U.S. Department of Health & Human Services



CSR Advisory Council Update March 2019

Noni Byrnes, Ph.D. Director Center for Scientific Review

Welcome New CSR Advisory Committee Regular & Ad Hoc Members



Mark Peifer, Ph.D. 1/1/2019 to 12/31/2022

Professor, Department of Biology Michael Hooker Distinguished Professor University of North Carolina at Chapel Hill



Denise Wilfley, Ph.D.

4/1/2018 to 12/31/2021

Professor, Psychiatry, Pediatrics, Psychological and Brain Sciences Washington University



Elizabeth Villa, Ph.D. Ad-Hoc

Assistant Professor Division of Biological Sciences University of California, San Diego



Leadership and Management Transitions



Xiang-Ning Li

Peer Review and IT Coordinator



Sharon Gubanich

Vonda Smith

DRR Assistant Directors



Michelle Timmerman

DRR Associate Director Guide Liaison Officer

Retirement



Robert Freund Chief AIDS and Related Research (AARR) IRG Chief



Karyl Swartz Associate Director Diversity & Workforce Development

Move



Joanna Bare Former: Executive Officer Now: Director of Business Transformation, NHLBI



Underlying Principles





Transparent, data-driven decision-making

Involvement/engagement of stakeholders Open, multi-directional communication strategies



Plans for Council Membership and Meetings



Membership

- Broaden membership to include all career stages (Early/Mid Career)
- Total number of slots increased by 2 (from 11 to 13)
- Publish council member information on website organization (photos?)



Meeting Content

- 1. Advice on study section restructuring, initiatives, processes, evaluations (no change)
- Higher level of engagement between council meetings council working groups with CSR staff, Council members and external scientific community members
- 3. Peek under the hood how does CSR...? Can we do it better?



Engagement with the Scientific Community



Acknowledgment: Kristin Kramer & IMB



Redesigned CSR Website



Acknowledgment: Kristin Kramer & IMB



Scope of Review Operations





CSR Continues to Review ~75% of all NIH Applications



FY18 Applications



Types of Review – A Variety of Special Initiatives and Inter-agency Collaborations



NIH All-of-Us Program Reviews, plus Other Transaction Authority Reviews



Brain Research through Advancing Innovative Neurotechnologies (BRAIN)



NIGMS Maximizing Investigators' Research Awards (MIRA)



Native American Research Centers for Health (NARCH)



All Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI)/Common Fund review



Many IC PARS and multi-IC RFAs

FDA/Tobacco



Global Alliance for Chronic Disease



<u>Investigation of Co-occurring conditions across the</u> <u>Lifespan to Understand Down syndrome</u> (INCLUDE)



Cancer Moonshot



Alzheimer's Disease (AD)



Office of Research on Women's Health (ORWH) at NIH -Specialized Centers of Research Excellence (SCORE) on Sex Differences



All Fogarty International Center Reviews



All Office of the Director (OD)/Office of Research Infrastructure Programs (ORIP) Reviews



NIH-NSF and NIH-DOE All USA-China Reviews



CSR Continues to Lead in Efficiency/Timeliness



Days from Receipt to SS Release



CSR Budget: FY19 \$138 million



Less than 0.4% of the \$39.3B NIH budget



Quality of Peer Review

Reviewers

- Training reviewers/Chairs consistent, transparent
- Review Service Overuse vs. broadening pool, incentivizing service
- Evaluating reviewers qualifications/expertise, scoring patterns, critiques



Study Sections

- Scientific boundaries (relevance, adapting to emerging areas, perpetuating stale science)
- Output (identification of meritorious science)
- Size appropriate for competition and breadth?

Process

- Confidentiality/Integrity in review
- Bias in review
- Assignment/Referral of Applications
- Review Criteria
- Scoring system



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Evaluating Panel Quality in Review (ENQUIRE) A New Evaluation Framework for CSR Study Sections



Study Sections

Previous Study Section Evaluations at CSR (2003-2015)

- By CSR's internal organizational/management groupings (IRG)
- Input from CSR management only (2004-8)
- Input from chairs/selected reviewers (2008 11)
- Input from blue-ribbon external scientific working group, given data re: application, workload, bibliometric, (2011–15)

Output: Comments about use of surveys, exit interviews, ranking, H-indices, bibliometrics, should Chairs be used to recruit new members, % ND, private discussion with SROs without management to assess IRG function, NIH A2 policy.

** Only **scientific** changes recommended were endorsement of proposals made by the CSR IRG Chief during his/her presentation of the science

Problems:

enter foi

- 1) Reviews by study sections clustered by CSR organizational structure
- 2) Too much info, too broad a scope including both science and process



CSR "SRG Reviews" 2015 - 2018

- Review by **scientific clusters**, not by management/organizational clusters or IRGs (10-20 SRGs)
- Assemble blue-ribbon Working Group (WG) of scientifically broad, senior scientists (with interest in more than one SRG)
- Ask 1 **question** designed to focus discussion on science, not process

"How well does the scientific scope of the study sections align with the current state of the science?"





Multiple Possible Actions for Restructuring Study Sections



Change in scientific guidelines



Merge study sections



Create new study sections



Eliminate study sections



Move an area of science from one study section to another/others



Add emerging areas of science



Study Sections

Example: SRG Review

HIV/AIDS: 9 study sections eliminated, science reorganized into 6 new study sections

🗁 Study Sections			A construction of a construction of the constr
HIV Coinfections and HIV Associated Cancers HCAC Starts 01/2019 Council	AIDS Clinical Studies and Epidemiology Ends 10/201	ACE 18 Council	Ex trigged to a set of the set of
HIV Comorbidities and Clinical Studies HCCS Starts 01/2019 Council	AIDS Molecular and Cellular Biology Ends 10/201	AMCB 18 Council	 Study Sectors Conserver of memory Dataset and the sector of the sector of
HIV Immunopathogenesis and Vaccine Development HIVD Starts 01/2019 Council	AIDS-Associated Opportunistic Infections and Cancer Ends 10/201	AOIC 18 Council	Extension
HIV Molecular Virology, Cell Biology, and Drug HVCD Development Starts 01/2019 Council	AIDS Immunology and Pathogenesis Ends 10/201	AIP 18 Council	Approximate
HIV/AIDS Intra- and Inter-personal Determinants and HIBI Behavioral Interventions	AIDS Discovery and Development of Therapeutics Ends 10/201	ADDT 18 Council	A Bit Street proving street of the stre
Starts 01/2019 Council	Behavioral and Social Consequences of HIV/AIDS Ends 10/201	BSCH 18 Council	The second secon
Population and Public Health Approaches to HIV/AIDS PPAH Starts 01/2019 Council HIV/AIDS Fellowship Special Emphasis Panels (AARR F17	Behavioral and Social Science Approaches to Preventing HIV/AIDS Ends 10/201	BSPH 18 Council	COMPARTIES OF COMPARENCE
Fellowship SEP)	NeuroAIDS and other End-organ Diseases	NAED	Teaching and Standard Strand Revenue Second Revenue Of Trans International Standard Revenue Standard Revenue
HIV/AIDS Small Business Applications: AARR Small AARR (10) Business Special Emphasis Panels (AARR Small Business SEPs)	HIV/AIDS Vaccines	VACC	https://public.csr.nih tudySections/DABP/
HIV/AIDS Small Business Applications: AARR Small Business Special Emphasis Panels	Ends 10/201	.8 Council	





Scientific Reorganizations of Study Sections Thus Far...



Visual Sciences





ENQUIRE (Evaluating Panel Quality in Review) New Framework/Process for Study Section Evaluation (2019)

- Largely builds on CSR's existing successful model of scientific SRG Reviews external panel to evaluate science by examining workload trends, guidelines, random sample abstracts/specific aims, adds in publication/bibliometric data.
- Adds in a process evaluation component internal NIH panel to look at process issues e.g. IC distributions, scoring patterns, reviewer/PO surveys, discussions, rosters, ESI application/award rates, etc.





SRG Reviews (2015-2018) to "SRG Reviews" completed (scientific restructuring only): **Bioengineering** 10 12 11 Imaging 11 15 **Basic Cancer Biology cluster** 9 **HIV/AIDS** 15

ENQUIRE...(2019-)

ENQUIRE (Scientific restructuring, adding in bibliometrics, process evaluation)



In progress: Health delivery/patient outcomes



In progress: GI/renal and endocrine/metabolism



Coming up: Cardiovascular





Key Aspects of ENQUIRE

- Combines strength of **expert opinion** and **objective metrics**
- **Stakeholder** engagement external scientific community, Council and ICs
- **Continuous and systematic** approach Evaluate ~20% of the study sections each year (i.e. a study section is evaluated every 5 years).
- Addresses both **NIH Strategic Plan** element "Optimize approaches to inform funding decisions" and **CSR's mandate** to continuously examine the function





- One year per cluster
- 3-4 clusters per year (20% of study sections)
- Iterative Approach Continuous refinement/modification of process based on experience and feedback
- Critical to success matching referral of applications and reviewer expertise to redefined scientific content of study section



Quality of Peer Review

Study **Sections** 8 **Reviewers Process**

Study Sections

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Reviewers

- Evaluating reviewers qualifications/expertise, scoring patterns, critiques
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Process

- Confidentiality/Integrity in review ۲
- Bias in review •
- Assignment/Referral of Applications
- **Review Criteria** •
- Scoring system
- Current review process





12 Year Service History of Reviewers

Participated in meetings in last 2 Years



27,070 distinct reviewers / 393,433 meetings





12 Year Service History of Reviewers

Participated in meetings in last 2 Years







Reviewers: Future Plans

- Broadening the pool of reviewers, limiting overutilization of same reviewers
- Incentivizing peer review Solicit ideas via social media? Prize?
- Development of online training modules goals: consistency, adaptability, transparency to applicant community
- Continuation/enhancement of annual incoming chair training
- Systemic Evaluations of Reviewers scoring behavior, consistency, critique quality



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Process: Future Plans

- Assignment/referral of applications automation for less complex decisions, transparency of process, enhanced communications
- Scoring System percentiling versus ranking
- Review Criteria simplification, focus on scientific input, limit administrative elements (needs NIH-wide discussion)
- Bias address results of study (fall 2019); Implicit bias training pilot
- Experiment with different designs of peer review process





Review Integrity



ACTIONS

- Following up on every allegation
- Actions have included
 - Deferral of application
 - Withdrawal of application
 - Removal from serving on peer review committees
 - Notifying the institution of the PI or reviewer which has led to personnel actions
 - Pursuing government-wide suspension and disbarment, or referral to other agencies for criminal violations

Coming: Loop back to informant



PRO-ACTIVE MEASURES

- Review Integrity Officer
- Enhanced Reporting SRO signature
- Enhanced SRO Awareness and Training
- Reviewer/Chair Targeted Training, Case Studies
- Tighter IT controls
- Outreach to scientific community culture change

Sexual Harassment

NIH National Institutes of Health Turning Discovery Into Health			Search NIH NIH Employee Intr		Intranet Staff Dir	ectory En Español		
Health Information	Grants & Funding	News & Events	Research & Training	Institutes a	IL NIH	About NIH		
fame - About NDH - Who We Are - The N	Di Director							
THE NIH DIRE	CTOR							
The NIH Director	February 28, 2019			Rel	ated Links			
Photo Gallery	Update on NIH's efforts to address sexual harassment in science			SS website				
Congressional Testimonies Idvisory Groups				Director's Statement: Changing the culture of science to and sexual harassment				
Adeo & Sound Gallery Articles								
itatements	As the NIH Director stated in September, sexual harassment is about power. The goal of the perperstor, most commonly but not exclusively a man, is to objectify, exclude, demoralize, diminish, and coerce the victim, most commonly a woman, to exert power over her. It's morally indefensible, it's unecceptable, and it presents a major obstacle that is keeping women from achieving their rightful place in science.							
	Victims of harassment know this all too well. Sexual harassment does not just damage the careers of those who have encountered it, it can leave deep scars and psychological effects that reverberate for a lifetime. The reports of scientists and students shared through the #NeToSTEM movement portray a heartbreaking story of opportunities lost, pain suffered, and a systemic failure to protect and defend. To all those who have endured these experiences, we are sorry that it has taken so long to acknowledge and address the climate							
	National Academie "federal agencies n concerned that NIJ	These steps are only the beginning and are				are not me	eant to usurp the charge of the A	
	of the solution.	a new point of the	Working Group, which will result in concrete recommendations to the ACD, or the					
		This month, the Working Group Changing the Culture to End Sei						
	a wide-range of exp		are confident that these two grou					
		Iseadership of the #METooSTEM with the input of all affected communities, will provide a roadmap for meaningful sustainable culture change.						
	intramural program conversations have							
	the underlying cult contributions to pe agency takes this is	rpetuating th	We can do better. We must do better.					
	The discussions of in June and provide centered around a	e a final repoi	Francis S. Collins, M.D., Ph.D., Director					

· Demonstrating accountability and transparency: We want to send a clear message to the institutions we fund and researchers who lead the research that sexual harassment is unacceptable. Discussions from both the NIH Anti-Harassment Committee and the ACD Working Group strongly endorsed an ethos of transparency and accountability to demonstrate the agency's serious commitment to addressing harassment and deterring future inappropriate

Peer Review

- At agency discretion
- Not arbitrary
- **Protection of impartiality/integrity of** review, not implying guilt
- CSR will exercise its discretion to exclude individuals about whom we have concerns, until concerns are resolved
- More on CSR blog later this week: csr.nih.gov/reviewmatters



This Is CSR



We want to hear from you: feedback@csr.nih.gov



DISCUSSION

