## Center for Scientific Review Advisory Council Meeting National Institutes of Health U.S. Department of Health and Human Services

#### Meeting Minutes March 25, 2024

The Center for Scientific Review Advisory Council (CSRAC) convened at 9:30 a.m., Monday, March 25, 2024.

<b>Members Present</b> Karen Anderson, Ph.D., M.D.	A
Anton Bennett, Ph.D.	R
Leopoldo Cabassa, MSW, Ph.D.	La
Jonathan Epstein, M.D.	
Donna Ginther, Ph.D.	Ex
Christine Hendon, Ph.D.	B
Michelle Janelsins-Benton, Ph.D.	
Narasimhan Rajaram, Ph.D.	Ex
Lynn Yee, M.D., M.P.H.	N

**Ad-Hoc Participants** Manuel Ares, Ph.D. Rodney Kiplin Guy, Ph.D. Lali Medina-Kauwe, Ph.D.

## **Executive Secretary** Bruce Reed, Ph.D.

Ex Officio

Noni Byrnes, Ph.D.

#### CSR/NIH/HHS Employees and Members of the Public Present

The meeting was held in-person; one council member was absent (Matthew Carpenter Ph.D.). A small number of observers attended in person. All other observers, members of the public and CSR staff, attended virtually via NIH videocast.

#### Welcome and Introductions

Dr. Reed welcomed CSRAC members, ad-hoc participants, and attendees to the 27<sup>th</sup> CSRAC meeting. Each person introduced themselves along with their institutional affiliations and respective areas of science.

#### **CSR Updates**

Dr. Byrnes provided the following CSR updates:

#### Welcome (NIH Videocast: 00:05:27)

Dr. Byrnes thanked all members for attendance and welcomed continuing council members, congratulated Jonathan Epstein on being appointed as the Interim Executive Vice President of the University of Pennsylvania for the Health System and Dean of the Perelman School of Medicine, and Michelle Janelsins-Benton on being promoted to Professor, Division of Supportive Care and having an endowed chair for the Gary R. Morrow Distinguished Professor of Supportive Care from the University of Rochester. She introduced newest council member Donna Ginther and the March 2024 ad-hocs Manuel Ares, Rodney Kiplin Guy, and Lali Medina-Kauwe.

#### NIH News (NIH Videocast: 00:07:40)

Senior leadership transitions at NIH Institutes, Centers, and Offices; Monica Bertagnolli was appointed the 17<sup>th</sup> Director of the NIH, Lawrence Tabak returned to his position as Principal Deputy Director at the NIH, W. Kimryn Rathmell was appointed as the Director of NCI, Sean Mooney was named the Director of CIT, joining this June. Within the NIH Office of the Director, Lyric Jorgenson was appointed the Associate Director for OSP, Tara Schwetz Deputy Director of DCPSI, and Andrew Bremer Director of ONR. As of June 2024, Joshua Gordon of the NIMH is retiring as Director, Shelli Avenevoli who is the current Deputy Director will serve as Acting Director.

#### Budget (NIH Videocast: 00:09:45)

NIH's appropriations, excluding ARPA-H, will see an increase in FY 2024 of \$300 million over FY 2023. Dr. Byrnes expressed her gratitude toward the appropriations staff and Congress for increasing the budget amidst lean times. She acknowledged that this gesture emphasizes the significance of the NIH. Dr. Byrnes noted that CSR's budget is not appropriated by Congress and is a very small fraction of NIH's extramural budget (under one half percent), funded through IC taps.

#### Advisory Committee to the NIH Director Working Group (<u>NIH Videocast: 00:11:29</u>)

Dr. Byrnes reported that the working group focused on re-envisioning NIH-supported postdoctoral training. There was a series of 6 recommendations. The highest priority recommendation in view of the working group is to have pay and benefits increased for all NIH-supported postdoctoral scholars, specifically a minimum \$70,000 NRSA post-doc stipend in 2024, annually adjusted to inflation.

#### Simplified Review Framework and Changes to Fellowship Review (NIH Videocast: 00:14:55)

Dr. Byrnes highlighted that the Simplified Review Framework for most NIH research project grant applications was announced via Guide Notice (NOT-OD-24-010) on October 19, 2023. She also reported that coming in April 2024, there will be an additional Guide Notice announcing the changes to fellowship review.

## CSR News (NIH Videocast: 00:15:22)

CSR scientific leadership/management transitions; 3 scientific review officers (SRO) were promoted to be coordinators in addition to their SRO duties, Pamela Jeter and Lystranne Maynard-Smith for Reviewer Training, and Alok Mulky to be an Assistant Review/Research Integrity Officer. Six new referral officers have been selected since the last CSRAC meeting: Bo Hong, Shivakumar Chittari, Bidyottam Mittra, Joonil Seog, Jessica Smith, and Wenjuan Wang. Sam Edwards of the Clinical Neuroscience Review Branch has retired as Chief, and Gabriel Fosu has retired as the Associate Director for Diversity and Workforce Development; both positions will be filled.

#### CSR's Mission, Strategic Framework, and Scope (<u>NIH Videocast: 00:18:22</u>)

Dr. Byrnes began by reviewing the mission, then informing Council of CSR's strategic framework, which seeks to optimize peer review by focusing on key components of peer review—reviewers, study sections, and review processes. She reported on CSR's scope, which reviews approximately 60,000 applications with ~19,000 reviewers across ~1,200 meetings. She spoke of the 161 special initiatives reviewed by CSR in FY23.

## CSR's Study Sections, Recurring Panels, Review Meetings (<u>NIH Videocast: 00:26:12</u>)

Dr. Byrnes outlined the current 180+ standing study sections and specified the number of standing panels of each division and the number of recurring special emphasis panels (SEP) that handle review of NRSA fellowship applications and small business applications. The ~1,200 meetings review meetings annually include standing study sections, recurring committees, and special emphasis panels. All standing sections and recurring SEPs hold one in-person meeting each year.

Dr. Byrnes also emphasized the continued focus on the expansion of hybrid meeting capability. CSR held 19 hybrid review meetings from February – March 2024, and 16 are planned for summer 2024. These additional meetings will provide data to inform analysis of reviewer experience, data on outcomes, etc. in hybrid meetings. Guidance on best practices is being refined by the CSR Staff Hybrid Review Meeting Working Group. CSR is working to bring better meal and refreshment options. CSR has also added SRO Lead, Steven Frenk, to continue this work and to coordinate all efforts on optimizing the quality and fairness of scientific review in hybrid settings. A next step would be to bring hybrid capability to DC metro hotels.

Council raised a couple of questions regarding hybrid meetings. It was asked if there were differences seen regarding how proposals are reviewed from hybrid vs virtual vs in-person meetings, and if there is a specific process in place for reviewer recruitment, in terms of who is invited to attend in-person or virtually. In response, CSR leadership noted that additional data on in-person versus face-to-face meetings will be available soon, and that going forward we are focusing on obtaining additional data on hybrid meetings, where more data is needed. Broadly, we do not see significant differences in outcomes according to meeting format; attention certainly does wane faster in virtual meetings. Recruitment practices vary between SROs and as we get more experience with hybrids, we will have more guidance on the topic. Upon

conclusion of the 19 hybrid review meetings from February – March 2024 and the 16 planned for summer 2024, CSR will have a stronger analysis to present.

#### ENQUIRE Update and Reflections (NIH Videocast: 00:33:26)

This CSR initiative, ongoing since 2019, has evaluated 14 scientific clusters thus far, 9 of which have been implemented, 4 are in progress, and 1 additional cluster is forthcoming, slated to be implemented in 2025. Dr. Byrnes highlighted what's been learned through ENQUIRE from 2019-2024. Scientific cluster (# of study sections) size matters. Some study sections will straddle more than one scientific cluster, while others are not a good fit for any cluster. Pre-recruitment discussions and careful selection of the chair is important and can make a big difference. Overall, the scientific community is now familiar with ENQUIRE, and has become more comfortable seeing updates to their study sections. Dr. Byrnes noted that ENQUIRE requires the help of numerous staff in multiple units across CSR; she thanked the many groups who contribute and make the ENQUIRE process possible.

#### Outreach to the Scientific Community (NIH Videocast: 00:49:26)

Dr. Byrnes reported on how CSR's Office of Communications and Outreach (OCO) has expanded since its establishment in 2019. The growth allows CSR to better implement its goals of transparency and bi-directional engagement with the scientific community. OCO will have a major focus this year in communications regarding the Simplified Review Framework, and improving fellowship review, while continuing to prioritize broad and targeted outreach. She also presented the CSR-developed infographic targeted to Offices of Sponsored Research and investigators at institutions with limited NIH engagement. She spoke of the outreach performed by SROs at 71 conferences since January 2023, how CSR senior leaders are engaging in more speaking engagements at scientific conferences and visits to groups of institutions, and its overall benefits. She highlighted a visit she made to the University of Rochester, Stony Brook University, and the Rochester Institute of Technology as an example of how these visits can be bi-directional, informing CSR as well as the host institutions.

A member asked if the distribution of the CSR staff across the U.S. would have any implications for holding study section meetings outside of the DC metro area. Leadership indicated that CSR does not currently plan to do so. CSR's objective is to ensure that the most qualified reviewers are able to attend our meetings. Meeting location does not seem to be much of a factor, even for reviewers from different regions of the country. Being able to provide the reviewers with the flexibility to choose between in-person or remote participation, is an effort to promote the involvement of a wide range of reviewers, regardless of personal or professional circumstances. The suggestion of requiring first-time study section members to be in-person is an idea that warrants further discussion. Encouraging the right culture—one of full participation for all—in the hybrid meetings was emphasized. CSR's investment in resources and technology has resulted in the current success of the hybrid meetings, they have proven to run efficiently. We are giving continued attention to refining best practices for effective hybrid and virtual meeting management.

## ENQUIRE Cluster 18 Update: Social and Behavioral Sciences (Dr. Valerie Durrant) (NIH Videocast: 01:36:10)

Dr. Valerie Durrant gave an overview of the ENQUIRE cluster 18 process and recommendations. ENQUIRE cluster 18 is a group of 10 standing study sections covering behavioral and social science, including two HIV-related study sections. HIV/AIDS applications have an expedited review process; therefore, those applications must be reviewed separately. The overarching approach and recommendations from external workgroup members were presented, as well as input on these recommendations provided by an internal panel of NIH stakeholders. Recommendations were to charter 8 new study sections; 3 of these in basic research areas, two translational, and three in applied science. The 2 current HIV related study sections were found to have reasonable scope for the current state of the field. The final CSR recommendations consist of 9 proposed study sections and eliminating one, Methods and Measurement Development.

After discussion, members of Council moved to approve the CSR's recommendations for Cluster 18. The motion carried unanimously.

## Update: NRSA Fellowship Review and Application Changes (Dr. Ray Jacobson) (<u>NIH Videocast: 02:13:10</u>)

Dr. Ray Jacobson began by reviewing the conclusions of the CSR Advisory Council working group. It was clear that NIH is

potentially leaving out highly promising young scientists because the review process favors elite institutions, wellknown scientist sponsors, and overemphasizes traditional markers of early academic success. Recommendations made by the committee began with changing the review criteria, to better focus reviewers on key assessments, define criteria to give less advantaged applicants a better chance-without disadvantaging others, and to reduce bias in review by reducing inappropriate consideration of sponsor and institutional reputation. To align the fellowship application with the new review criteria, changes must be made to the application materials so that the information needed to apply the criteria is provided and unnecessary information is eliminated. Efforts were also made to clarify instructions, reduce redundancy, and shorten the application. To guide and execute the implementation process, NIH developed a NRSA Fellowship Review Implementation Committee.

He then turned to recent changes made in response to comments generated by the RFI that was issued in April 2023. Generally, comments expressed strong support for the proposed restructuring of the application. However, there were multiple requests to further clarify and provide additional guidance for specific criteria, provide distinctions between Criterion 2 and Criterion 3, and to make clear what information should be provided in the various application sections. The implementation working group devoted considerable effort to addressing those comments. The review criteria have been restructured and revised to the following three criteria: 1) Candidate's Preparedness and Potential, 2) Research Training Plan, and 3) Commitment to Candidate. Parallel changes were made to the fellowship application itself and include the elimination of undergraduate grades, a revised applicant section, and revised instructions for letters of reference.

Coming outreach includes a staff webinar (April 3<sup>rd</sup>), a Guide Notice (Mid-April), and a public webinar (September 19<sup>th</sup>). Training plans to support a culture change for the new review and application criteria will continue with staff training (Fall-Winter 2024/25) and reviewer training (April-June 2025). The new framework will be implemented for fellowship applications submitted for due dates on or after January 25, 2025 (April 8, 2025, is the standard NRSA receipt date, Summer 2025 peer review, October 2025 Advisory Council).

Multiple members expressed enthusiasm for the changes overall. A concern was raised with respect to the title of review criterion 3, "Commitment to Candidate." Specifically, the concern was that mentoring, which is extremely important, is not captured in the title. CSR leadership indicated that it is not clear whether that level of change can be made at this point in the implementation process. It was also clarified that the substance of the review criteria in fact directs substantial attention to the review of the mentoring plan. In addition, the application has been revised to request more information about how the sponsor will train the specific candidate who is applying.

#### Simplifying Review Framework Update (Drs. Lisa Steele, Kristin Kramer, and Miriam Mintzer) (NIH Videocast: 02:52:42)

Dr. Lisa Steele gave an overview on the Simplified Review Framework that will apply to most research project grants beginning with January 25, 2025 due dates. The framework will reorganize the existing five criteria; Significance, Investigators, Innovation, Approach, and Environment into three factors; Factor 1: Importance of the Research (Significance and Innovation, Scored 1-9), Factor 2: Rigor and Feasibility (Approach, Scored 1-9), and Factor 3: Expertise and Resources (Investigators and Environment, considered in overall impact; no individual score). To facilitate a smooth and successful implementation process, NIH has formed a Simplifying Review Framework Implementation Committee. The committee consists of multidimensional domain expertise. Three sub-groups were created to help execute the changes: Communications; Policy/Guide/Era/Systems; Training.

Dr. Kristin Kramer gave an update on the Communications and Policy/Guide/Era/Systems sub-committees. The goal is to ensure that the community is aware of changes well in advance of their implementation. The approach is to have frequent communications and variety in terms of our communication vehicles, messages, and messengers. In April 2024, a second public webinar and guide notice are scheduled, along with the expansion of the social media campaign. Regarding the Policy/Guide/Era/Systems sub-committee, they have focused on the reissuance of Notice of Funding Opportunities (NOFOs) including updated review language and the adaptation of eRA systems for new format scoring

#### and critiques.

Dr. Miriam Mintzer spoke on training plans. The training vision is to support change in reviewer practices and the culture of study sections, while clearly conveying details of the new framework. This will be accomplished by focusing on the underlying rationale. To assist with the culture change, the approach is to engage SROs early in the process. Bi-directional communication, and early feedback/questions from SROs will enhance further training development. Plans will include the development of select staff in each division to become subject matter experts, allowing them to facilitate and distribute training resources. It is intended to proactively raise awareness of reviewers at an early stage to help address any questions or concerns they may have. Milestones achieved include completing an introduction staff webinar in October 2023, distributing preliminary resources to staff in February-March 2024 (including a 1-page SRO overview, a 1-page PO overview, and a summary statement), appointing CSR divisional liaisons, and finishing a staff (PO) webinar on NOFOs. Ongoing efforts include the development of a FAQ, a summary statement (SRO Resume) guide, and PO guidance. In May 2024, there will be an SRO workshop that will help identify potential questions and pain points early on; staff training will continue in June. Reviewer training will be held April-June 2025, before the first review meetings.

# Interim report: CSRAC Reviewer Evaluation Working Group (Drs. Delia Olufokunbi Sam and Lynn Yee) (NIH Videocast: 03:18:18)

Dr. Delia Olufokunbi Sam gave an overview of the recent deliberations and how the Reviewer Evaluation Working Group came to the final proposed framework. The working group's charge is to develop a practical framework for evaluating reviewer performance – one that allows for a uniform, structured, consistent, and transparent approach to performance assessment and improvement. CSR's internal evaluation committee developed a model of three domains that characterize a reviewer's performance: 1) Fair, 2) Knowledgeable, and 3) Evaluative. This model served as a baseline that the CSRAC Reviewer Evaluation Working Group would work with. The evaluation framework development process started with a brainstorming session to identify what the key elements of a fair and high-quality review were, refine those evaluation elements, and apply the elements to the existing conceptual framework. After working through various iterations, a revised, simplified framework was created. Dr. Lynn Yee presented the new conceptual reviewer evaluation framework. The key elements of reviewer behavior that support fair review were placed into three categories: 1) Provide Evaluative/Critical Assessments, 2) Adhere to Established Review Guidelines, and 3) Provide Open-minded Assessment. The model elaborates each of these top-level concepts with more specific behaviors.

Council was very pleased about the framework proposed and emphasized the importance that the aspects that make up a good reviewer were captured. A council member raised the concern that scientific expertise was underemphasized in this framework. CSR leadership responded that expertise is fundamental, that we devote much attention to the task; the issue is whether grading expertise is appropriate in the context of evaluating reviewer performance. It was also pointed out that as the model is specified, it does address reviewer expertise. For example, it defines evidence of "Provide Evaluative/Critical Assessments" as "Critiques are substantive, specific, and provide sufficient rationale to discern evaluation." A "substantive critique" that provides "sufficient rationale" must surely tap scientific expertise. Council generally agreed that there was great value in the conceptual model, even if not all characteristics can be measured. Communicating what specific characteristics we are expecting from reviewers to reviewers, chairs, SROs can itself have a substantial impact. Having a fair evaluative structure in place will help frame the culture change we are looking for.

# Interim report: CSRAC Reviewer Recognition Working Group (Drs. Kristin Kramer and Michelle Janelsins-Benton) (NIH Videocast: 03:56:28)

Dr. Kristin Kramer began by reviewing the CSRAC Reviewer Recognition Working Group's charge to identify the actions NIH can take to increase the prestige of peer review. The objective of this group is not focused on getting an individual to say yes when an SRO invites them to a review, it is rather looking to shape the culture around peer review service to ensure the process is recognized as prestigious, a service to the community, and a benefit to the institutions. In terms of prestige, the group wants peer review to be recognized as valuable when relating to the advancement of knowledge, and prestigious for the institution and for the reviewer themselves. In terms of service to the community, the group

wants people to recognize that peer review plays a role in advancing science and the overall public health impact by identifying the most meritorious research. Regarding the benefit peer review has on institutions, it will enhance their reputation, increase visibility, and allow researchers to gain experience reviewing applications, as well as fostering collaborations.

Dr. Michelle Janelsins-Benton highlighted the actions the working group is taking to improve reviewer recognition, promote peer review value, and ways to enhance culture. One proposal is a letter from the NIH or CSR Director, notifying institutions of service by their faculty. This is an opportunity to highlight the value of peer review (for society, scientific community, institution). Also, letters of this fashion are often utilized and included in promotion materials. Additional actions being discussed to promote peer review value and the enhancement of culture include communications to the community from NIH in the form of conferences/scientific events outreach, blogs, and the voiced encouragement to institutions to host seminars regarding this topic. Also, the collection of data to assess links between peer review service and funding success will be completed.

Council provided several additional thoughts and suggestions of ways to enhance reviewer recognition. Letters to the institutions should be explicit with the content of the peer review, highlighting the specific details per the individual (served x number of times, days/hours of service, role). The recipients of the letters are under consideration, and the idea of the reviewer providing a list of the recipients they'd prefer was brought forth. The importance of the correct frequency of letter sending was noted, as the impact of the letter diminishes in significance when sent too often. A council member noted that awards are worth considering, because there is evidence that awards contribute, over time, to faculty salaries. In addition, the member suggested engaging with organizations that evaluate educational/research institutions, such as AAU or AAAS, with the goal of finding ways peer review service might be incorporated into the evaluations those organizations do.

The meeting adjourned at 3:12 p.m.

We hereby certify that, to the best of our knowledge, the foregoing minutes of the March 25, 2024, CSRAC meeting are accurate and complete.

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