The Center for Scientific Review Advisory Council (CSRAC) convened at 8:30 a.m., Monday, September 23, 2019, at the Center for Scientific Review (CSR), 6107 Rockledge Drive, Bethesda, MD. The entire meeting was held in open session. Noni Byrnes, Ph.D., presided as chair.

Members Present

Noni Byrnes, Ph.D.  
Jinming Gao, Ph.D.  
Alfred L. George, M.D.  
Yasmin Hurd, Ph.D.  
Deanna L. Kroetz, Ph.D.  
José López, M.D.  
Miller, Scott J., Ph.D.  
Tonya Palermo, Ph.D.

Ad-Hoc Participants

Julie C. Price, Ph.D.  
Mark A. Peifer, Ph.D.  
Elizabeth Villa, Ph.D.

Michelle Janselsins-Benton, Ph.D.  
Sara Zimmer, Ph.D.

Cathleen Cooper, Ph.D., was the executive secretary for the meeting.

CSR/NIH/HHS Employees Present

Dr. Abdelouahab Aitouche  
Dr. Sally Amero  
Dr. Meena Ananthanarayanan  
Dr. Aftab Ansari  
Dr. Jon Arias  
Dr. Armaz Aschrafi  
Dr. Laura Asnaghi  
Dr. Nuria Assa-Munt  
Melinda Bennett  
Dr. Thomas Beres  
Dr. Liliana Berti-Mattera  
Dr. Dipak Bhattacharyya  
Dr. Larry Boerboom  
Dr. Jasenka Borzan  
Dr. John Bowers  
Dr. Vanessa Boyce  
Dr. Jenny Browning  
Dr. Jian Cao  
Dr. Mark Caprara  
Dr. Gene Carstea  
Dr. Michael Chaitin  
Dr. Maribeth Champoux  
Dr. Margie Chandler  
Dr. Hui Chen  
Dr. Jingshan Chen  
Dr. Yuanna Cheng  
Rebecca Chiang  
Dr. Thomas Cho  
Dr. Chi-Wing Chow  
Dr. Julius Cinque  
Dr. Wilson Compton  
Dr. Hope Cummings  
Trinette Curtis  
Dr. Mary Custer  
Dr. Aurea de Sousa  
Dr. Maria Debernardi  
Chuck Dumais  
Dr. Ramona Dumitrescu  
Dr. Valerie Durrant  
Dr. Samuel Edwards  
Dr. Robert Elliott  
Bonnie Ellis
Welcome and Introductions

Dr. Byrnes welcomed CSRAC members and attendees to the 18th CSRAC meeting. After the members introduced themselves, they approved the minutes from their March 25, 2019, meeting.

New Members: Dr. Byrnes welcomed the newest member: Elizabeth Villa, Ph.D., from the University of California, San Diego. She then introduced two ad hoc participants: Michelle Janelins-Benton, Ph.D., University of Rochester Medical Center; and Sara Zimmer, Ph.D., University of Minnesota Medical School.

CSR Update (NIH Videocast: 2:54)

After discussing the scope of CSR’s operations and staff changes, Dr. Byrnes provided an update on CSR initiatives:

Securing Recommendations of Qualified Reviewers will involve a new system that will allow scientific societies and NIH institute program staff to enter names of qualified reviewers, and also will provide a single interface for Scientific Review Officers (SROs) to view potential reviewers for their study sections.

Randomizing Application Discussion Order instead of ordering discussion by preliminary scores will enhance integrity, fairness, and reviewer engagement.

Release of Not-Discussed Summary Statements will now occur when SROs complete them. Prior policy required SROs to delay their release until after release of those for scored applications. Community feedback drove this change.

Active Management of Reviewers to Reduce Undue Influence is advancing, where SROs carefully consider service records and avoid those with excessive service when recruiting reviewers.

The Recent Substantial Service Program is Being Reconsidered. It allowed continuous application submission for ad hoc reviewers who serve frequently. CSRAC advised limiting this program to appointed chartered reviewers and council members.
The Pool of Associate/Assistant Professors on Study Sections will be increased by emphasizing scientific qualifications (publications, funding) -- not reviewer rank -- with the goal of increasing the diversity and quality of perspectives.

**ENQUIRE: Evaluating PaNel QUality In REview:** this is the external/internal review process CSR is using to assess and reorganize its review groups.

A CSR Anonymization Study is nearing completion. Preliminary findings shared with council were: redaction of applications did not appear to make a difference in reviews for African-American applicants while redactions appeared to slightly worsen scores for White applicants. CSR is working to further analyze the results. Dr. Byrnes also noted that CSR is helping to pilot implicit bias training for SROs, reviewers, and Program Officers.

Simplifying Peer Review Criteria is an effort CSR wants to tackle with the help of the Council, scientific community, and the NIH Office of Extramural Research because the length and complexity of NIH review criteria has become a burden for reviewers. Members were very supportive.

**ENQUIRE**

**Healthcare Delivery and Patient Management Study Sections** *(NIH Videocast: 01:15:00):* Valerie Durrant, Ph.D., Director, AIDS Behavioral, and Population Sciences, said that the external panel recommended a reorganization that created 11 vs. 9 study sections and modified the scope of all study sections to center on a focal area with overlap in the boundaries. The internal panel added refinements to this plan.

**ACTION:** CSRAC members endorsed the proposed reorganization plan.

**Gastrointestinal, Renal, Endocrine, Metabolism Study Sections** *(NIH Videocast: 1:36:49):* Lawrence Boerboom, Ph.D., Director, CSR Division of Physiological and Pathological Sciences, gave an overview of the external and internal panel evaluations.

- **Kidney and Urology Study Sections:** The external panel recommended merging two small study sections: Kidney Molecular Biology and Genitourinary Organ Development, and Urology and Urogynecology. The internal panel proposed reorganizing them with the Pathobiology of the Kidney Disease study section to create two study sections.

- **Gastroenterology Study Sections:** The external panel only suggested adding topics to the Clinical, Integrative and Molecular Gastroenterology study section.
• **Diabetes, Nutrition and Endocrinology Study Sections**: The external panel suggested reorganizing them into 5 study sections focused on diabetes, obesity, nutrition, metabolic disease, and cellular/molecular endocrinology.

The internal panel took a more holistic approach to the second and third groups. They proposed three study sections in the GI/nutrition area and four study sections for diabetes, obesity, endocrine area organized along a continuum from basic to clinical.

**Discussion**: Dr. Byrnes said CSR will do a mock sort of applications into the proposed study sections based on the internal panel’s guidance and share a revised plan with the external panel.

**Cardiovascular, Vascular and Hematology Study Sections** (NIH Videocast: 1:55:51): Dr. John Bowers, Director, CSR Division of Translational and Clinical Sciences, explained that the external panel took a clean-slate approach. They proposed eight overlapping study sections, which included ones for basic science, preclinical research, clinical research, and blood/transfusion research. The panel recommended moving blood cancer into an oncology review group. The internal panel agreed with the plan. The next steps will be to do a mock sort of applications and address process issues.

**Functional Neuroscience Study Sections** (NIH Videocast 2:11:47): Bruce Reed, Ph.D., Director, CSR Division of Neuroscience, Development and Aging, noted that the external panel proposed changes opposed by the internal panel:

- Merge clinical/translational research on the front and back of the eye into twin review groups. The internal panel, particularly the National Eye Institute, held that the areas of science were too different, and discrete study sections are better paired to program needs. They also noted that historically cornea/front of the eye applications had not fared well when reviewed along with retinal applications.

- Narrow the Neuroendocrinology, Neuroimmunology, Rhythms and Sleep study section to rhythms and sleep. The internal panel noted there were not enough applications to do this. Multiple representatives raised concerns about areas of science that would lack a review home were this to be implemented.

**Discussion and ACTION**: Members discussed the value of more broadly constructed study sections where experts from different fields work together on study sections. They recommended that CSR should proceed with the external panel’s plan for the twin vision study sections.

**SRO Training at CSR** (NIH Videocast 2:30:48)

CSR’s New SRO Training and Development Coordinator, Craig Giroux, Ph.D., said the SRO serves as an honest broker of the peer review process and is trained in
review principles and policies, adoption of best practices, and management of a highly regulated administrative process.

New SROs receive one-on-one training from their chief, shadow/observe study section meetings, and participate in an intensive 13-week training course. Continuing education is provided by an integrated team of training coordinators, committees and chiefs who employ multiple training tools: an SRO Handbook, best practice guidance, and monthly workshops. SROs are trained to apply principles and to adopt best practices as appropriate for new review situations.

Implementation of the Cancer Moonshot (NIH Videocast: 2:55:55)

Dinah Singer, Ph.D., Deputy Director of Scientific Strategy and Development, at the National Cancer Institute (NCI) said the Cancer Moonshot initiative was announced in 2016 to accelerate our understanding of cancer from basic biology research to translational and clinical research as well as screening and prevention.

A blue-ribbon panel was charged to help define the vision, goals, and to help identify research activities as well as opportunities and challenges. Members included clinicians, researchers, advocates, and representatives from pharma and IT. NCI established seven working groups and solicited 1,600 ideas from the public and scientific community.

Dr. Singer described the 13 recommendations made by the panel. She then highlighted key Moonshot initiatives that have been implemented and thanked CSR for reviewing so many Moonshot applications.


CSR member Mark Peifer, Ph.D., gave an overview of CSR’s Early Career Reviewer (ECR) program, which was established to help early career researchers become more competitive applicants and enrich the pool of NIH reviewers. He explained that community concerns about the program led CSR to establish an ECR Working Group to collect more input and help address the concerns. The working group includes another CSRAC member, Dr. Elizabeth Villa, Ph.D., two SROs (Drs. Kristin Kramer and Antonello Pileggi) and four former ECRs.

Working Group Recommendations Presented by Dr. Villa:

- Increase training opportunities for ECRs by increasing the number of ECRs per panel (up to three), create mock study section videos, and increase outreach and publicity.

- Revise the criteria to (1) publishing two papers since earning a Ph.D. as first/senior/corresponding author with at least one published as faculty; (2) having submitted an NIH grant application aside from F series; and (3) not having a MIRA grant.
• Publicize criteria, recruitment constraints, and guidance on getting selected.

• Begin to deal with the large backlog by removing PIs who are no longer interested or who have reviewed for NIH ICs.

• Formalize SRO best practices for training ECRs.

Members discussed the revised publication requirement. They also had a long discussion on the value and impact of increasing the number of ECRs on a panel.

Discussion: Dr. Byrnes suggested a compromise between the current policy of one ECR per panel and the working group’s suggestion of three ECRs per panel -- increasing the number of ECRs per panel to two and reducing the number of applications they review to two. Members liked the new requirement for ECRs to have submitted an NIH application but recommended that ECRs also be required to have received a summary statement. Members endorsed the new publication requirement.

Review Integrity Training Working Group Report (NIH Videocast 4:35:47)

CSR member Scott Miller, Ph.D., said that maintaining the integrity of NIH peer review is key to maintaining public trust and ensuring the candor/quality of reviews. A CSRAC Review Integrity Training Working Group was formed that included three other CSRAC members (Drs. Jinming Gao, Deanna Kroetz, Tonya Palermo, and Denise Wilfley), two SROs (Drs. Miriam Mintzer and Raul Rojas) and CSR’s Research Integrity Officer, Dr. Kathryn Koeller.

Web-Based Training: This group has focused on developing a web-based training module for reviewers that:

• Covers key NIH policies/general principles
• Includes a range of violation case studies
• Provides reviewer guidance on how to respond to possible violations
• Has a brief, interactive format and is trackable

Dr. Miller described and demonstrated a training module in development that included videos, text and exercises.

Next Steps included revising per Council suggestions, reassessing videos for brevity, pilot testing with SROs and reviewers, and determining how to track use.

Discussion: Members discussed the importance of making it clear that NIH is very serious about review integrity and violations can lead to significant consequences. They also discussed the importance of covering low-level infractions and requiring the training in the future.
Closing Remarks and General Discussion (NIH Videocast: 5:03:18)

Members raised the following issues: the value of mock reviews for training ECRs, the need to gather better data on the ECR program, the possibility of weighting criteria scores to produce final impact scores to make scoring more transparent.

The meeting adjourned at 3:03 p.m.

We do hereby certify that, to the best of our knowledge, the foregoing minutes of the September 23, 2019, CSRAC meeting are accurate and complete. The minutes will be considered at the next meeting of the Advisory Council, and any corrections or comments will be made at that time.

_____________________________
Noni Byrnes, Ph.D.
Director Center for Scientific Review Advisory Council

_____________________________
Cathleen Cooper, Ph.D.
Executive Secretary
Center for Scientific Review
Advisory Council