statement?

Select all correct responses.

- ☐ It's a good concern, add it to my critique.
- ☒ Contact the SRO to see if this is okay.
- ☒ Ask the reviewer what they meant during the meeting if the application is discussed.



NIH Center for Scientific Review



- Specifically targeted toward mitigating the most common (not all) biases in the peer review process. *Not implicit bias training*
- 30-min, delivered to reviewers ~4 weeks prior to the fall review meetings.
- Version 1, with feedback from surveys (reviewers and SROs) to inform future versions.

# Established Reporting Mechanism for Concerns re: Fairness/Bias in Peer Review

With ~1.5k meetings, >65k apps, >18k reviewers, ~200k critiques, mistakes will occur

**For issues related to respectful interactions, bias or anything else that could affect the fairness of the review process, contact your SRO or the CSR Associate Director of Diversity & Workforce Development at G.Fosu\_AssocDir@csr.nih.gov.**

## Existing CSR policy regarding a potentially flawed/biased review

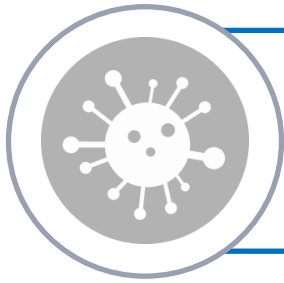
Assessment by CSR management – is it a flawed review?

- Yes - CSR re-reviews the application in the same council round.
- No – CSR refers PI to program officer for guidance on council appeal process



Gabriel Fosu, Ph.D.

- On every outgoing staff email
- On CSR's web page
- On every study section page



## Pandemic Impact

## Business as usual.....virtually

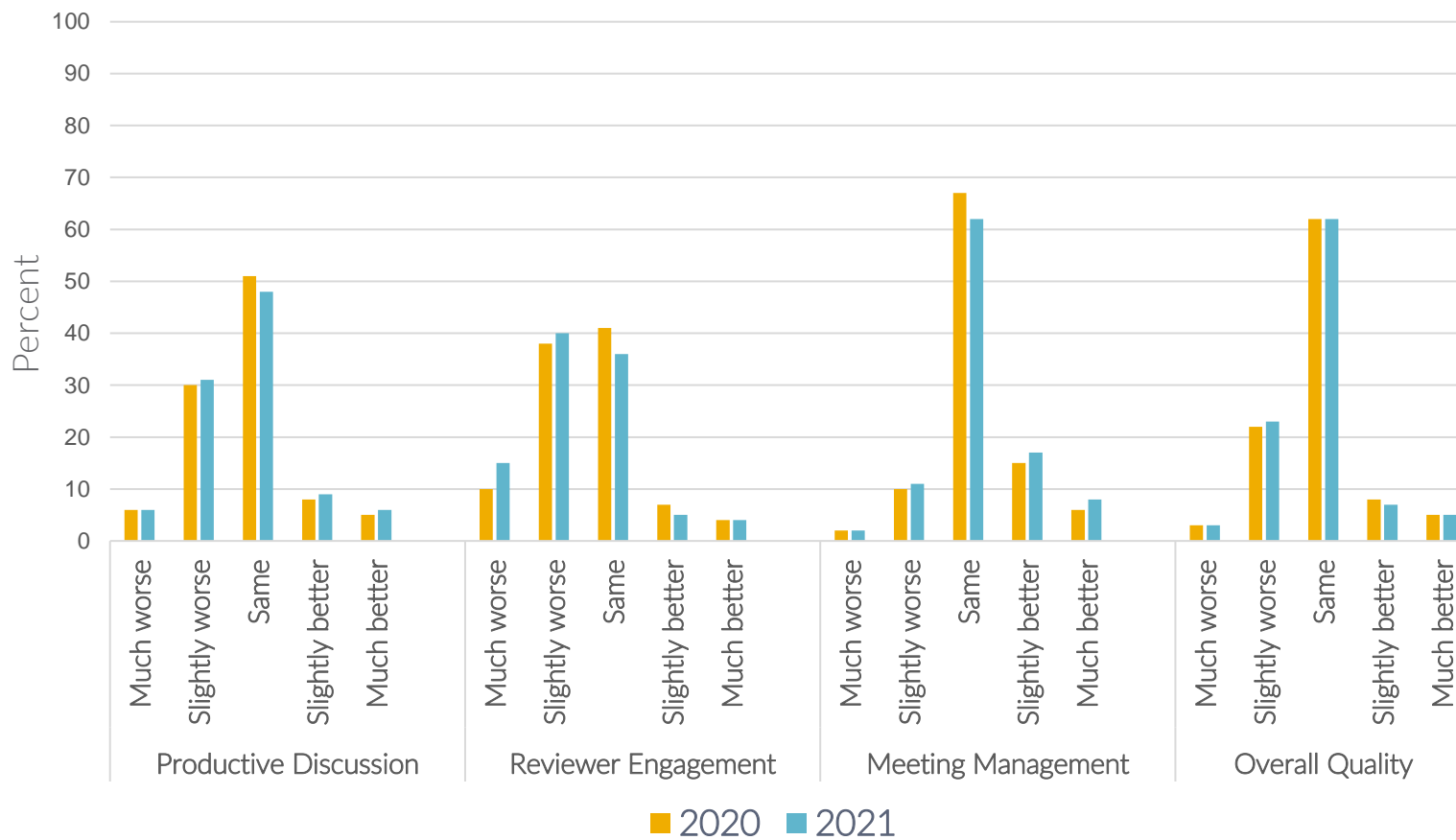
Since the beginning of the pandemic, CSR has:

- Held **2,036** meetings, reviewed **97,385** NIH applications, engaged **24,474** individual reviewers
- Conducted **objective analyses** of scoring patterns and recruitment compared to pre-pandemic
- Conducted **surveys** of reviewers (Survey 1: summer 2020; Survey 2: spring 2021) and staff [*Complete report: CSR Analysis of Zoom in Review at <https://public.csr.nih.gov/>*]

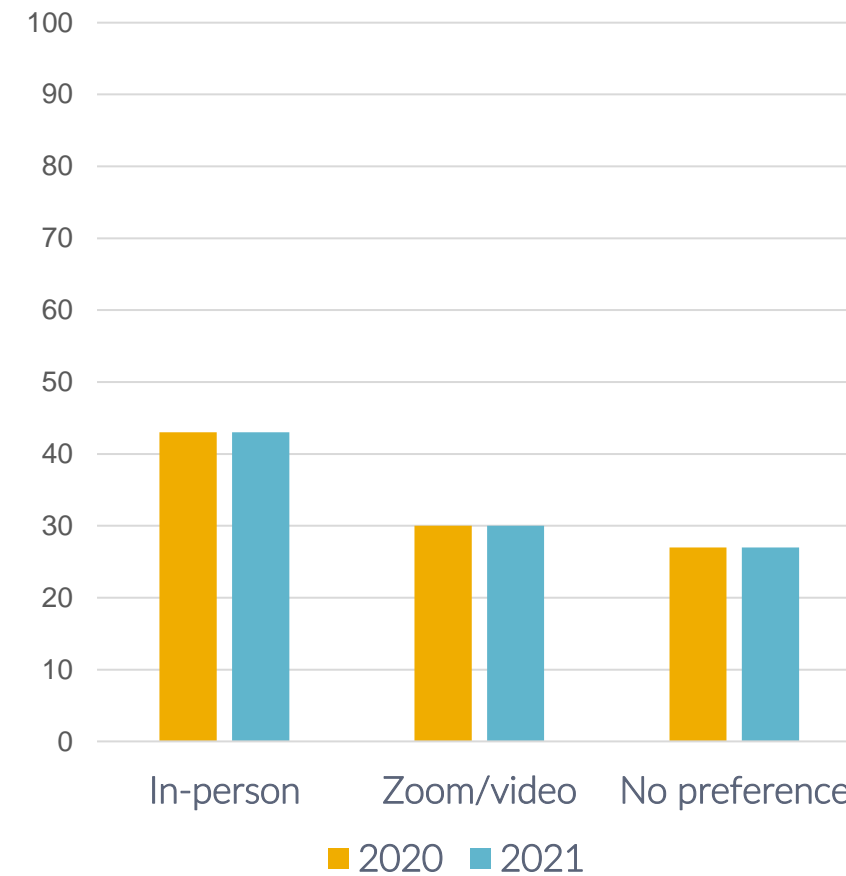
# Post-Zoom Meeting Reviewer Surveys: Jun/Jul 2020 vs Feb/Mar 2021

## No Significant Change

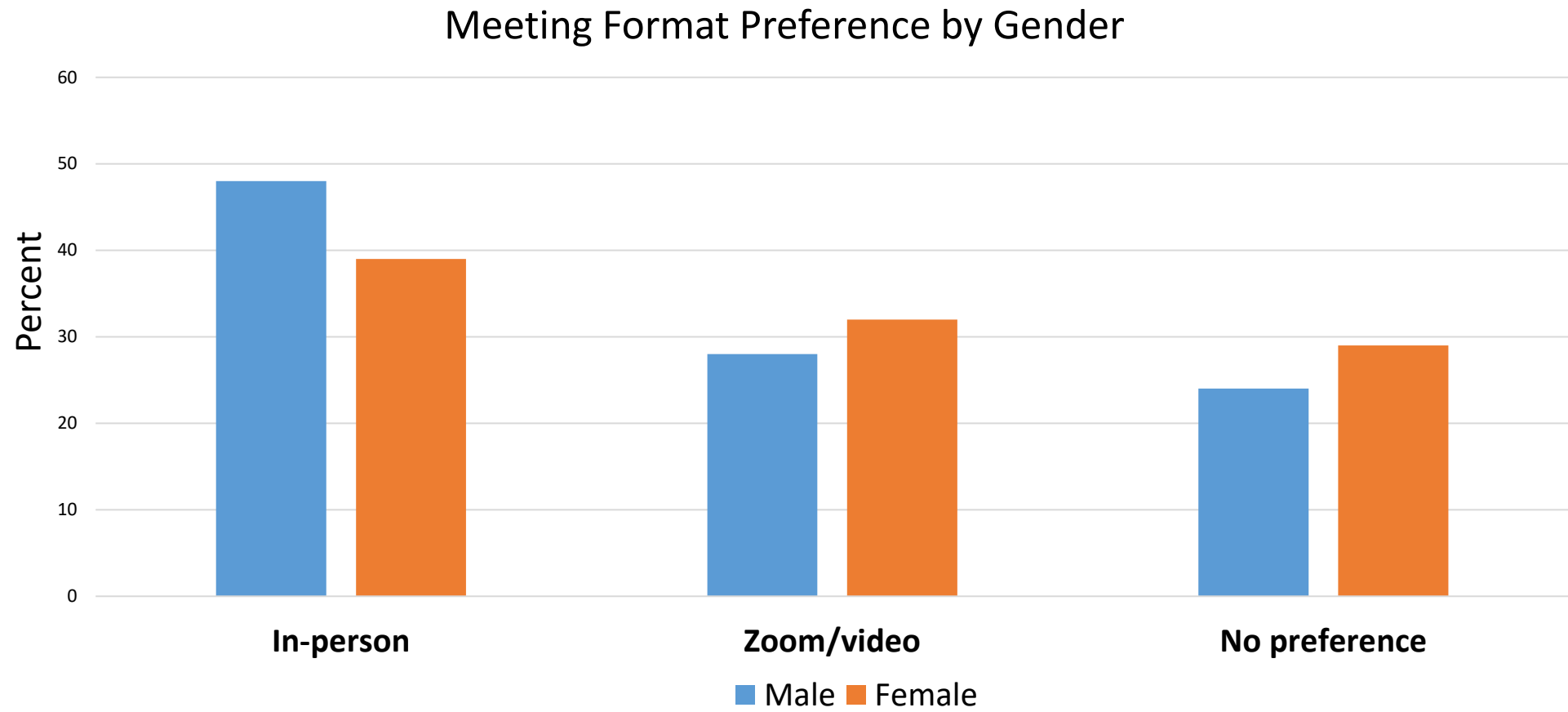
Impressions of Meeting  
(Zoom compared to in-person)



Format Preference  
(Zoom compared to in-person)

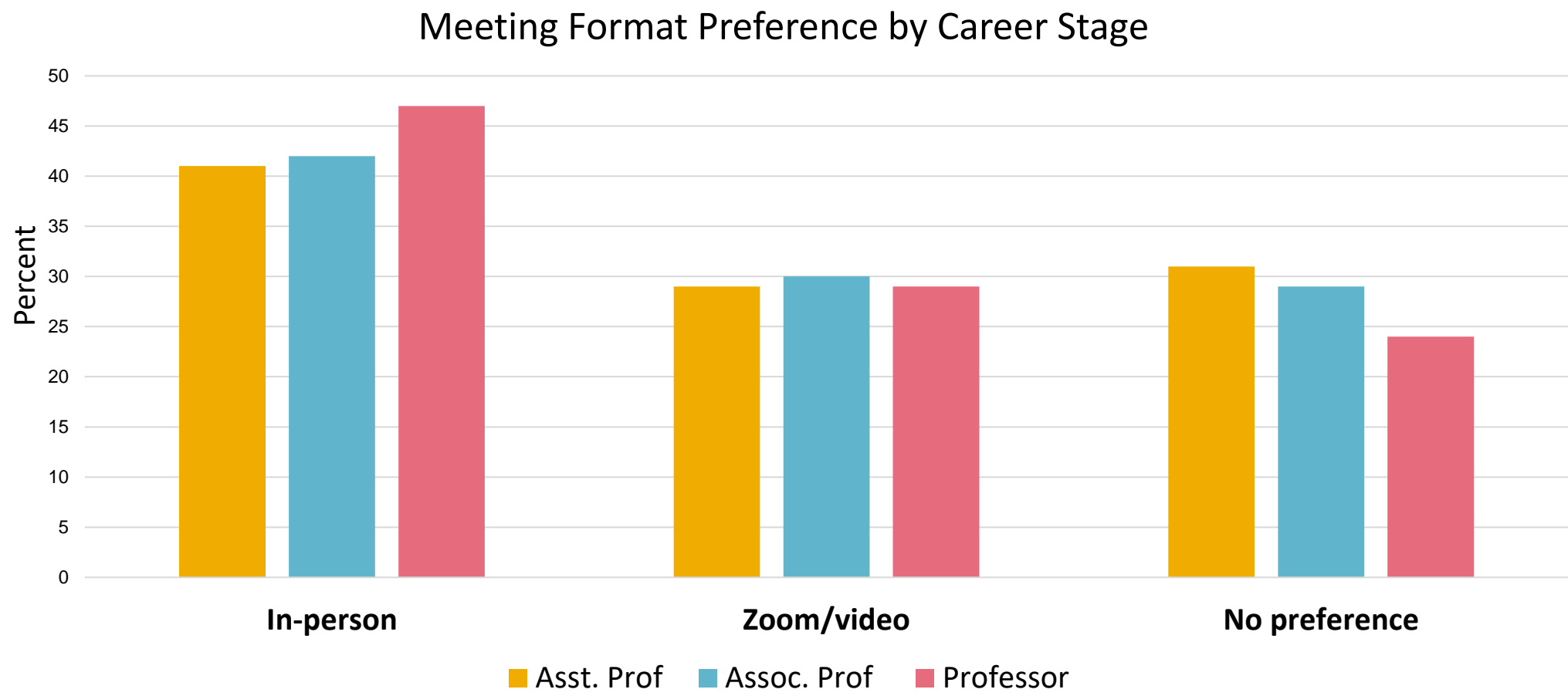


Both prefer in-person over zoom, but the margin is larger for males





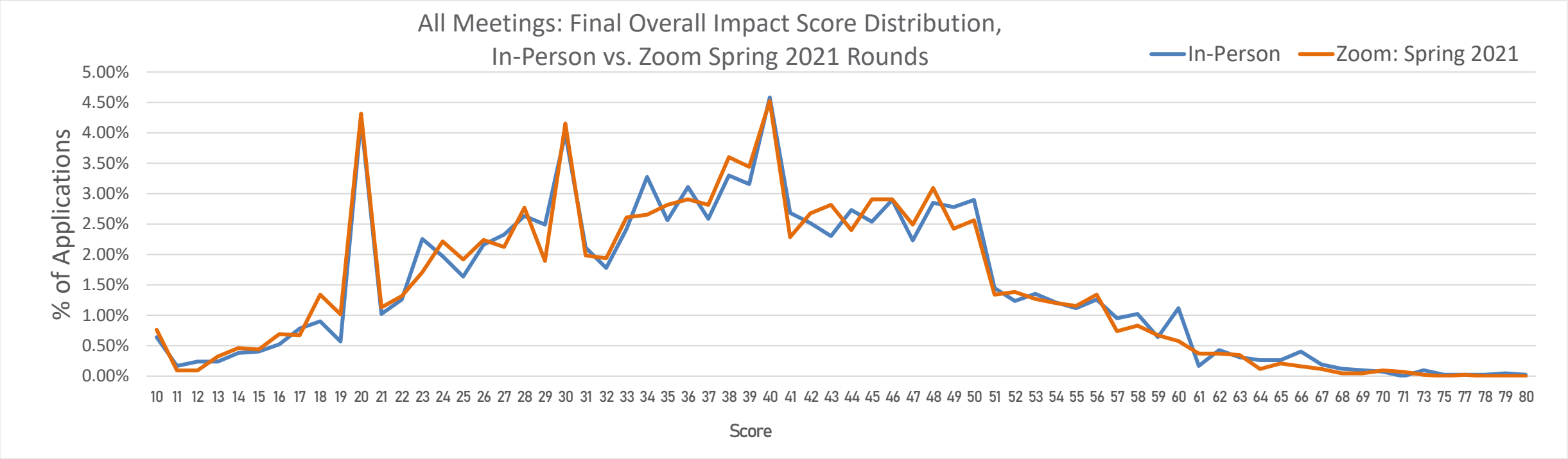
All prefer in-person over zoom, but margin is larger for senior faculty (full profs)



# Out-of-Range Scoring & Score Distributions

## No Significant Change

Meeting Type	All Meetings		Standing Study Sections		Fellowship		Small Business	
Council	In-Person	Zoom	In-Person	Zoom	In-Person	Zoom	In-Person	Zoom
N of scores	120,871	131,163	96,727	105,191	12,454	12,850	11,690	13,122
% of out-of-range scores	3.6%	3.3%	3.4%	3.2%	3.8%	2.9%	4.8%	4.3%



## How will review occur post-pandemic?

- Spring (Feb/Mar) 2022 meetings to be virtual  
Summer (Jun/Jul 2022) – tbd
- CSR will not hold as many in-person review meetings as were held pre-COVID.
- Reviewer engagement, recruitment, reviewer input, environmental and fiscal factors are all considerations.
- Use of both virtual formats and in-person meetings provides a good balance. CSR will follow a hybrid approach – a mix of virtual meetings and in-person review meetings.



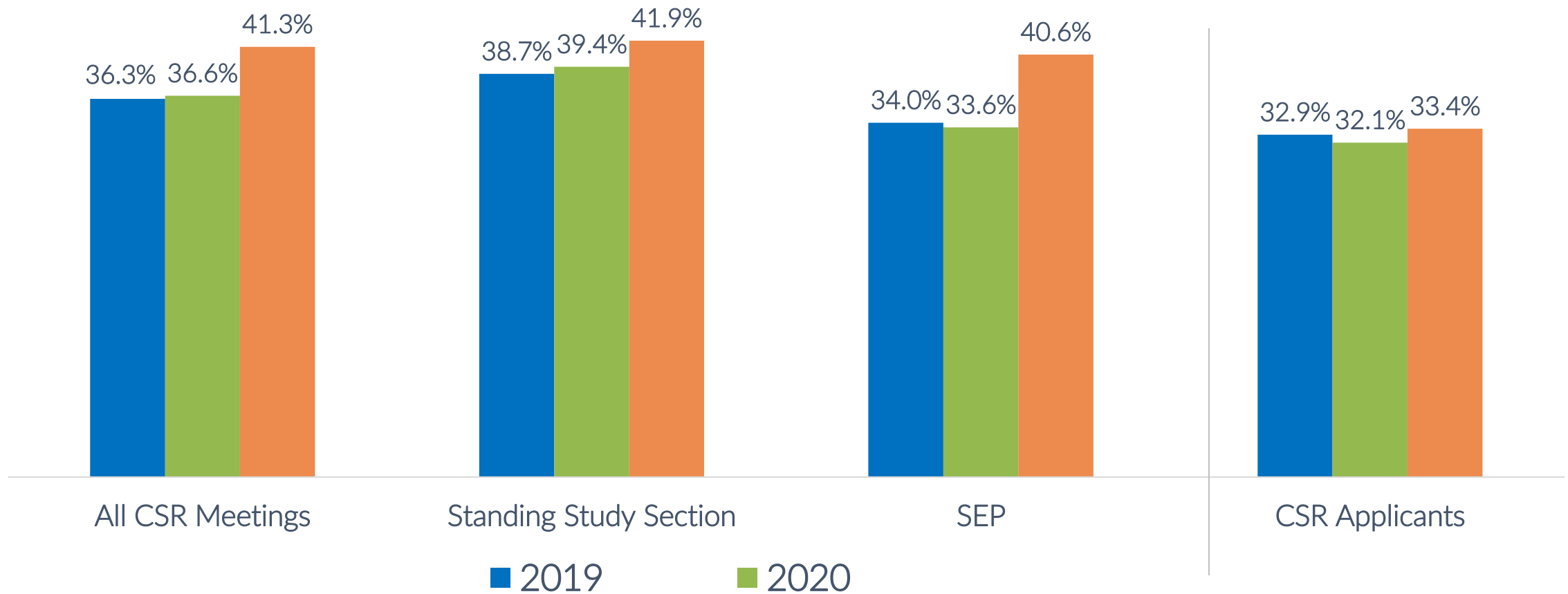


## Diversifying Review Committees

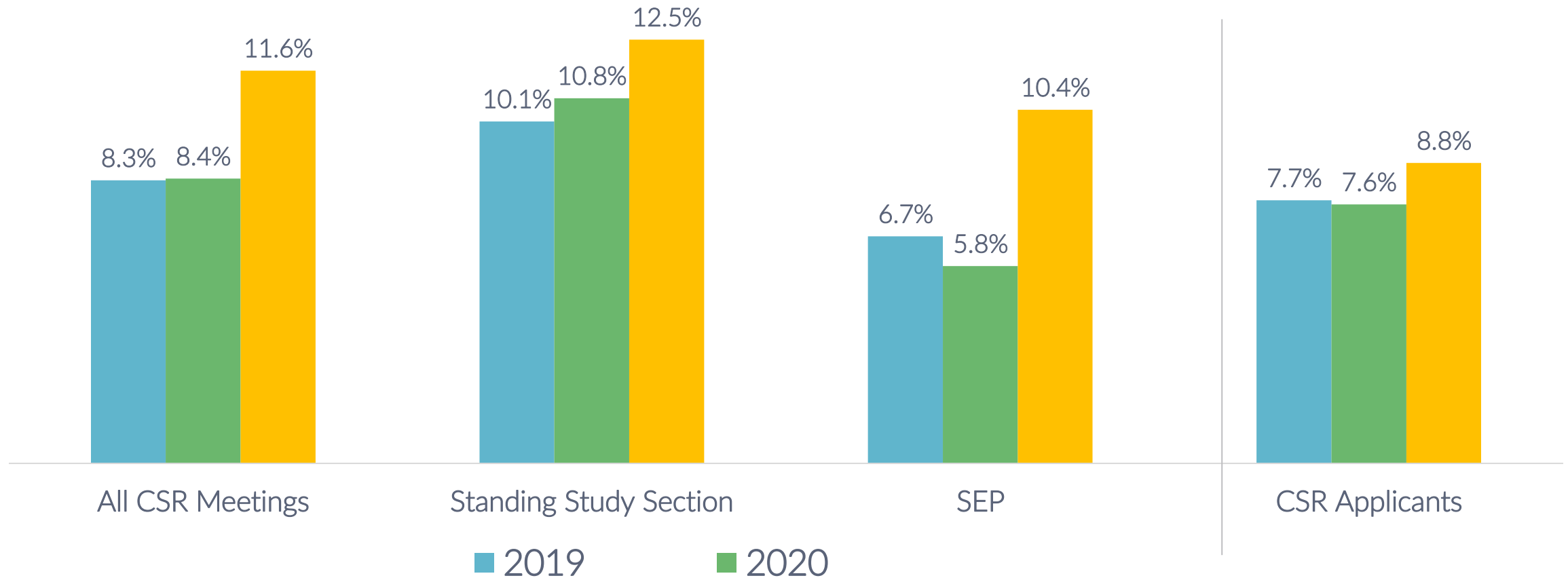
## From March 2021 CSRAC: Strategies for Diversifying Review Panels

- Emphasizing **critical need** for the NIH to hear diverse perspectives to fulfill peer review's mission of identifying the best, most disruptive, novel science.
- The most effective, highest-quality review committees are **broadly diverse in multiple dimensions**. These include: 1) scientific background and perspective; 2) demographic/geographic; 3) career stage and; 4) peer review experience
- Standing study section membership process is thorough, multiple levels of oversight and approval. We are focusing on enhancing diversity on **Special Emphasis Panels**
- **Raising collective awareness**, setting expectations, sharing panel-level data with management/staff
- Providing **tools** for SROs to find “lesser-known” well-qualified reviewers, building up database with multiple sources of scientific experts [Reviewer Finder]
- **SRO training**, esp. SRO-to-SRO sharing of best practices in broader recruitment strategies

# % of Women in CSR Meetings (All, Standing Study Section, SEP, Applicants) Summer 2019, 2020, 2021



# % of URM in CSR Meetings (All, Standing Study Section, SEP, Applicants) Summer 2019, 2020, 2021



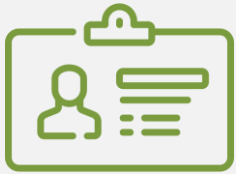
**Plans for continued, sustained attention to demographic and gender diversity on all panels**



## Stakeholder Engagement CSR Advisory Council



# March 2019: Enhancing the Role of CSR Advisory Council



## Membership

- Broaden membership to include all career stages (Early/Mid Career)
- Total number of slots increased by 2 (from 11 to 13)
- Publish council member information on website organization (photos?)



## Meeting Content

1. Advice on study section restructuring, initiatives, processes, evaluations (no change)
2. Higher level of engagement between council meetings - council working groups with Council members and external scientific community members

# The Important Role of CSR Advisory Council Working Groups

**2019**

- 1. Early Career Reviewer Program**
- 2. Reviewer Integrity Training Module Development**

**2020-2021**

- 3. Simplifying Review Criteria**
- 4. Simplifying Review Criteria – Clinical Trials**

**2021**

- 5. Bias Awareness Training Module Development**

**2021-2022**

- 6. NRSA Fellowship Review**

[Home](#) > [About CSR](#) > [CSR Organization](#)

CSR Advisory Council

[CSR Advisory Council](#)

[Meeting Materials & Reports](#)

[Working Groups](#)



The CSR Advisory Council (CSRAC) was established in 2011 to provide advice to the Director of the Center for Scientific Review on matters related to planning, execution, conduct, support, review, evaluation, and receipt and referral of grant applications at CSR ([CSRAC charter](#)).

# CSR Advisory Council Working Groups

2019

## Early Career Reviewer Program

*Expanded ECR program launch: Dec 2019*

[Home](#) > [For Reviewers](#) > [Become a Reviewer](#)

### Early Career Reviewer (ECR) Program

The program aims to help early career scientists become more competitive as grant applicants through first-hand experience with peer review and to enrich and diversify CSR's pool of trained reviewers.

[Benefits of ECR](#) | [Qualifications for ECR](#) | [Apply to ECR](#) | [ECR Training](#) | [ECR Webinars](#)

### ECR Qualifications

#### Employment

You have at least 1 year of experience as a fulltime faculty member or researcher in a similar role. Post-doctoral fellows are not eligible.

You must be an Assistant Professor or in an equivalent role. Because the program is focused on early career scientists, Associate Professors are not eligible.

#### Research

You show evidence of an active, independent research program. Examples include publications, presentations, institutional research support, patents, acting as supervisor of student projects.

#### Grant & Review History

You have not served on an NIH study section in any capacity aside from as a mail reviewer. (Mail reviews do not include participation in the meeting.)

You have not held an R01 or R01-equivalent (R35, R37, RF1, R23, R29, DP1, DP2, DP5, U01, RL1) grant in the PD/PI role

You must have submitted a grant proposal, in the PI/DP role, to the NIH and received the associated summary statement.

## Early Career Reviewer Working Group

### CSR Advisory Council



Mark Peifer, Ph.D.,  
University of North  
Carolina Chapel Hill  
**Co-Chair**

### CSR Staff



Elizabeth Villa, Ph.D.,  
University of  
California San Diego  
**Co-Chair**



Kristin Kramer, Ph.D.,  
CSR



Antonello Pileggi,  
Ph.D.,  
CSR

### Former Early Career Reviewers (Ad hoc)



Vinay Aakalu, M.D.,  
MPH  
University of Illinois,  
Chicago



Lisa Jones, Ph.D.,  
University of  
Maryland



Stephanie Cook,  
Ph.D., MPH,  
New York University




Manuel Llano, M.D.,  
Ph.D.,  
University of Texas EL  
Paso

# CSR Advisory Council Working Groups

2019

## Reviewer Integrity Training Module Development

*Integrity training module launch: Jan 2020*



### CSR Reviewer Training

64% complete


- Home
- Introduction
- Reviewer Responsibilities
- Applicant Responsibilities
- Breach of Integrity
- Exercises
- Consequences
- Conclusion
- Feedback

#### EXERCISE 3

For the following exercise, please watch the video and then answer the question that follows:

Dr. Martinez and Dr. Jones are having a conversation while the XYZ study section is taking its morning coffee break.

Video (1:13 min.)



**Dr. Martinez:** ...So I ran into Michelle at the Biopharma Society Meeting last month.

**Dr. Jones:** Really? How's she doing?

**Dr. Martinez:** Oh, she's doing great, actually. She gave a fascinating talk at the meeting and she got awarded her first R01.

[Show/Hide Text Version](#)

Next

## Review Integrity

### CSR Advisory Council Members



Scott Miller, Ph.D.,  
Yale University



Dr. Jinming Gao,  
Ph.D.,  
UT Southwestern  
Medical Center



Dr. Deanna Kroetz,  
Ph.D.,  
University of  
California San  
Francisco



Dr. Tonya Palermo,  
Ph.D.,  
University of  
Washington

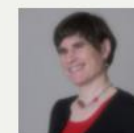


Dr. Denise Wilfley, Ph.D.,  
Washington University St. Louis

### NIH Staff



Dr. Kathryn Koeller,  
Ph.D.,  
CSR Research &  
Review Integrity  
Officer



Dr. Miriam Mintzer,  
Ph.D.,  
CSR



Dr. Raul Rojas, Ph.D.,  
CSR



# CSR Advisory Council Working Groups

2020-2021

## CSR Advisory Council Workgroup: Simplifying Review Criteria for Clinical Trials

**Bruce Reed, PhD**  
Deputy Director  
Center for Scientific Review

**Tonya Palermo, PhD**  
Professor of Anesthesiology,  
Pediatrics, and Psychiatry  
University of Washington

U.S. Department of Health & Human Services



### CSR Advisory Council Workgroup: Simplifying Review Criteria

Bruce Reed, PhD  
Deputy Director  
Center for Scientific Review

Tonya Palermo, PhD  
Professor of Anesthesiology,  
Pediatrics, and Psychiatry  
University of Washington

March 30, 2020

## Simplifying Review Criteria

### CSR Advisory Council Members



Jinming Gao, Ph.D.,  
UT Southwestern  
Medical Center



Alfred George, M.D.,  
Northwestern  
University



Yasmin Hurd, Ph.D.,  
Mount Sinai School of  
Medicine



Deanna Kroetz, Ph.D.,  
University of  
California, San  
Francisco



José López, M.D.,  
Bloodworks  
Northwest Research  
Institute



Tonya Palermo, Ph.D.,  
University of Washington  
**Co-chair**

### Working Group Ad Hocs



Kevin Corbett, Ph.D.,  
University of  
California, San Diego



Michelle Janelins,  
Ph.D.,  
University of  
Rochester Medical  
Center



Brooks King-Casas, Ph.D.,  
Virginia Tech University

### NIH Staff



Sally Amero, Ph.D.,  
Office of Extramural  
Research



Bruce Reed, Ph.D.,  
**Co-Chair**

## Simplifying Review Criteria (Clinical Trials)

### CSR Advisory Council Members



Alfred George, M.D.,  
Northwestern  
University



Yasmin Hurd, Ph.D.,  
Mount Sinai School of  
Medicine



Tonya Palermo, Ph.D.,  
University of  
Washington  
**Co-chair**

### Working Group Ad Hocs



Brian Boyd, Ph.D.,  
University of Kansas



Matthew Carpenter,  
Ph.D.,  
Medical University of  
South Carolina



Michelle Janelins,  
Ph.D.,  
University of  
Rochester Medical  
Center



Brooks King-Casas,  
Ph.D.,  
Virginia Tech  
University



Pamela Munster, Ph.D.,  
University of California San Francisco

### NIH Staff



Sally Amero, Ph.D.,  
Office of Extramural  
Research



Bruce Reed, Ph.D.,  
**Co-Chair**

*Recommendations under consideration by NIH extramural advisory committee*

# CSR Advisory Council Working Groups

2021

Bias Awareness Training Module Development

*Launched Aug 2021*

## CSR AC Members



Scott Miller, Ph.D.  
Yale University



Julie Price, Ph.D.  
Harvard Medical School



Narasimhan Rajaram, Ph.D.  
University of Arkansas at  
Fayetteville

## Working Group Ad Hoc



Doug Andres, Ph.D.  
University of Kentucky



Markus Brauer, Ph.D.  
University of Wisconsin-  
Madison



Elizabeth Cosgriff-Hernandez,  
Ph.D.  
University of Texas, Austin



Carlos Crespo, Ph.D.  
Portland State  
University



Karine Gibbs, Ph.D.  
University of California,  
Berkeley



Xuemei Huang, Ph.D.  
Pennsylvania State  
University



Rakale Quarells, Ph.D.  
Morehouse College



Germán Rosas-Acosta, Ph.D.  
University of Texas at El Paso



Steve Varga, Ph.D.  
University of Iowa

## NIH Staff



Hope Cummings, Ph.D.  
CSR



Kristin Kramer, Ph.D.  
CSR



Charlene Le Fauve, Ph.D.  
COSWD



Michael Sesma, Ph.D.  
NIGMS



Tasmeen Weik, Ph.D.  
CSR

# CSR Advisory Council Working Groups

2021-2022

NRSA Fellowship Review

*Kickoff meeting: Sept 2021, recommendations expected: Mar 2022*

## CSR AC Members



Scott Miller, Ph.D.  
Yale University



Narasimhan Rajaram, Ph.D.  
University of Arkansas at  
Fayetteville



Elizabeth Villa, Ph.D.  
University of California, San  
Diego

## External



Michael Burton, Ph.D.  
University of Texas at Dallas



Barbara Kazmierczak, MD, Ph.D.  
Yale University



Nathan Vanderford, Ph.D.  
University of Kentucky



Katherine Friedman, Ph.D.  
Vanderbilt University



Robin Queen, Ph.D.  
Virginia Tech



Judith Yanowitz, Ph.D.  
Magee-Womens Research  
Institute & Foundation

## NIH Staff



Ericka Boone, Ph.D.  
NIH OD



Alison Gammie, Ph.D.  
NIGMS



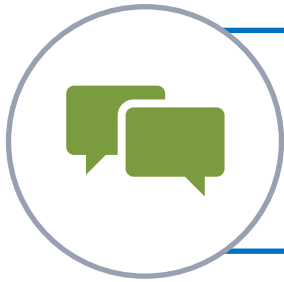
Lystranne Maynard-Smith, Ph.D.  
CSR



Bruce Reed, Ph.D.  
CSR



Cibu Thomas, Ph.D.  
CSR



Thank you – and Discussion