

peer review notes

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CSR Update



Job opportunities rise. Now is the time to consider the benefits of working for NIH. There are many challenging and rewarding jobs at CSR. Our staff works on the forefront of their scientific fields, interacts with the best scientists and has a broad impact on the evolution of science.

We expect to hire about 40 new Scientific Review Officers (SROs). Due to the reorganization of our review groups into new divisions, we will recruit four new Integrated Review Chiefs and two new Division Directors: one for our new

Physiological and Pathological Sciences Division and one for our new Translational and Clinical Sciences Division. More information: http://cms.csr.nih.gov/AboutCSR/Employment/.

Unexpected savings found in West Coast review meetings. Cost was not the main reason for having review groups hold one of their three meetings on the West Coast. The goal was to make it easier for West Coast reviewers to participate. Since beginning this initiative, however, costs have soared for hotel meeting rooms in the Washington, D.C., area. The average meeting cost (airfare and hotel) in Washington is nearly \$27,000, while it is about \$15,500 in West Coast cities—a savings of over \$11,000 per meeting!

Enhancing Peer Review Effort to Reduce Burdens and Boost Science

NIH's broad efforts to enhance peer review spring from its commitment to identifying "the best science, by the best scientists, with the least administrative burden," said NIH Director Dr. Elias Zerhouni at the April 30 Peer Review Advisory Committee (PRAC) meeting.



Broad Support: Last year, Dr. Zerhouni convened two working groups to explore more effective ways of conducting review. Leaders from the extramural community served on one and leaders from NIH served on the other. These groups sought broad input from all stakeholders before developing their report and submitting recommendations to Dr. Zerhouni.

Changes Considered Carefully

Since the peer review report was released, NIH has been evaluating which recommendations represent the most holistic approach to transforming NIH's peer review and grants systems.

NIH will implement specific recommendations in phases, based on which ones would likely have the greatest impact on review, in light of costs and benefits. In June, NIH will begin to phase-in the first selection of proposed pilots and changes. Dr. Zerhouni discussed some of the recommendations NIH has under active consideration: shortening the length of R01 and other applications; developing new scoring practices to better assess the merits of an application; and providing applicants clearer and more concise feedback.

Calling peer review the "cornerstone of NIH," Dr. Zerhouni said peer review enhancements are vital in response to the challenges brought by the "increasing breadth, complexity, and interdisciplinary nature of biomedical science" in a no-growth budget environment.

Additional Recommendations

Restructured Applications: The recommendations also call for R01 applications that are structured according to the review criteria with an emphasis on an application's impact and significance in advancing scientific knowledge. Each application would be rated against individual criteria and also given an overall score. Applications would then be ranked, and any necessary adjustments in scoring made.

More Focused Reviews: Reviews themselves would be shorter and more specifically address how applications fared in terms of the criteria—impact, investigator, innovation/originality, research plan and environment. This set of changes will emphasize the impact of the application, versus the methodology, allow reviewers to read more applications and give applicants, councils and staff clearer feedback.

Enhanced Training: The recommendations also call for enhanced training for Scientific Review Officers, chairs and members and incentives for reviewers.

PRAC members enthusiastically supported the overall effort to reduce unnecessary administrative burdens that force people to do more than they need to do to get funded and that shift attention from performing the science to managing the ancillary aspects of science. View Dr. Zerhouni's presentation at http://grants1.nih.gov/grants/peer/prac/index.htm.

Electronic Reviews to the Rescue

Dr. Maqsood Wani faced a special dilemma in March when the best potential U.S. reviewers of grant applications for lymphatic biology research were also the ones submitting the applications. This posed an obvious conflict of interest he had to avoid.



Employing a new, blog-like review format called Asynchronous Electronic Discussion (AED), Dr. Wani secured 12 reviewers from five countries around the world: Switzerland, Austria, Belgium, Finland and the United States. No one lugged a suitcase or boarded a plane. AED allowed the reviewers to post comments at a time convenient to their respective time zones and schedules.

How it works: CSR uses AED and other electronic review modes when they represent the best way to engage the

best reviewers. About 15 percent of CSR's reviews are electronic. AED reviewers have the same pre-meeting experience face-to-face reviewers have—they have six weeks or longer to review and critique their assigned applications. The only difference is the meeting itself.

The virtual chat room is set up before the first day of the review meeting, which typically includes a 48-hour window for discussion. Reviewers access the room with a user name and password. The application and everything required to conduct the review is accessible, with the exception of any application with which a reviewer has a conflict of interest. Applications that represent conflicts are inaccessible to the reviewers in question. The discussion commences as reviewers post their remarks and respond to each other. At the end of the review period, each reviewer assigns scores, but only the respective reviewer and the SRO view them.

"I thought the electronic review was great," said one of the reviewers from Switzerland. "It required no travel...and we could log on and off all day and no one had to clear several days off the calendar to do this."

Recruiting the World's Best: "Without AED, I would never have been able to invite internationally renowned experts to participate in an NIH review because it would be cost-prohibitive and pose major scheduling challenges," Wani said. "This was the first opportunity our reviewer from Finland had to participate. He was excited."

Learn more at http://cms.csr.nih.gov/AboutCSR/CSRInitiatives/.

Shorter Review Cycles Make a Difference



"I was virtually broke, so I had to have the money," said Dr. Paul Thompson, describing the pressures he felt having to resubmit his first R01 grant application. Dr. Megan McEvoy felt different pressures. "My tenure clock was ticking," she explained.

To help such endangered applicants, CSR shortened the review cycle for new investigators submitting R01 applications. Since 2006, these applicants receive their scores and critiques within 10 days of the review meeting. And since September 2007, CSR has accelerated these

reviews so new R01 applicants can resubmit their applications in the next review round instead of being forced to wait out a round.

Both Dr. McEvoy from the University of Arizona and Dr. Thompson from the University of South Carolina were in tight spots: Their previous applications were unscored and they were running out of time. But they both had reasons to be optimistic and resubmitted in the next round.

Fixable Problems: "My main problem was making it clear why what I wanted to do was important and a good way to approach it That's something that can be addressed on a short-time scale," said Dr. McEvoy. Dr. Thompson explained his situation: "The reviews overall were quite positive ... and my chair and my mentor both said, 'I think you should just try to turn it around."

Both Drs. Thompson and McEvoy did well in the following reviews and are now funded.

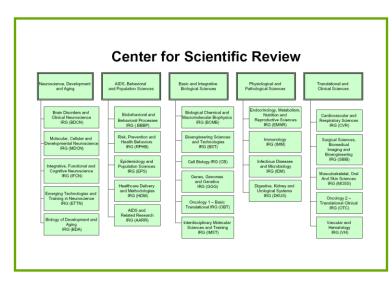
Not for Everyone: "I don't think everybody should do it," said Dr. Thompson. "You have to look at your reviews and make sure that the comments are addressable and not just go in just to go in." NIH encourages applicants who have questions to discuss them with their Program Officer. Of the new investigators given the opportunity, between 10 and 13 percent resubmit their R01 applications in the next round.

Careful Evaluation: NIH is currently finalizing a qualitative and quantitative evaluation of these shorter review cycles, and the results of this study will guide efforts to shorten review cycles for other applicants.

A Big Difference Already: Some established applicants, however, haven't waited. CSR now holds its review meetings and posts summary statements earlier than before. Thus, many applicants can resubmit in the next round, and about 100 take advantage of this opportunity each round. "It makes a huge difference," said Dr. McEvoy. "I go up for tenure this summer."

Learn More at http://cms.csr.nih.gov/AboutCSR/CSRInitiatives/.

PRAC Updated on CSR Realignment, Supports Plan



At its April 30 meeting, the Peer Review Advisory Committee members supported the final phase of CSR's re-alignment. This twoyear effort has been guided by broad input from colleagues in the community. external The realignment groups likescience Integrated Review Groups (IRGs) within five divisions, re-titles divisions reflect the to the science represented, and allows for broader recruitment of new Scientific Review Officers on a division-wide basis. No study sections will be changed in the

realignment.

The main goal of the realignment is to respond to changes in science and better serve the different scientific fields. The realignment will also improve recruitment, provide career development opportunities, allow more flexibility in putting together review groups, and balance

workloads. There is one new division, Neuroscience, Development and Aging. The four other Divisions are (1) AIDS, Behavioral and Population Sciences; (2) Basic and Integrative Biological Sciences; (3) Physiological and Pathological Sciences; and (4) Translational and Clinical Sciences. Implementing these realignments will take place over the next year as new division directors are hired.

For more information, see the related presentation from the April 30 PRAC meeting: http://grants1.nih.gov/grants/peer/prac/index.htm.

NIH Encrypts Reviewer CDs to Improve Security



NIH has become increasingly concerned about the security of confidential information. In response, we are working to further ensure that NIH grant applications entrusted to us are not compromised.

Effective May 15, NIH is now encrypting the applications, summary statements, appendix materials and additional materials on the CDs sent to reviewers. CDs produced for each review meeting will have a unique password that

reviewers use to open PDF application files on their CD. Once they receive their CD, reviewers can obtain the password from the "CD Password" page on the Internet Assisted Review Web system.

We know this new precaution is a little cumbersome, but we wanted to act swiftly, and we hope for a better solution in the future. One compromised application is one too many. We believe it's important to show applicants we will do all we reasonably can to protect their ideas and information. We thank all our reviewers for all their other efforts to ensure the integrity of the NIH peer review process. For instructions and further information, go to http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-08-071.html.

New Evaluations to Enhance CSR Review Groups



This summer, CSR will engage reviewers and study section chairs in a new round of reviews to assess and enhance CSR's Integrated Review Groups (IRGs). Working groups will assess key scientific and operational aspects of each IRG and produce a report on their findings. CSR and NIH program staff will provide additional input. Chairs of all the study sections within each IRG will then meet with senior CSR staff. These meetings will have the following goals:

- Assess the alignment of the study sections to their respective fields of science.
- Ensure that the study sections are aligned for expected growth in the science.
- Engage the chairs in discussions and networking to enhance meeting dynamics and develop best practices.

The first set of IRG Working Groups will meet July 24, 2008. Two or three IRG Working Groups will convene every other month, and all the IRGs should be evaluated by July 2010.

Electronic Conflict of Interest Forms Save Time

Less hassle for reviewers: Reviewers who use the new electronic conflict-of-interest forms no longer have to bother with hard copies that need to be mailed to NIH. Groups of reviewers used the electronic forms at meetings in the May Council Round, and more will use it in the coming round.

Savings at CSR: These electronic forms are also making life easier for SROs. Those participating in a recent survey of the form said it is easy to use and saves time and money. NIH made electronic conflict-of-interest forms available at the end of last year through the Internet Assisted Review module.

First Kid to Get an NIH 'Grant' Tells His Story



When Terence Boylan was 9 years old in 1957, he sent a request to NIH for \$10 to build a rocket ship. His little letter went to an NIH review committee. Members were humored and moved. They dug into their own pockets and funded the request directly, hoping it would pay off one day. Boylan came to NIH to share his story with children who attended NIH's annual "Take Your Child to Work Day" on April 24, 2008.

"Can you imagine what a thrill that was," he says. "It made me think, wow, you can do anything. You can try for something that anyone with any brains would tell you not to do because it's not going to happen ... well, there's nothing stopping me from trying."

Boylan described the trials and triumphs of his research, which stunned his parents. He wanted to be a medical researcher like his father, but when he was in college a New York Times music critic discovered him singing in Greenwich Village. He quickly became a recording artist, touring with Linda Ronstadt, Bonnie Raitt and the Eagles.

But Boylan never forgot about the importance of medical research. He created a foundation that supports young scientists who want to be researchers, and he is the chair of the board of trustees at the Mount Desert Island Marine Laboratory in Maine.

View the Video: To learn more about this amazing story, go to our News and Reports Web page, which has links to the video of Boylan's talk as well as a booklet for children and an article, "Shining Lady in the Sky": http://cms.csr.nih.gov/NewsandReports/RocketBoy.htm.

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