



# CSR's Early Career Reviewer Program and Initiatives to Address Bias in Peer Review

April 27, 2022

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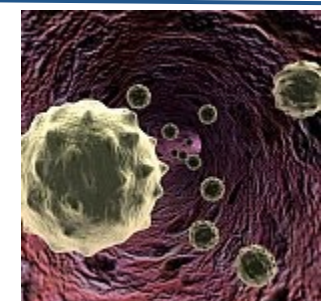
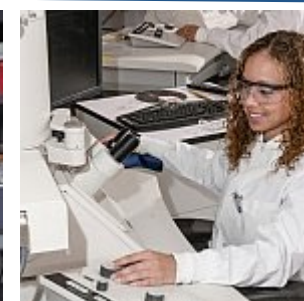
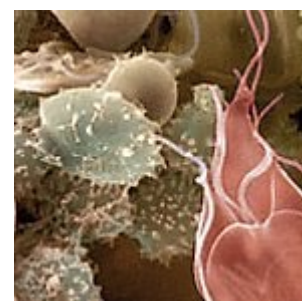
Center for Scientific Review, National Institutes of Health

# 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.



## TOPIC 1:

# Early Career Reviewer (ECR) Program

## TOPIC 2:

# Initiatives to Ensure that Peer Review is Fair so that the Highest Impact Science can be identified

- Bias Reporting
- Bias Awareness Training
- Diversifying Review Committees
- Fellowships

# Serve on a review panel – Early Career Reviewer (ECR) Program

## Program goals:

- Train qualified scientists in grant review
- Expose investigators to peer review so that they can write more competitive grant applications of their own
- Enrich the existing pool of NIH reviewers



# Early Career Reviewer Program – the Basics

- Early career scientists can apply to CSR's Early Career Reviewer (ECR) program.
- ECR's serve as an ECR one time and review 2 applications as Reviewer 3.
- ECRs write full critiques and participate in the review meeting and score all applications.



### ECR Qualifications

|   |  |
|---|--|
| <b>Employment</b><br>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.<br><br>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.   | <b>Grant &amp; Review History</b><br>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.)<br><br>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 |
| <b>Research</b><br>You show evidence of an active, independent research program. Examples include publications, presentations, institutional research support, patents, acting as supervisor of student projects.<br><br>You have at least 1 senior-authored research publication in a peer-reviewed journal in the last 2 years plus at least 1 additional senior-authored research publication since receiving a doctorate. | You must have submitted a grant proposal, in the PI/PD role, to the NIH and received the associated summary statement.   |

Visit <https://public.csr.nih.gov/ForReviewers/BecomeAReviewer/ECR> for qualifications and application process.

# Qualifications for the Early Career Reviewer Program

## Employment

- You have at least **1 year of experience as a fulltime faculty member** (assistant professor) or a researcher in a similar role.

## Grant & Review History

- You have not served on an NIH study section aside from being a mail reviewer.
- You have not held an R01 or equivalent grant as a PI/PD.
- You have submitted a grant application to NIH and received the summary statement.

## Research

- You have evidence of an active, independent research program.
- You have at least 2 senior-authored research publication in a peer-reviewed journal – 1 since doctoral degree, 1 in the last 2 yrs.

Visit <https://public.csr.nih.gov/ForReviewers/BecomeAReviewer/ECR> for qualifications and application process.

## If you are invited to serve...you will work closely with your scientific review officer (SRO)



- Your SRO will provide training in advance of the review meeting through a pre-meeting training session and will read your critiques in advance and provide feedback.
- Typically, you'll receive review assignments ~ 6 weeks in advance of the review meeting.
- Your SRO will also make sure you know what to expect at the meeting.

# Early Career Reviewer and Peer Review Webinars & Videos

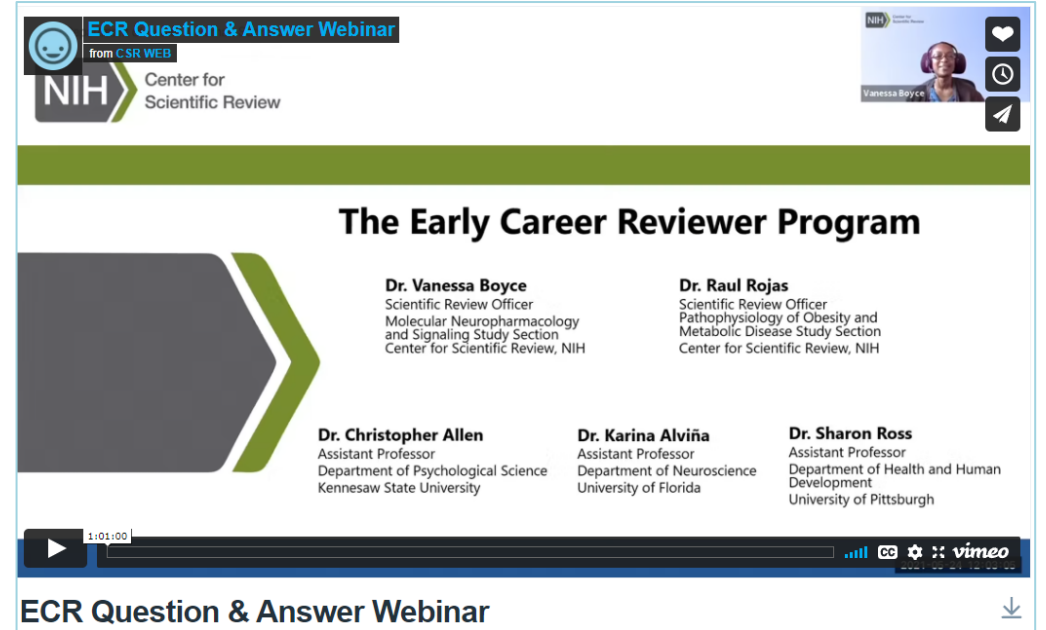
## Grants 101 & Early Career Reviewer Program



The video thumbnail features a woman with long brown hair wearing a headset, positioned on the left side. To her right is a white box with a blue and green NIH logo. The text in the box reads: "Grants 101 & Early Career Reviewer Program", "April 14, 2021", "Recording", "Slides", and "Q & A Portion".

<https://public.csr.nih.gov/NewsAndPolicy/PeerReviewVideos>

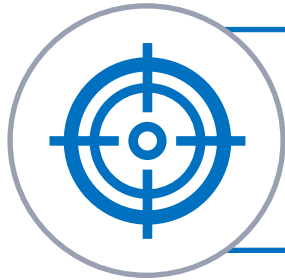
## ECR Question & Answer Webinar



The screenshot shows a video player interface. At the top left, it says "ECR Question & Answer Webinar from CSR WEB" and "NIH Center for Scientific Review". In the top right corner, there is a small video feed of a woman with the name "Vanessa Boyce" below it. The main content area has a green header "The Early Career Reviewer Program" and a large grey arrow pointing right. Below the arrow, there are four columns of text listing speakers: "Dr. Vanessa Boyce" (Scientific Review Officer, Molecular Neuropharmacology and Signaling Study Section, Center for Scientific Review, NIH), "Dr. Raul Rojas" (Scientific Review Officer, Pathophysiology of Obesity and Metabolic Disease Study Section, Center for Scientific Review, NIH), "Dr. Christopher Allen" (Assistant Professor, Department of Psychological Science, Kennesaw State University), "Dr. Karina Alviña" (Assistant Professor, Department of Neuroscience, University of Florida), and "Dr. Sharon Ross" (Assistant Professor, Department of Health and Human Development, University of Pittsburgh). At the bottom, there is a video player control bar with a play button, a progress bar at 1:01:00, and the "vimeo" logo. Below the player, the text "ECR Question & Answer Webinar" is displayed with a download icon on the right.

<https://vimeo.com/672373050/93defda2f9>





## Bias Reporting & Bias Awareness Training

# Reporting Bias in Peer Review: [G.Fosu\\_AssocDir@csr.nih.gov](mailto:G.Fosu_AssocDir@csr.nih.gov)

~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](mailto:G.Fosu_AssocDir@csr.nih.gov).



Gabriel Fosu, Ph.D.

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

## 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

# Bias Awareness Training

We all have a role in ensuring review proceeds fairly and is unbiased. Therefore, we train reviewers, chairs, and SROs to be aware and to intervene.

## How do we do this?

- Developed bias awareness training – with help from CSRAC WG.
- Focused on most common biases, specific to review.
- Goals are:
  - To raise awareness of potential sources of bias in peer review.
  - Provide tools for bystanders to intervene if and when they see potential bias
  - Provide reporting avenues for reviewers

# CSRAC WG: Bias Awareness Training Module Development

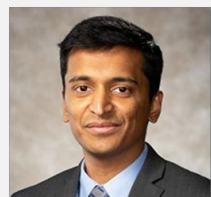
## CSR AC Members



**Scott Miller, Ph.D.**  
Yale University

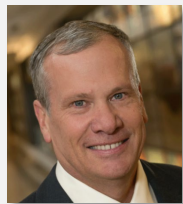


**Julie Price, Ph.D.**  
Harvard Medical School



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

## Working Group Ad Hocs



**Doug Andres, Ph.D.**  
University of Kentucky



**Derek Applewhite, Ph.D.**  
Reed College



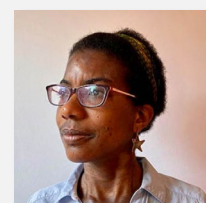
**Markus Brauer, Ph.D.**  
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Wisconsin-Madison



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



**Carlos Crespo, Ph.D.**  
Portland State  
University



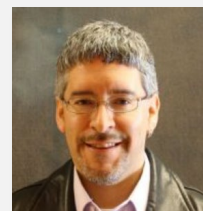
**Karine Gibbs, Ph.D.**  
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Berkeley



**Xuemei Huang, Ph.D.**  
Pennsylvania State  
University



**Rakale Quarells, Ph.D.**  
Morehouse College

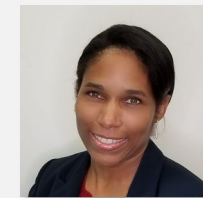


**Germán Rosas-Acosta, Ph.D.**  
University of Texas at El Paso

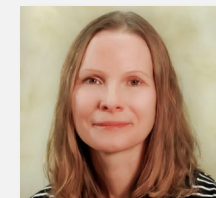


**Steve Varga, Ph.D.**  
University of Iowa

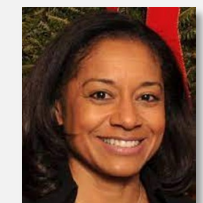
## NIH Staff



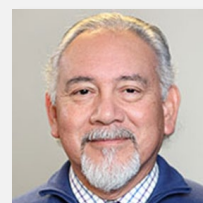
**Hope Cummings, Ph.D.**  
CSR



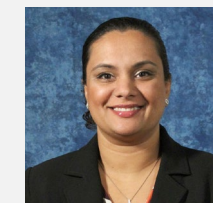
**Kristin Kramer, Ph.D.**  
CSR



**Charlene Le Fauve, Ph.D.**  
COSWD



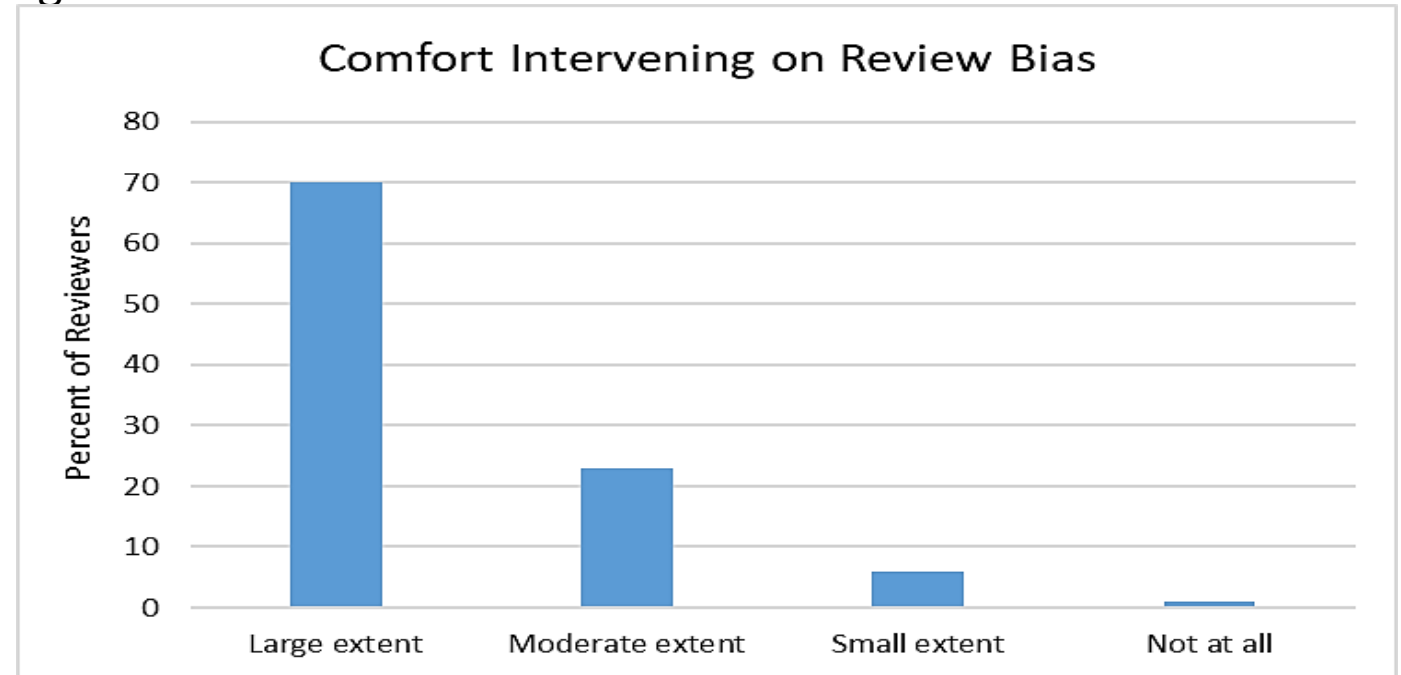
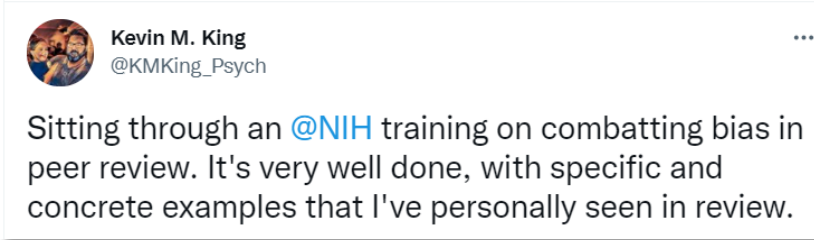
**Michael Sesma, Ph.D.**  
NIGMS



**Tasmeen Weik, Ph.D.**  
CSR

# CSR Bias Awareness Training for Reviewers Launched in August 2021

- Objectives – raise awareness of potential biases in peer review, provide tools to intervene
- Targeted the most common biases in the peer review process. *It is not implicit bias training.*
- 30-min, sent to ~10,000 reviewers before their meeting – surveys to inform future versions
- Includes personal testimonials, interactive exercises, narrated mock study section
- Very well-received by scientific community - survey results indicate increased ability of reviewers to identify bias, increased comfort in intervening





# Diversifying Review Committees

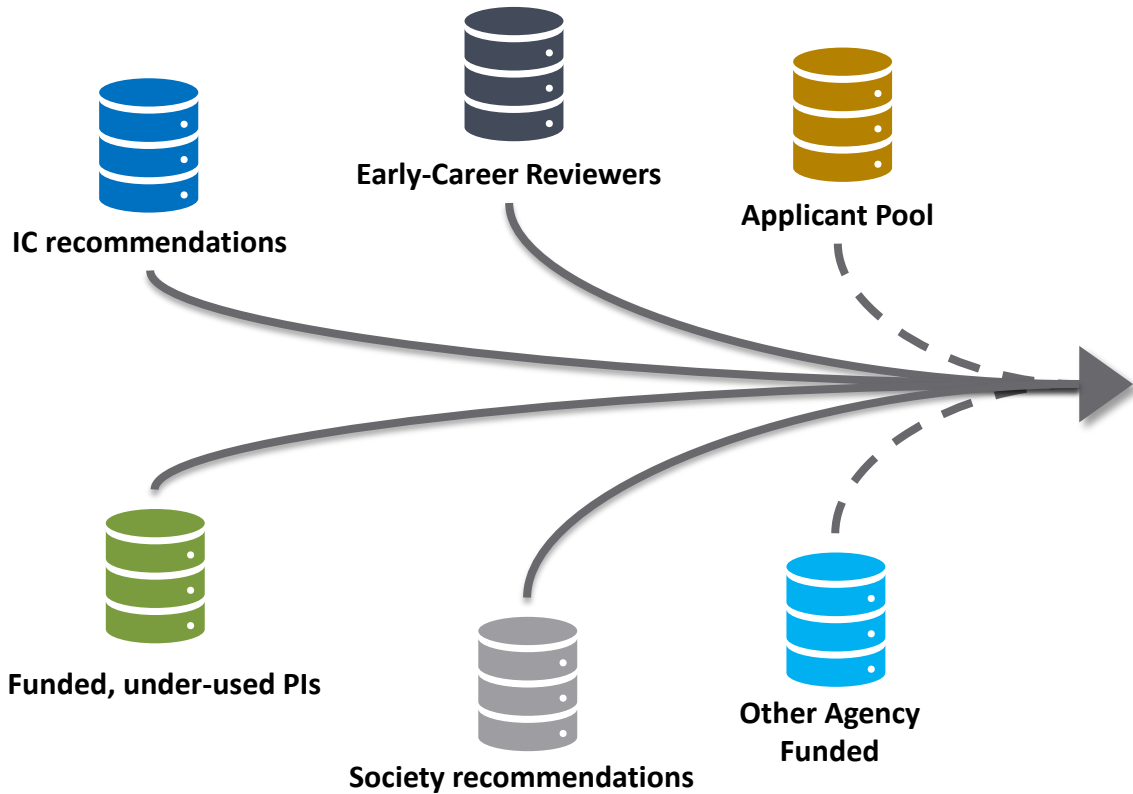
# Strategies for Diversifying Review Panels

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

- Emphasizing **critical need** for the NIH to hear diverse perspectives to fulfill peer review's mission of identifying the best, most disruptive, novel science.
- 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

# Broadening the Pool of Reviewers

Aug 2020: Launched CSR Reviewer Finder Tool (for SROs to find “lesser-known” qualified reviewers)



Multiple Data Sources

Select a pool below to use the Advanced Filters Advanced Filters

You can search by study section request but because study sections end and start, a search by expertise might be more useful.

Source  ECR  Society  ICRR  Funded PI  NIH Applicants  All Search for Reviewers

Last name  Expertise Keywords  Profile ID  Study Section

Recommending Society

Recommending IC  Recommending PO  Region  State  R15

IRG  [Region Map View](#)

Approved ECR (1077)

Society Recommendations (273)

IC Recommendations (225)

Funded PI (5368)

Applicants (11349)  
See for BDCN, CVRS, GGG, BCMB

URM Academics Coming Soon!

Search Result: 59 Export all results to Excel

| <a href="#">Reviewer Name</a>       | Profile ID | Expertise   | Gender | URM | Race | Ethnicity | State | <a href="#">Study Section Matches</a> | <a href="#">PO Name</a> | Source | CV |
|-------------------------------------|------------|---|--------|-----|------|-----------|-------|---------------------------------------|-------------------------|--------|----|
| <a href="#">M. Knight, Jennifer</a> |            | Psychiatry, Psycho-Oncology, hematopoietic stem cell transplantation (HCT) translational research, randomized controlled pharmacologic and behavioral trials                        |        |     |      |           | TX    | MESH,BGES,BMHO                        |                         | SR     |    |
| <a href="#">Suffoletto, Brian</a>   |            | behavioral interventions longitudinal repeated measures; multilevel modeling  |        |     |      |           | IL    | BMHO,ARM,PDRP                         |                         | SR     |    |
| <a href="#">Baucom, Katherine</a>   |            | Behavioral Intervention; Community-Based Participatory Research; Couples; Couples Therapy; Diabetes Prevention; Effectiveness; Efficacy; Health Promotion; Interpersonal Relations; |        |     |      |           | UT    | BMHO, LCBH, HPC, HSDO                 |                         | ECR    |    |

One interface – user-friendly for SROs





# Fellowships

# CSR Advisory Council Working Group on Review of NRSA Fellowship Applications

- Persistent concerns that fellowship reviews may disadvantage some applicants who are in fact highly qualified led CSR in September 2021 to convene a WG on fellowship review, advisory to CSRAC.

## Charge

- Evaluate the fellowship review process and making recommendations to make it as effective and fair as possible for all.

## CSR Advisory Council



**Chair**

**Elizabeth Villa, Ph.D.**

University of California  
San Diego



**Narasimhan Rajaram, Ph.D.**

University of Arkansas at  
Fayetteville

## Working Group Ad Hocs



**Michael Burton, Ph.D.,**

University of Texas at Dallas



**Katherine Friedman, Ph.D.**

Vanderbilt University



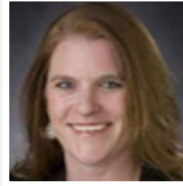
**Barbara Kazmierczak, MD, Ph.D.**

Yale University



**Scott Miller, Ph.D.**

Yale University



**Robin Queen, Ph.D.**

Virginia Tech



**Nathan Vanderford, Ph.D.**

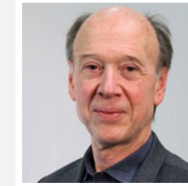
University of Kentucky



**Judith Yanowitz, Ph.D.**

Magee-Women's Research  
Institute

## NIH Staff



**Co-Chair**

**Bruce Reed, Ph.D.**

Center for Scientific Review



**Ericka Boone, Ph.D.**

Division of Biomedical Research  
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**Alison Gammie, Ph.D.**

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Medical Sciences



**Lystranne Maynard-Smith, Ph.D.**

Center for Scientific Review



**Cibü Thomas, Ph.D.**

Center for Scientific Review

*Please feel free to contact anyone at NIH and ask for assistance navigating NIH.*

## **If you are submitting a grant, you can find a relevant PO and SRO**

- using **Matchmaker in NIH Reporter** (or the contacts they've developed at NCI)
- email/call – we might not be able to answer your question, but we will get you to someone who can
- email the CSR Webmaster ([csrwebmaster@csr.nih.gov](mailto:csrwebmaster@csr.nih.gov)),
- you can tag us with a question on (**Twitter (@CSRpeerreview)**).



## Discussion

*Thank you*