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

## March 25, 2019

The Center for Scientific Review Advisory Council (CSRAC) convened at 8:30 a.m., Monday, March 25, 2019, at the Center for Scientific Review (CSR), 6701 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.
Deanna L. Kroetz, Ph.D.
Scott J. Miller, Ph.D.
José A. López, M.D.

Tonya M. Palermo, Ph.D. Mark A. Peifer, Ph.D. Julie C. Price, Ph.D. Elizabeth Villa, Ph.D. (ad hoc) Denise E. Wilfley, Ph.D.

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

## **CSR/NIH/HHS Employees Present**

Dr. Abdelouahab Aitouche

Yvette Alston

Dr. Meena Ananth

Dr. Aftab Ansari

Dr. Armaz Aschrafi

Dr. Julia Barthold

Dr. M-J Belanger

Melinda Bennett

Dr. Thomas Beres

Dr. Liliana Berti-Mattera

Dr. Dipak Bhattacharyya

Dr. Seetha Bhagavan

Dr. Juraj Bies

Dr. Larry Boerboom

Dr. John L. Bowers

Dr. Vanessa Boyce

Dr. Gene Carstea

Dr. Michael Chaitin

Dr. Margaret Chandler

Dr. Hui Chen

Dr. Jingshan Chen

Dr. Yuanna Cheng

Rebecca Chiang Dr. Thomas Cho Dr. Chi-Wing Chow Joyce Coffman Dr. Francis Collins

Mark Cruz

Dr. Hope Cummings

**Trinette Curtis** 

Dr. Maria Adele Debernardi

Brenda Derflinger

Dr. Gniesha Dinwiddie

Dr. Gianina Dumitrescu

Dr. Sheba Dunston

Dana Ellis

Rebecca Feuerherd

Dr. Elia Femia

Lia Fleming

Dr. Lauren Fordyce

Dr. Gabriel Fosu

Colin Fraser

Dr. Robert Gersch

Dr. Susan Dale Gillmor

Alexandra Gomez Dr. Inna Gorshkova

Saba Hamid

Ann Graham-Hamlin

Dr. Liying Guo
Dr. Ileana Hancu
Dr. Dianne Hardy
Dr. Martha Hare
Dr Jonathan K Ivins
Dr. Ray Jacobson
Dr. Rolf Jakobi
Dr. Ingrid Li

Dr. Nang Ei Ei Khaing Dr. Natalia Komissarova

Dr. Katie Koeller Dr. Kristin Kramer Dr. Raj Krishnaraju Dr. Rajiv Kumar Dr. Patrick Lai Dr. Xiang-Ning Li Dr. Mark Lindner

Mary Liu

Dr. Songtao Liu
Dr. Yi-Hsin Liu
Dr. Sharon Low
Dr. Weihua Luo
Don Luckett
MonaLisa Lynch
Dr. James Mack
Dr. Kathy Malinda
Dr. Lee Mann
Dr. Khalid Masood
Dianne Massay

Dr. Lystranne Maynard-Smith

Denise McGarrell Dr. Miriam Mintzer Dr. Baljit Moonga Fauzia Moore-Alfred

Dr. Alok Mulky Dr. Suzan Nadi Candice Newman Dr. Weijia Ni Paula Orye

Dr. Devon Oskvig Ashlee Outlaw Dr. Gagan Pandya Dr. Sussan Paydar

Dr. Tom Peterson

Allan Philip

Dr. Antonello Pileggi

Dr. Alex Politis Dr. John Pugh Dr. Mei Qin

Dr. Syed M. Quadri

Fatima Reed

Dr. Srikanth Ranganathan

Wendy Remsburg Leo Reynolds Johnny Richardson Dr. Raul Esteban Rojas

Sheila Rosa

Dr. Amy Rubinstein Dr. Suzanne Ryan Dr. Soheyla Saadi Petal Alexis Sampson

Valerie Sanders Dr. Sarita Sastry Dr. Geoff Schofield Dr. Marci Scidmore Dr. Brian Scott Sharon Sealey

Dr. Michael Selmanoff

Dr. Ben Shapero

Dr. Terez Shea-Donohue Dr. Elyse Schauwecker

Lata Shelat Mike Showe

Dr. Elaine Sierra-Rivera

Dr. Vonda Smith Dr. Afia Sultana Nisrin Suterwala Shema Teymourian

Tho-Van Tran
Dr. Jingsheng Tuo
Dr. Mark Vosvick
Diane Wallace
Dr. Jian Wang
Dr. Maqsood Wani

Carla Ward
Carlton Williams
Dr. David Winter
Dr. Andrew Wolfe
Dr. Guo Feng Xu
Dr. Jean Yuan

#### **Members of the Public Present**

Joe Davis -- Oak Ridge Associated Universities

Dr. Yvette Seger -- Federation of American Societies For Experimental Biology

#### **Welcome and Introductions** (NIH Videocast 0:00:01)

Dr. Noni Byrnes, CSR Director, welcomed CSRAC members and attendees to the 17th CSRAC meeting. After members introduced themselves, they approved the minutes from their September 24, 2018, meeting. Dr. Byrnes then welcomed the NIH Director, Dr. Francis Collins, M.D., Ph.D.

#### Some Observations from the NIH Director (NIH Videocast 0:02:51)

Dr. Collins thanked CSR staff members for their hard work advancing the most rigorous and respected peer review system in the world. He noted that CSR has grown dramatically since 1946 due to strong yet flexible foundations. He then said he was confident that Dr. Byrnes will successfully build on these foundations as she leads CSR forward.

NIH peer-reviewed science has led to significant advances in life expectancy and has made NIH a respected steward of medical and behavioral research. Dr. Collins focused on advances and promising opportunities that have arisen since the human genome was sequenced. He then highlighted some of NIH's most promising research initiatives and thanked CSR for effectively managing so many of them, particularly when they call for quick and specialized reviews.

**Discussion:** (NIH Videocast: 0:57:51)

#### **CSR Advisory Council Update** – Dr. Byrnes (NIH Videocast 1:11:51)

Dr. Byrnes said CSR is seeking greater engagement with CSRAC members, and the Center is now using Twitter, Facebook, and a new Review Matters blog to increase engagement with the community.

**Study Section Quality:** CSR has a new framework to evaluate CSR scientific review groups (SRGs). The Evaluating Panel Quality in Review (ENQUIRE) approach builds on CSR's current evaluation model that uses external experts to assess how well SRGs are matched to the science. The new panels also will consider publication/bibliometric data. Separate internal panels will consider SRG process issues.

**Reviewer Quality:** CSR will seek to broaden the reviewer pool, limit overutilization of the same reviewers, better incentivize review service, enhance reviewer and chair training, and systemically evaluate reviewers.

**Process Quality:** CSR will work to improve application assignment and referral, advance discussions about the Review Criteria, address concerns about possible reviewer bias, and assess alternative review methods.

**Review Integrity:** Dr. Byrnes discussed how NIH responds to allegations of review confidentiality and integrity, and how NIH is taking proactive measures. She also discussed how CSR works to protect the impartiality of the peer review when a potential reviewer is accused of sexual harassment.

**Discussion:** (NIH Videocast 2:04:02)

### **ENQUIRE - Evaluating Panel Quality in Review**

**Healthcare Delivery and Patient Outcomes-Related Study Section Update --** Valerie Durrant, Ph.D., Director, CSR Division of AIDS, Behavioral and Population Sciences (NIH Videocast 2:25:13)

Dr. Durrant gave an update on CSR's ongoing assessment of its nine Healthcare Delivery and Patient Outcomes SRGs. The External Scientific Evaluation Panel recommended changes of various degrees for all SRGs, ranging from updating the descriptions to changing the panel name to disbanding and reforming SRGs. The recommendations are currently being considered by a trans-NIH panel, incorporating consideration of science and process evaluation. The final recommendations will go to CSRAC and to the Extramural Activities Working Group for approval with a targeted implementation for May 2020 council dates.

Dr. Durrant discussed general insights and challenges and provided details on the internal process evaluations, which include data summaries, site visits by senior staff, and surveys of reviewers and program officers.

Kidney, Urology, Gastrointestinal, Diabetes, Obesity, Nutrition and the Endocrine SRGs -- Larry Boerboom, Ph.D., Director, CSR Division of Physiological and Pathological Sciences (NIH Videocast 2:49:22)

Dr. Boerboom delivered an update on an ENQUIRE review of 11 SRGs in the areas of kidney, urology, gastrointestinal, diabetes, obesity, nutrition and the endocrine system.

He noted that the external panel has met and the following are examples of their proposed recommendations:

- Retain the Pathobiology of Kidney Disease SRG.
- Merge the Kidney Molecular Biology and Genitourinary Organ Development SRG with the Urology and Urogynecology special emphasis panel.
- Reorganize Cellular Aspects of Diabetes and Obesity, Clinical and Integrative
  Diabetes and Obesity, and the Integrative Physiology of Obesity and Diabetes
  SRGs. Have basic, integrative and clinical studies reviewed in the same
  review groups with one SRG focused on diabetes and another on obesity.

• Seek input from the internal panel on what to do about the small number of applications that do not fit in the two new SRGs.

CSR has completed the surveys of reviewers and program officers. The internal panel is partially assembled.

**Discussion with Dr. Boerboom and Durrant** (NIH Videocast: 3:00:57)

**External Scientific Review of Study Sections on Biology and Disorders of Vision** -- Bruce Reed, Ph.D., Director, CSR Division of Neuroscience, Development and Aging (NIH Videocast 3:15:05)

Dr. Reed presented a reorganization plan for biology and disorders of vision SRGs. The recommendations were developed through a pre-ENQUIRE process: a single panel of external experts focused on a narrow set of applications, which are primarily reviewed in the Biology of Visual Systems SRG, the Diseases and Pathophysiology of the Visual System SRG, and a recurring special emphasis panel (SEP) on the ocular surface (ZRG1 BDCN J81).

The external panel recommended that CSR:

- Charter J81 and name it the Ocular Surface and Anterior Segment of the Eye SRG
- Create a new SEP for Visual Circuit Development, Dissection, and Degeneration.

Members expressed concerns about the narrow scientific scope of the review, contrasting it with ENQUIRE. They noted that CSR's mock sort indicated the visual circuits SRG would be too small. Council thus declined to implement the Visual Circuits SEP and voted to defer action on chartering J81 pending ENQUIRE review. They requested that CSR prioritize the review of these SRGs in the context of the ENQUIRE process.

#### **Discussion** (NIH Videocast 3:29:21)

**Council Working Group Review Integrity Discussion**—Kathryn Koeller, Ph.D., CSR Research/Review Integrity Officer (NIH Videocast 3:42:23)

CSR has created a working group to advance review integrity by raising reviewer awareness and supporting culture change. Dr. Koeller said the group includes herself, two CSRAC members (Drs. Jinming Gao and Denise Wilfley), and two CSR Scientific Review Officers (Drs. Miriam Mintzer and Raul Rojas). The group has begun work on a web-based training module for reviewers.

Dr. Koeller said the number of reported cases is small, but NIH is taking review integrity violations seriously. She described different types of cases, such as breaches of confidentiality, review tampering, inappropriate contact between

applicant and reviewer, undeclared conflict of interest, and misappropriation of intellectual property.

**Discussion** (NIH Videocast 3:52:23)

**3 Step Prize Review: Antimicrobial Resistance Diagnostics Challenge** -- Gagan Pandya, Ph.D., Scientific Review Officer (NIH Videocast 4:09:25)

Dr. Pandya described the design and implementation of a technical review for a \$20 million Federal prize Challenge competition. This three-step, 4-year competition is a joint effort of NIH and the Biomedical Advanced Research and Development Authority to develop new rapid diagnostic technology for combatting antimicrobial drug resistance. Relatively small incentive awards from the first two steps could lead to \$19 million awards for up to three prize winners. The technical evaluation of the final step is scheduled for the summer of 2020. It will include independent performance evaluations the submitted prototypes in CLIA-certified laboratories.

Due to many unusual attributes of the overall process of the Challenge competition, compared to NIH grant application, CSR developed a unique process to review solutions (applications) in a compressed timeline with a large team of CSR SRO's and support staff.

**Discussion:** (NIH Videocast time 4:19:23)

**Nominating Study Section Members –** Bruce Reed, Ph.D., Director, CSR Division of Neuroscience, Development and Aging (<u>NIH Videocast 4:22:51</u>)

Dr. Reed said who reviews is very critical to the vitality of NIH peer review. Each year, CSR produces reviewer nomination slates to replenish, refresh, and keep current the core reviewers who serve on its 175 chartered review groups.

He then described the main criteria for evaluating potential reviewers: expertise, stature, funding, diversity considerations, and review skills. In addition, candidates are screened for ethical/integrity concerns as well as for the potential to have excess influence on reviews.

These slates are vetted at multiple levels to meet CSR, NIH, HHS, and Federal Advisory Committee Act guidelines. Final approvals include those of the CSR Director and the Office of the NIH Director. CSR commits substantial resources to this 10- to 12-month process so CSR will have expert panels that incorporate diverse opinions and are free from inappropriate influences.

**Discussion:** (NIH Videocast 4:40:29)

Closing Remarks and General Discussion – Dr. Byrnes (<u>NIH Videocast:</u> 4:56:27)

CSRAC focused on midcareer PI success rates and challenges. A member suggested that CSR cluster reviews by career stage. Dr. Byrnes said this approach would be a complicated one that might not achieve the anticipated results. She then focused on another approach: adjusting the emphasis on career stage in reviews. Members discussed this idea as well as the possibility of having NIH initiatives that target midcareer PIs. Dr. Byrnes said the issue goes well beyond review, so she will share the Council's concerns about midcareer applicants with the appropriate NIH extramural committees.

The meeting adjourned at 2:58 p.m.

We do hereby certify that, to the best of our knowledge, the foregoing minutes of the March 25, 2019, meeting of CSRAC 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