



2022 CSR Incoming Chair Orientation

Brief Overview - Key Issues In Peer Review

Noni Byrnes, Ph.D.

Director, Center for Scientific Review

Agenda

2:00 – 2:20 pm

Introductions, Overview of CSR – Integrity and Fairness in Peer Review

2:20 – 2:35 pm

Preparing to Chair – Dr. Bruce Reed

2:35 – 4:00 pm

Discussion – Facilitators Drs. Gene Carstea and Mark Caprara



Bruce Reed, Ph.D.

Deputy Director, Center for Scientific Review (CSR)



Gene Carstea, Ph.D.

Chief, Respiratory, Cardiac, and Circulatory Sciences Review Branch (RCCS)

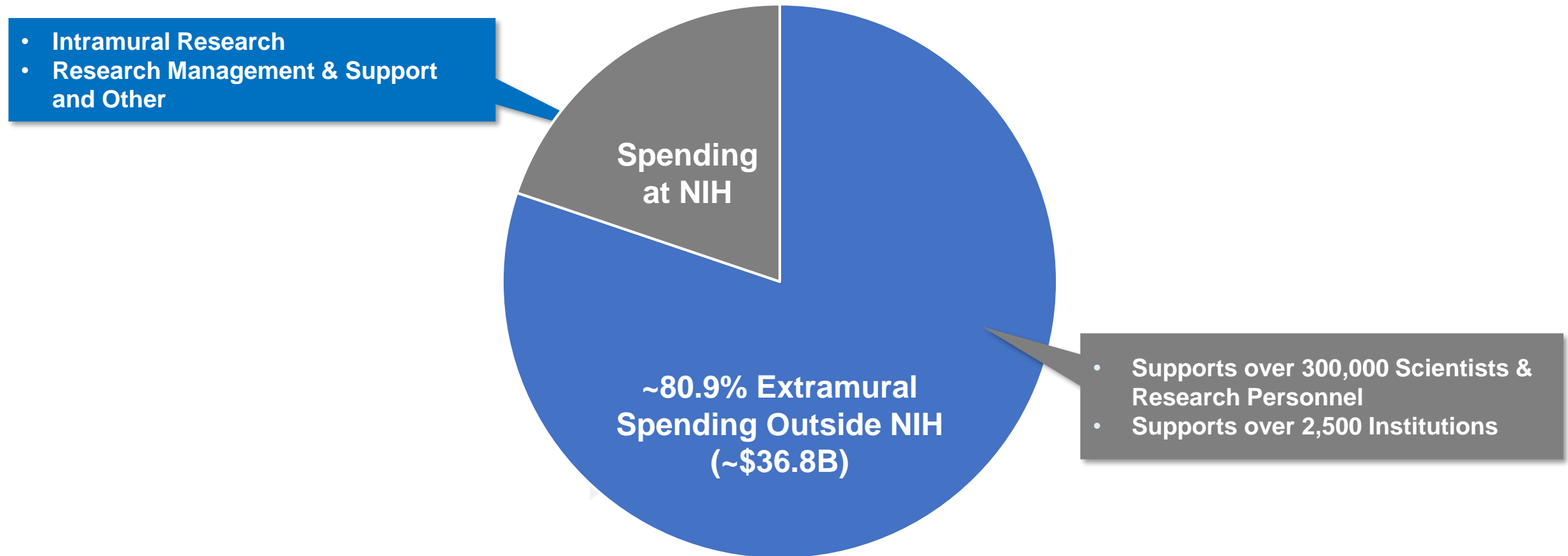


Mark Caprara, Ph.D.

Chief, Molecular and Cellular Sciences and Technologies Review Branch (MCST)

The Critical Importance of Peer Review – The Main Driver of NIH Extramural Funding

FY 2022 NIH Budget: \$45.5 Billion



CSR reviews >76% of all applications for NIH extramural funding (~ 61,000 per year)

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.

Achieved through the invaluable contributions of over 19,000 volunteer reviewers every year, in over 1300 review meetings!

Integrity is fundamental to the mission



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Violating the integrity of the peer review process undermines and diminishes the work of the study section in identifying the strongest, most innovative science in the field. Some examples:

- Reviewers disclosing the materials, scores, identity of assigned reviewers, content of discussion
- PI attempts to influence the outcome of the peer review process – contacting reviewers, inappropriately-timed invites to seminars/visits by reviewers or offers to collaborate with reviewers
- Reviewers' ex parte discussions of applications (outside of the presence of SRO and committee)

CSR's Online Reviewer Integrity Training Module, version 2

Coming prior to Fall 2022 Meetings

The screenshot shows the 'CSR Reviewer Training' interface. At the top left is the NIH Center for Scientific Review logo. The title 'CSR Reviewer Training' is centered at the top. Below the title, a progress bar indicates '64% complete'. On the left is a navigation menu with links: Home, Introduction, Reviewer Responsibilities, Applicant Responsibilities, Breach of Integrity, Exercises, Consequences, Conclusion, and Feedback. The main content area is titled 'EXERCISE 3' and contains the following text: '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.)'. Below this text is a video player showing a man (Dr. Martinez) speaking. To the right of the video, there is a transcript of the conversation: '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.' At the bottom of the main content area, there is a link 'Show/Hide Text Version' and a 'Next' button.

CSR and NIH have taken the following actions:

- deferral or withdrawal of application
- removal from serving on peer review committees
- Notification of institution of the PI or reviewer, which has led to personnel actions, institutional withdrawal of funding
- pursuing government-wide suspension and disbarment, or referral to other agencies for criminal violations

Chairs can play a major role in promoting a culture of integrity → take the training early, reinforce the SRO's message by encouraging all reviewers to take the training

Fairness is fundamental to the mission



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Scientific Review

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Unfairness or bias in the peer review process – i.e. the influence of anything outside of the review criteria -- has a direct impact on the study section's influence and its ability to identify the strongest, most meritorious science. Some examples:

- Reputational bias, both positive and negative – networked/halo effect/prestige (linked to race, ethnicity, gender, career stage)
- Reviewer bias during the meeting – burden of proving expertise for women, minorities, junior reviewers, disrespectful interactions

Bias Awareness Training for Reviewers

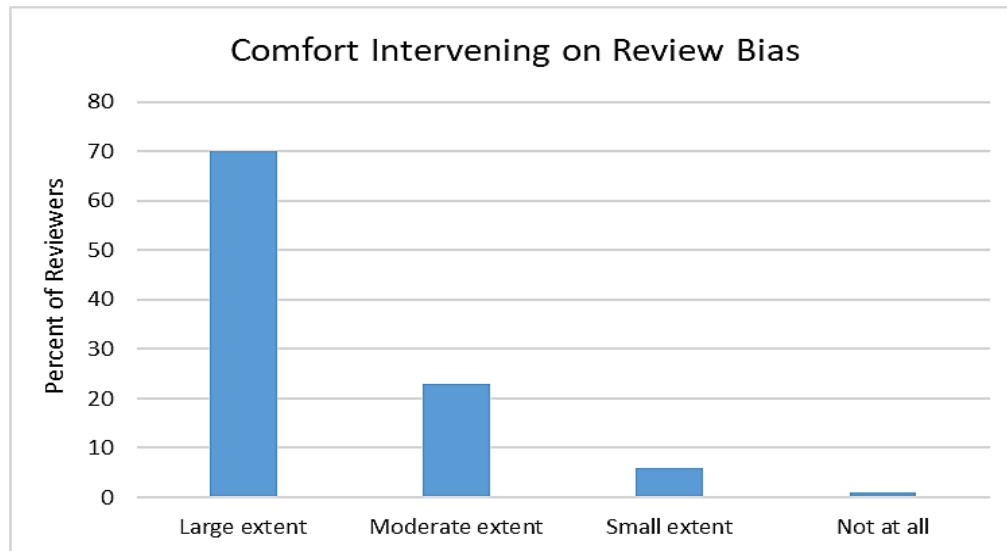


CSR Bias Awareness Training for Reviewers

CSR developed this training with input from the [CSR Advisory Council Working Group on Bias Awareness Training](#), which had diverse representation, included those with expertise in bias training, and members from

Bias Awareness Training:

Eliminating Bias in Peer Review with no Survey



Chairs are integral to ensuring fairness in the review process → take the training if you haven't done so yet (required for chairs), don't hesitate to intervene at the meeting

Launched in Fall 2021

- Over 15,000 reviewers received invitations – about 10,000 have taken the training. Survey feedback: very well received (full survey [report](#)).
- A common theme within the qualitative survey comments: **the need for Chairs and SROs to intervene more.....**

“These two jobs have the most weight in the room”

Preview of upcoming changes to NIH peer review

- All standing, recurring study section meetings to be held in person once a year, beginning with 1/3 in Oct 2022, remainder in Feb 2023, June 2023 (tentative, depending on community infection levels)
- Piloting hybrid meetings, beginning in February 2023 (tentative) – providing training and tools to ensure panelists have equal presence in the meeting, whether joining in person or remotely

Learn more

[CSR Advisory Council March 2022 Update](#)

Review Surveys Regarding Format, [Fall 2020](#), [Summer 2021](#))

- Restructured NIH RPG review criteria – based on recommendations by the CSR Advisory Council, currently being developed at the NIH -- coming in 2023-2024

Learn more

CSR Advisory Council Working Group on Simplifying Review Criteria – [Clinical Trials](#) and [Non-Clinical Trials](#))

Learn more about CSR's actions and priorities

[CSR's multi-pronged actions to promote fairness and mitigate bias in NIH peer review](#)

[CSR's 2022-2027 Strategic Plan](#)

Q/A, Discussion, Comments
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