U.S. Department of Health & Human Services



Early Career Reviewers Working Group September 2019

Mark Peifer, Ph.D. Professor Department of Biology University of North Carolina, Chapel Hill Elizabeth Villa, Ph.D. Assistant Professor Division of Biological Sciences University of California, San Diego

The CSR Mission



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



The ECR Program was created with two goals



To expose early-career scientists to the peer review process, with the ultimate goal of helping them to become more competitive as applicants



To enrich and diversify NIH's pool of trained peer reviewers



Early Career Reviewers must currently meet four criteria



Have at least 2 years experience as a full-time faculty member or researcher in a similar role. Post-doctoral fellows are not eligible.



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



Have at least 2 senior-authored research publications in peer-reviewed journals in the last 2 years. In press publications are considered and author position can be as single author, corresponding author, or first or last author.



Have not served on a CSR study section in a role other than mail reviewer. (Mail reviews do not include participation in the meeting.) Review service at other agencies or at other NIH institutes/centers are not disqualifiers.

*Anyone who has received an R01 is over-qualified.



Here is the current situation



- ✓ Applicants to the ECR program apply through an online portal.
- ✓ After submitting their application, they are vetted by individual Scientific Review Officers (SRO)
- ✓ Note: some ECRs are recruited directly by SROs without being entered in the database; the requirements for participation remain the same



Here is the current situation

- ✓ Applicants to the ECR program apply through an online portal.
- ✓ After submitting their application, they are vetted by individual Scientific Review Officers (SRO)
- ✓ Note: some ECRs are recruited directly by SROs without being entered in the database; the requirements for participation remain the same



Current CSR policy is that one ECR is to be recruited for every meeting of a standing review group (chartered study section) or recurring special emphasis panel that handles primarily R01 proposals. ECRs are assigned 2-4 applications as R3.



Here is the current situation

- ✓ Applicants to the ECR program apply through an online portal.
- After submitting their application, they are vetted by individual Scientific Review Officers (SRO)
- ✓ Note: some ECRs are recruited directly by SROs without being entered in the database; the requirements for participation remain the same

Current CSR policy is that one ECR is to be recruited for every meeting of a standing review group (chartered study section) or recurring special emphasis panel that handles primarily R01 proposals. ECRs are assigned 2-4 applications as R3.





The community has raised several concerns about the current program



Are the criteria for inclusion too stringent or not being implemented uniformly?



The community has raised several concerns about the current program



Are the criteria for inclusion too stringent or not being implemented uniformly? There are many more ECRs interested in the program than slots available-how can we accommodate more?



The community has raised several concerns about the current program



Are the criteria for inclusion too stringent or not being implemented uniformly? There are many more ECRs interested in the program than slots available-how can we accommodate more? Are there other ways to help early career scientists learn more about the review process?



An Early Career Reviewer Working Group was convened including two members of CSRAC, two current SROs and four ECRs who had served

CSR Advisory Council



Mark Peifer, Ph.D., University of North Carolina Chapel Hill





Kristin Kramer, Ph.D., CSR



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



Antonello Pileggi, Ph.D., CSR

Former Early Career Reviewers



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



The ECR Panel was charged with three primary questions:

- 1. Should we change the criteria for the ECR program in any way? Are the criteria reasonable?
- 2. What should we do about the ~3100 willing ECRs currently in the database who have not yet served on a panel?
- 3. No matter what changes are made, CSR cannot meet demand for the ECR program. Is there something else we can provide to those who are not recruited as a reviewer?





We relied on several sources of information:

- Usage statistics from the ECR database maintained by CSR and the Query/View/Report NIH database
- Direct experience and input from the working group members who have served as ECRs
- Feedback from the scientific community to CSR gathered from social media, responses to CSR blog posts, and a survey
- A survey of the ~ 300 participants in the NewPISlack forum





Based on our Discussions we recommend the following modifications to the ECR Program





Increase training opportunities for ECRs by:

- Increasing the number of ECRs from one per panel to one ECR per 25 proposals, with a cap of three ECRs per panel
- Create new mock study section videos
- Increase outreach at scientific meetings, perhaps offering a live mock panel
- Broadly publicize program at all NIH Institutes and Centers





Revise the criteria to expand eligibility

- Instead of two papers in 2 years since faculty appointment as first/senior/corresponding, the recommended requirement is two papers since earning a Ph.D. as first/senior/corresponding with at least one of those having been published while in a faculty position.
- ECRs must have submitted a grant proposal to the NIH; any grant mechanism other than F30, F31, F32 qualifies
- Receipt of a MIRA (R35) is a disqualifier for the program
- Other existing criteria remain





Publicize criteria and constraints in recruitment:

So that ECRs are fully informed and to ensure SROs apply criteria consistently

æ

8

Constraints include rules that prevent "observers" on review panels and that restrict number of reviewers from the same institution on the same panel Provide ECRs with advice about how to improve their chances of being chosen: e.g., contacting SROs, making sure you provide a complete CV, and that your contact information is current





Begin to deal with the large backlog of eligible ECRs by:

- Query all currently eligible ECRs in the database to verify continued interest; remove them if no response.
- Institute annual queries to ECRs in the database to ask if they are still in a research position and are still aiming for NIH funding. Removal from database if no response.
- Engage NIH Institutes and Centers in the ECR program and consider changing criterion so that service on review panels at other ICs count as ECR service



Formalize Best Practices for SROs in training ECRs



ECR critiques must be read in advance of the meeting and feedback given



Have a brief meeting with panel Chair and SRO before panel starts.



ECRs should be encouraged to fully participate and their comments solicited by panel Chairs



ECRs should receive post-meeting feedback on their performance

