



Center for  
Scientific Review

## Efforts to promote fairness in peer review

Bruce Reed, Ph.D.

Deputy Director

Center for Scientific Review

Dialogue with Institutional Leaders

May 20, 2024



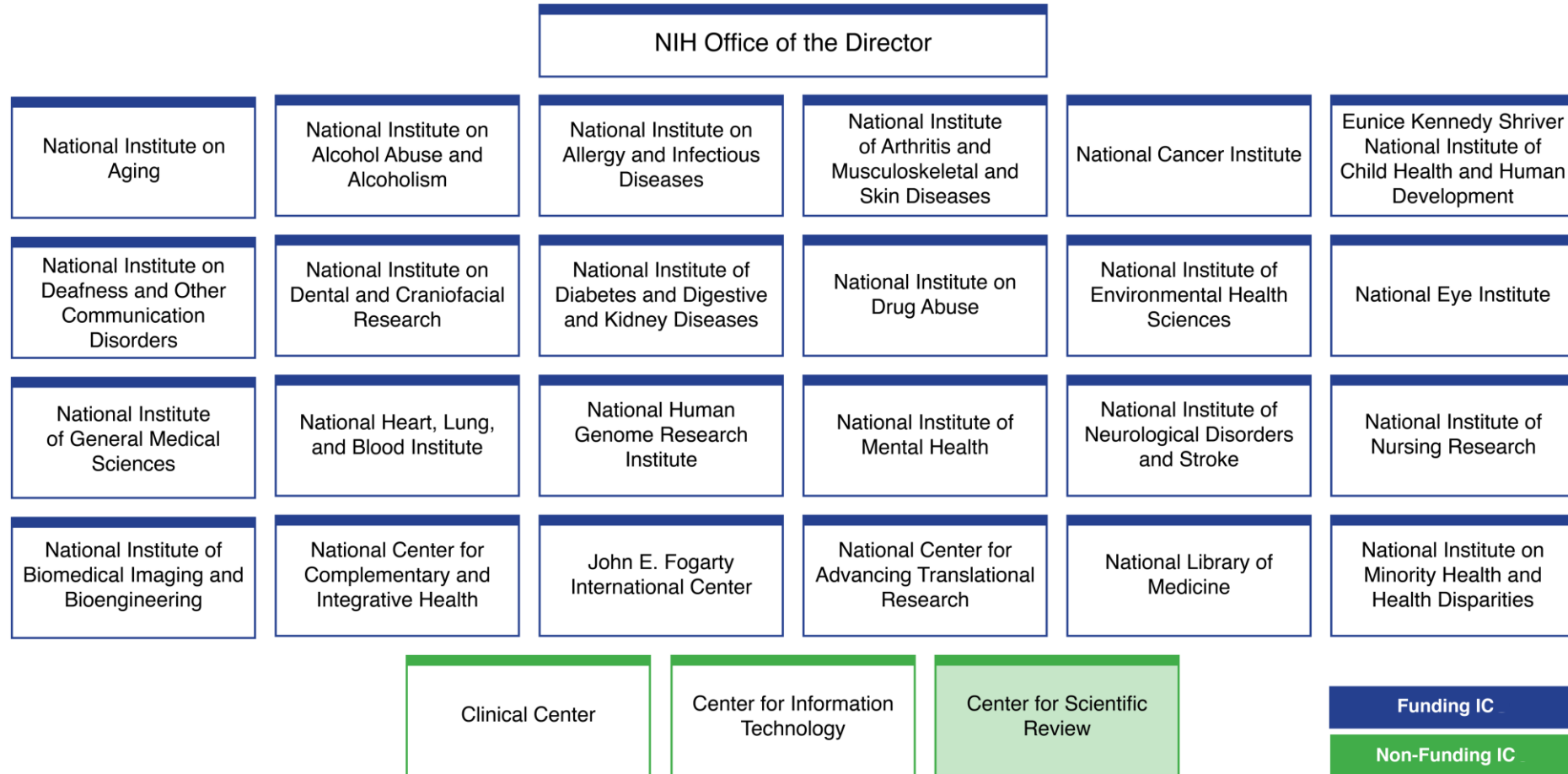
# Overview: Funding Opportunities & NIH Peer Review

# NIH awards many grants in addition to major research project, program and center grants

- **R21**: to encourage exploratory/developmental research by providing support for the early stages of project development
- **R03**: small research projects that can be carried out in a short period of time with limited resources
- **R15**: Supports small-scale research projects at educational organizations that provide baccalaureate degrees but that have not been major recipients of NIH support (undergrad and graduate versions)
- **Small business**: to support early-stage small business research and development
- **Individual and institutional training grants** (e.g. F31, T32)

<https://grants.nih.gov/funding/searchguide/index.html#/>

# National Institutes of Health – 27 Institutes/Centers (ICs)



# What does NIH want to fund?

- Institute by institute decision
- Announced through Notices of Funding Opportunity (NOFO) and Notices of Special Interest (NOSI) published in the NIH Guide
- Look for opportunities that play to your strengths.
- Always talk to program officers in advance

**Find Grant Funding**  
NIH Guide for Grants and Contracts

The NIH Guide for Grants and Contracts is NIH's official publication of notices of grant policies, guidelines, and funding opportunities.

We publish daily and issue a [table of contents](#) weekly. [Subscribe to receive updates today!](#)

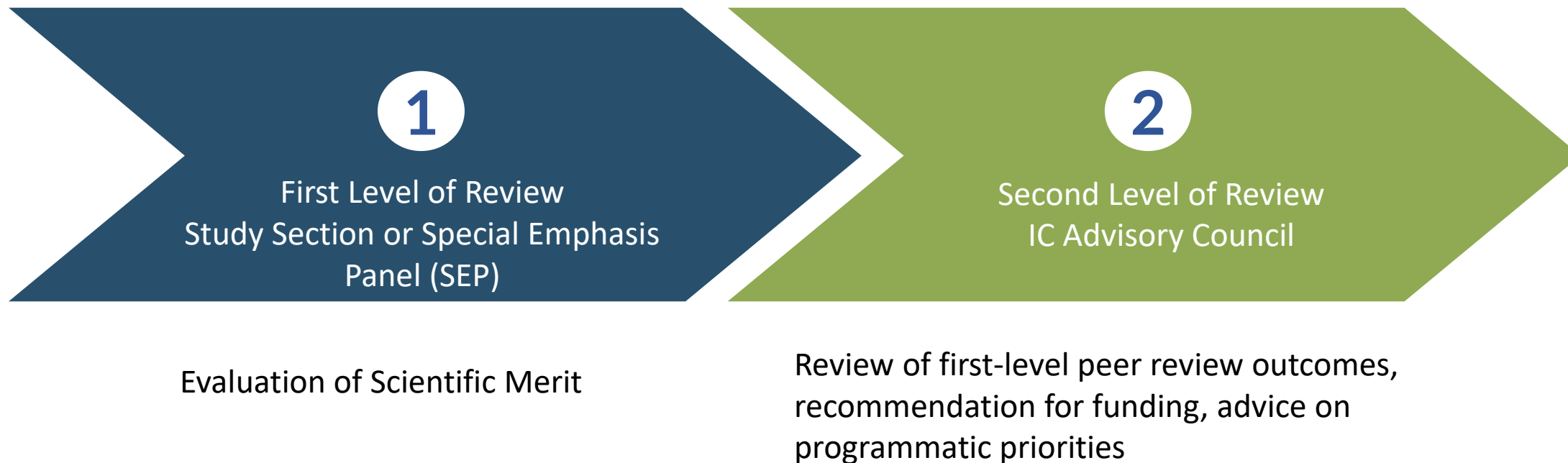
Active Funding Opportunities and Notices   [Advanced Search](#)

Displaying: 1 to 25 of 17278 results    Results Per Page: 25

Title	NOFO/Notice Number	Issuing Organization	Release Date	Expiration Date	Activity Code
Publication of the Revised NIH Grants Policy Statement (Rev. April 2024) for Fiscal Year 2024	NOT-OD-24-115	NIH	May 2, 2024	N/A	N/A
Notice to Extend the Expiration Date for the Mentored Patient-Oriented Research Career Development Awards (Parent K23s)	NOT-OD-24-113	OD	May 2, 2024	N/A	N/A
Lasker Clinical Research Scholars Program (SI2/R00 Clinical Trial Optional)	PAR-24-202	NIH	May 2, 2024	Aug 31, 2024	SI2/R00
Notice of Information: Technical Assistance Webinars for PAR-24-206 Peer Review Clinical Research Grants (PRCG) for the Peer	NOT-TR-24-004	NCATS	May 1, 2024	N/A	N/A

<https://grants.nih.gov/funding/searchguide/index.html#/>

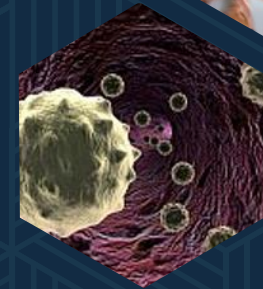
# NIH's Two-Level Peer Review System



**First-level of peer review has a singular, important goal: provide expert advice to the NIH on the scientific and technical merit of grant applications.**

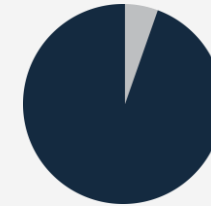
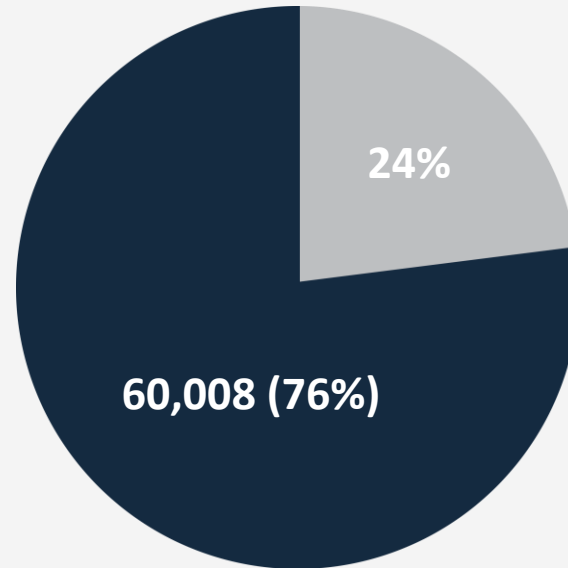
# CSR's Mission

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.

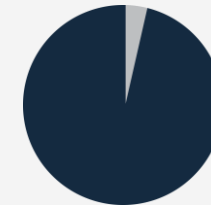


# CSR reviews a majority of NIH grant applications (FY23 numbers)

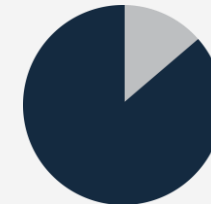
Annually:  
~1200 review meetings  
~19,000 expert reviewers



**32,254 (94%)**  
R01s



**6,307 (96%)**  
SBIRs-STTRs



**4,980 (84%)**  
NRSA Fellowships

CSR also reviewed **161 special initiatives**, such as:

BRAIN, HEAL, Pioneer Award, ComPASS, NIH Director's Transformative Research Award

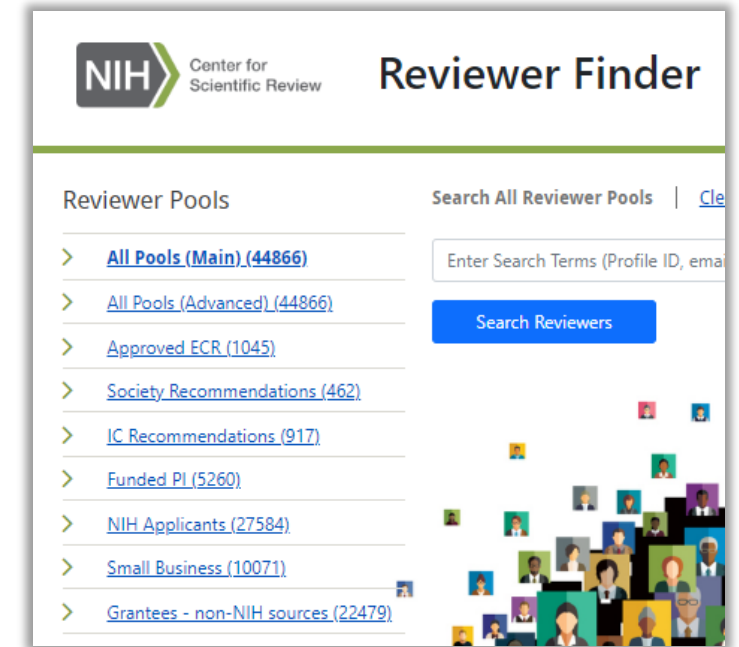




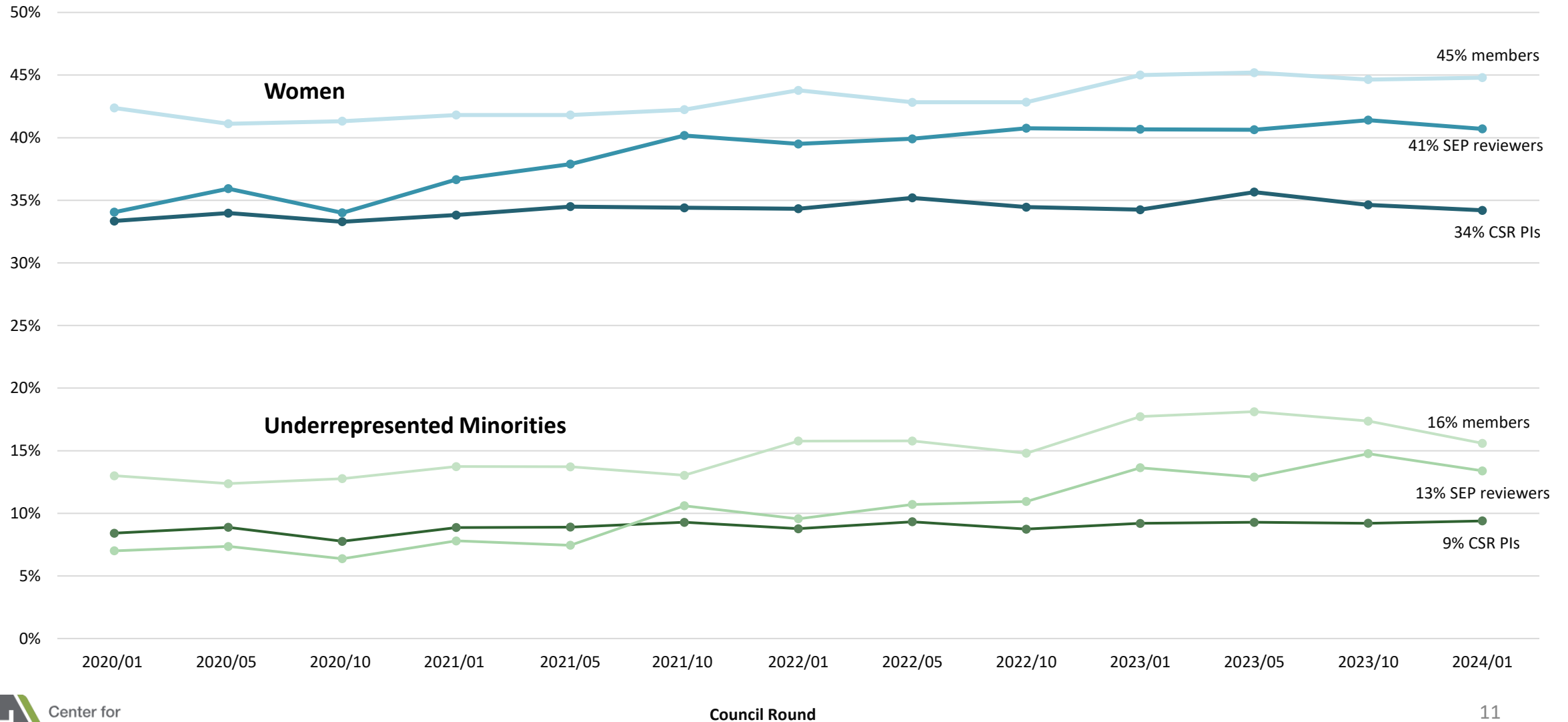
# Diversifying Review Panels

# CSR's Strategies for Diversifying Review Panels

- Emphasizing the **critical need** for NIH to hear diverse perspectives to fulfill peer review's mission of identifying the best, most disruptive, novel science
- The most effective review committees are **diverse in multiple dimensions** – e.g. 1) scientific background and perspective; 2) demographic/geographic; 3) career stage; 4) review experience
- **Getting away from our mental rolodex - broadening the pool** by providing tools for SROs to find “lesser-known” well-qualified reviewers, e.g. database with multiple sources of scientific experts
- **Limiting excessive service to avoid a “gatekeeper” phenomenon** by asking review staff to check service histories and discontinuing incentives for substantial service

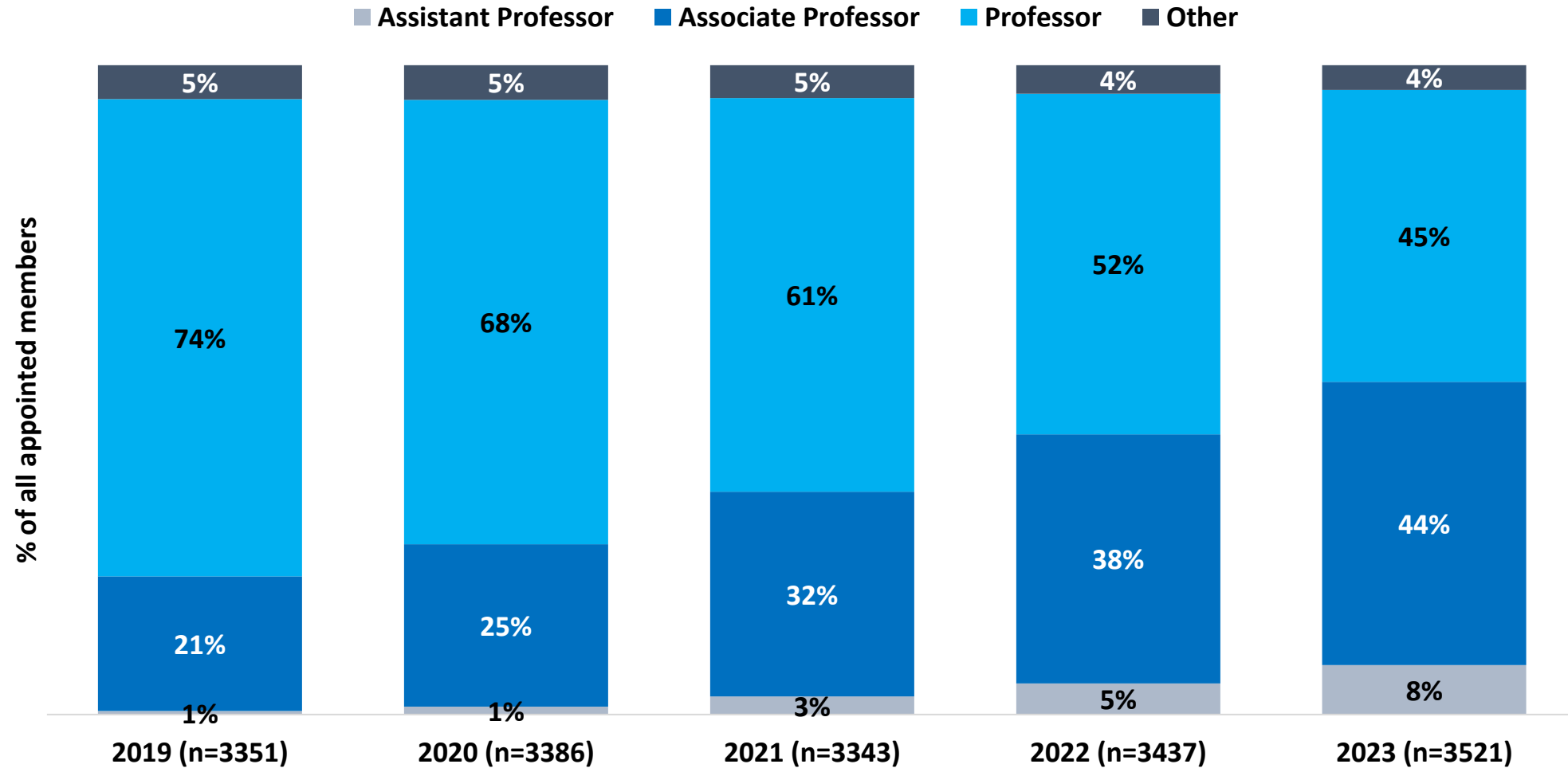


# Increasing the representation of women and URM in CSR study sections



# Increasing the career-stage diversity among standing study section members

Distribution of Academic Rank of Study Section Members 2019 -2023



# CSR's Early-Career Reviewer (ECR) Program



**Julia Maxson** @juliamaxson · Mar 7

Replying to @NinaSteele17 and @Momademia

Nothing helps more with grant writing than sitting on study section. Check out NIH's **ECR** program!



**Daniel Matson Laboratory** @danielmatsonlab · Oct 15

Had a wonderful experience at **NIH** study section in DC last week. A big plug for the **NIH** Early Career Reviewer (**ECR**) program. If you've recently started your lab and are beginning to compete for **NIH** funding, I strongly recommend applying to be an **ECR**.



**Jenny Zhen-Duan, PhD (she/ella)** @DrJennyZD · Jul 10

I recently served as an **NIH** Reviewer as an **ECR** and am strongly encouraging anyone eligible to sign up [tinyurl.com/yc5wxe4n](https://tinyurl.com/yc5wxe4n). It was an awesome learning experience and it clarified, for me, why the evaluation process took so long, 🤔 why we get scores first and summaries later.



**Abha Karki Rajbhandari, PhD** @BrainBody\_Lab · Jun 16

This week I served on an **NIH** Study Section for the first time and it was such an illuminating experience! The review process is not a black box any more. For ESI highly recommend applying for the **ECR** program 🙌

- Provides early-stage investigators a valuable, first-hand look at the NIH peer review process
- Assistant Professors or similar – independent, early career, without NIH review experience, and without R01-equivalent funding
- One-time commitment, ample training, review 2 grant applications as Reviewer 3, see peer review first-hand
- 2 ECRs/standing study section each round

Enrollment information at: <https://public.csr.nih.gov/ForReviewers/BecomeAReviewer/ECR>

# Mitigating Bias

# CSR's Bias Awareness Training for Reviewers – since August 2021

- **Specifically targeted toward mitigating the most common biases in the peer review process.** Not implicit bias training - includes personal testimonials, interactive exercises, narrated mock study section
- 30-min, required for access to grant applications
- >25,000 reviewers have taken the training - community feedback has been overwhelmingly positive

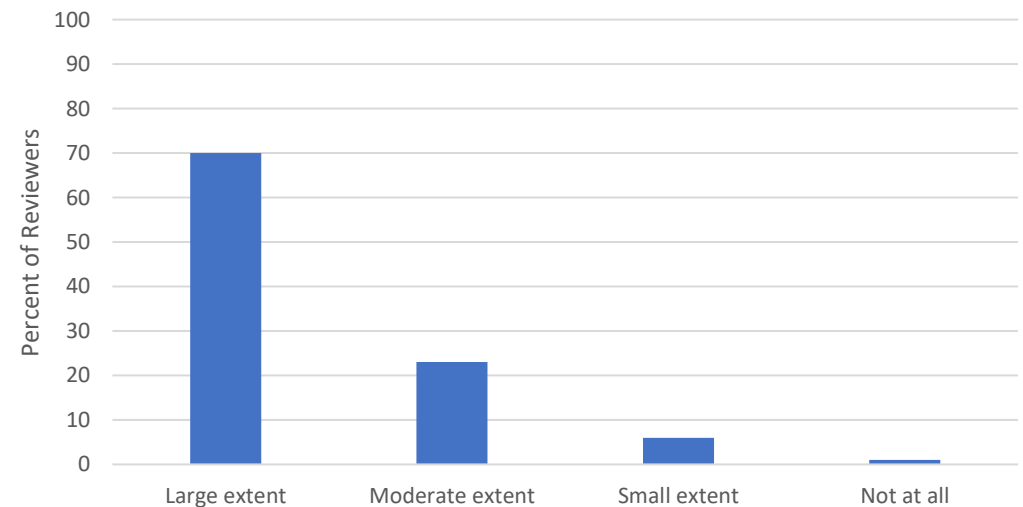
*“This training has given me the confidence to step up and say something when I believe I am seeing bias in the review process.”* Reviewer Survey

Review Survey – Full Report:

[https://public.csr.nih.gov/sites/default/files/2022-04/Reviewer Bias Training Survey Report 2022-01 Council Round final.pdf](https://public.csr.nih.gov/sites/default/files/2022-04/Reviewer%20Bias%20Training%20Survey%20Report%202022-01%20Council%20Round%20final.pdf)

**CSR's Bias Training is now required for all NIH reviewers ([NOT-OD-23-156](#)).**

93% of reviewers reported the training made them substantially more **comfortable intervening on bias**.



# Applicants and reviewers can report instances of bias directly to CSR



**[reportbias@csr.nih.gov](mailto:reportbias@csr.nih.gov)**

**Included in email signature of all CSR staff**

- Every allegation is carefully investigated by CSR senior management
- If we agree re: biased/flawed review – CSR will re-review application in same council round to not disadvantage the PI's potential funding timeline
- If we don't agree, the official NIH appeals process through IC council remains available to all investigators.
- Follow-up with reviewer and take actions, as necessary, by CSR Division Director → foster culture change in review community



# **Revising Review Frameworks to Promote Fairness and Strengthen Outcomes**

# Changes in Peer Review – January 25, 2025 grant deadlines and beyond

## **A simplified review framework for most research project grants (RPG)**

- Includes R01, R03, R21, R15
- Changes to how reviewers evaluate applications
- Minimal changes for investigators in how they construct the grant

## **Revised review framework and application for individual fellowship grants**

- Includes pre-doctoral (F31), post-doctoral (F32), and M.D./Ph.D. fellowships (F30)
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## **Simplified Review Framework for NIH Research Project Grant (RPG) Applications**

## Persistent feedback from scientific community, NIH staff observations motivated changes to RPG review

- **Increased complexity of and administrative additions to NIH's review criteria** dilutes reviewer attention across too many questions, increasing reviewer burden and detracting from a singular focus on scientific merit
- **Concerns about the undue influence of reputational bias** (e.g. halo effects, investigator's pedigree, institution's name, etc.) – on the evaluation of scientific merit

# Goals of the changes

- **Refocus first-level peer review on its singular role of providing advice to the agency regarding the scientific/technical merit of grant applications**
  - Reframes criteria to focus reviewer attention on 3 key questions
  - Removes distractions of certain administrative compliance items
- **Address concerns about the undue influence of reputational bias** (e.g. halo effects, investigator's pedigree, institution's name, etc.) – on the evaluation of scientific merit
  - Scoring of Investigator and Environment is changed to **“appropriate, or gaps identified”**

**Together will make peer review more fair and more effective.**



## Revised application and review for **individual fellowship grants**

# Goals of changes to fellowship application and review

1. Better focus reviewer attention on key assessments relevant to training
2. Reduce bias in review by reducing inappropriate consideration of sponsor and institutional reputation
3. Align the application with the review criteria
4. Clarify instructions and shorten the application
5. **Implement change to give more equal access to candidates across a broad range of organizations and research environments**



# Learn more on NIH's one-stop shop sites for RPGs, Fellowships

## Register for public webinars, view recorded webinars, resources, FAQs, and more

### Research Project Grants (RPGs)

The screenshot shows the NIH Grants & Funding website. The header includes the NIH logo and 'GRANTS & FUNDING NIH Central Resource for Grants and Funding Information'. Navigation links include HOME, ABOUT GRANTS, FUNDING, POLICY & COMPLIANCE (highlighted), NEWS & EVENTS, and ABOUT OER. A search bar is present. The breadcrumb trail reads: Home » Policy & Compliance » Peer Review Policies and Practices » Simplifying Review of Research Project Grant. The main content area features a sidebar with 'POLICY & COMPLIANCE' and 'Peer Review Policies and Practices' highlighted. The main heading is 'Simplifying Review of Research Project Grant Applications'. The text states: 'NIH is implementing a simplified framework for the peer review of the majority of competing research project grant (RPG) applications, beginning with submissions with due dates of January 25, 2025. The changes are designed to:'. A list item follows: '1. Enable peer reviewers to better focus on answering the key questions necessary to assess the scientific and technical merit of proposed research projects:'. A sub-item is listed: 'Should the proposed research project be conducted?'. A blue call-to-action box says 'ONLINE BRIEFING NOV 3, 2023' with a sub-link 'Join us for an overview of the simplifying review changes.' and a 'Learn more' button.

<https://grants.nih.gov/policy/peer/simplifying-review.htm>

### Fellowships

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<https://grants.nih.gov/policy/peer/revisions-nih-fellowship-application-review-process.htm>

# Engage with us to learn more about peer review

**Resources and Programs for NIH Grant Applicants**  
From the Center for Scientific Review (CSR) of the National Institutes of Health (NIH) <https://public.csr.nih.gov>

**A GREAT PLACE TO BEGIN!**  
Subscribe to the NIH Guide for Grants and Contracts to stay abreast of new funding opportunities and policy changes that can impact your application: <https://grants.nih.gov/funding/about-nih-guide-to-grants-and-contracts.htm>.

**TIPS FOR SCIENTISTS**

- 1 Read and carefully follow all general application guide, NOFO-specific, and related NIH Guide notice instructions.
- 2 Do not attempt to skirt page limits by re-homing information into non-limited sections. Your application could be withdrawn.
- 3 Consult with experienced colleagues, but do not consider another investigator's application as a "written in stone" example of what to do, or not to do. Use the Assisted Referral Tool (ART) or Matchmaker to...

**8** Some ICs provide sample applications and related documents: <https://grants.nih.gov/grants/how-to-apply-application-guide/resources/sample-applications.htm>.

Plugging Into NIH: Conversations and Connections

WEBINAR

**The NIH Grants Process: A Brief Walk-Through for Beginners**

WEDNESDAY, MAY 15, 2024 • 1:00-2:30 PM ET

Register today!

REGISTER FOR WEBINAR  
NIH Grants Process:  
A Walk-Through for  
Beginners

- CSR-developed infographic targeted toward Offices of Sponsored Research, Investigators [https://public.csr.nih.gov/sites/default/files/2022-06/CSR\\_ResourceInfographic\\_v21.pdf](https://public.csr.nih.gov/sites/default/files/2022-06/CSR_ResourceInfographic_v21.pdf)

CSR and the Office of Extramural Research are hosting informational webinars on navigating NIH

- **May 15, 2024 – recording available**
- **November 13-14, 2024 (tentative)**  
<https://grants.nih.gov/learning-center/nih-grants-process-beginners-walk-through-webinar>

Questions/comments? Reach us at [communications@csr.nih.gov](mailto:communications@csr.nih.gov)

# Learn more: CSR Initiatives to Address Bias in Peer Review

Details, data, analyses at: <https://public.csr.nih.gov/AboutCSR/Address-Bias-in-Peer-Review>

## CSR Initiatives to Address Bias in Peer Review

CSR is committed to addressing bias in peer review. Learn about our commitment and relevant data.



### Words from Dr. Noni Byrnes, Director

- [CSR's Commitment to Advancing EDI in Peer Review, 3 March 2021](#)
- [January 19, 2022](#) [▶ WATCH](#)

### Words from Dr. Bruce Reed, Deputy Director

- [May 20, 2022](#) [▶ WATCH](#)



Bias Awareness and  
Mitigation Training



Reporting Avenues  
for Bias



Broadening the  
Reviewer Pool



Exploring Changes to  
Review to Make it More  
Fair and Effective

# If you or your staff have questions later...



Bruce Reed, Ph.D.  
Deputy Director  
CSR  
[reedbr@mail.nih.gov](mailto:reedbr@mail.nih.gov)



Kristin Kramer, Ph.D.  
Communications Director  
CSR  
[Kristin.Kramer@nih.gov](mailto:Kristin.Kramer@nih.gov)



Noni Byrnes, Ph.D.  
Director  
CSR  
[byrnesn@csr.nih.gov](mailto:byrnesn@csr.nih.gov)

# Discussion