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*Share Your Insights as You Read Peer Review Notes*

You can now add comments to Peer Review Notes articles! We hope your comments will stimulate productive discussions and improve how we work together.

**Reviewing NIH Grant Applications in Light of New Policies to Enhance Reproducibility of Research through Rigor and Transparency**

This is the first review round to include new policies on reproducibility, transparency, and accounting for important biological variables, such as sex. For those who have not heard much about these changes, we encourage you to visit the NIH Rigor Reproducibility Web page.

NIH Deputy Director of Extramural Research, Dr. Mike Lauer, has published a series of blog posts on each of the key aspects of these new policies:

- **Scientific Premise in NIH Grant Applications**
- **Scientific Rigor in NIH Grant Applications**
- **Consideration of Relevant Biological Variables in NIH Grant Applications**
NIH Director of the Office of Research on Women’s Health, Dr. Janine Clayton, has published a commentary about the rationale and goals of the Sex as a Biological Variable policy: *FASEB Journal* Life Sciences Forums: "Studying both sexes: a guiding principle for biomedicine."

**CSR Director Back on Capitol Hill**

On April 13, Dr. Nakamura presented a [poster](#) at a congressional exhibition: “Wasteful” Research? Looking Beyond the Abstract. He joined a collation of scientists to help members of Congress understand how basic research that may seem wasteful advances science and health. See how well it went by visiting the [Collation to Promote Research Web site](#).

**Examples of Reviewers Gone Wrong: Integrity in Peer Review**

“I’m often inspired when I go to a peer review meeting,” said CSR Director Dr. Richard Nakamura. “Discussions are usually powered by an amazing, high-octane mix of scientific rigor and conscientiousness. It’s thus disappointing when I hear that a reviewer has inappropriately shared confidential information or tried to influence a review in an unethical way.”

With increased competition for funding and more reminders from NIH, the vast majority of reviewers and applicants are keenly aware of the need to keep peer reviews fair and confidential. Having a process that can be trusted helps ensure all applications get an even chance, science advances and public funding continues to flow.

This broad buy-in and email communications that record judgment errors and make it easy to report them means that reviewers who break the rules are more likely to get caught. We are extremely thankful for all those who say something when they see something wrong.

**Examples of Reviewer Misbehavior**

While reviewer misconduct is rare, just a few people can severely damage the public perception and support for the NIH grants program. We thus take any breach seriously, and the consequences can be severe. This is why NIH works to make sure everyone gets the message and why we decided to share some fictionalized—but representative—examples of reviewers gone wrong.
The wrong way to train postdocs: Jason shared with his students printed copies of grant applications from his recent review meeting so they could see how to better construct their own applications. Unfortunately, he compromised the applications he was entrusted to evaluate when he and his colleagues could have agreed to share their own applications instead.

The wrong way to get help reviewing applications: Brenda is reviewing an application that cites the work of a colleague in her department. Brenda asks him to look at the application, thinking his feedback would help her write a better critique. She should have discussed the need for extra expertise with her Scientific Review Officer, who could make sure that Brenda’s colleague did not have a potential conflict of interest if he was recruited.

The wrong way to help a friend: Larry meets a colleague who had an application reviewed in his recent study section meeting. Larry tells his colleague that her application did really well except one reviewer was critical of one specific aspect. Larry didn’t need to say anything. Instead, he violated his oath and cast doubt on the confidentiality of the peer review process—if not in the eyes of his colleague then in the eyes of those who may hear of the conversation.

The wrong way to improve family finances: Marge is afraid her son’s NIH application for a grant renewal may not be funded and she contacts reviewers she knows on the study section to ask them for their help. In return, she assures them that she will give them favorable reviews when she serves on study section. Marge jeopardized her own career and—potentially—the careers of more deserving scientists.

Bottom Line

Never reveal the contents of an application, review discussion or critique, and never reveal review meeting outcomes or associate a specific reviewer with an individual review.

Immediately report any peer-review integrity concerns to your Scientific Review Officer or to the appropriate Research/Review Integrity Officer at NIH. For peer review activities within the Center for Scientific Review, please contact Dr. Dana Plude or send an email message to csrrio@mail.nih.gov. If you would like to report an incident to someone outside of CSR, you may contact Ms. Maritza Zeiberg, Director of the NIH Division of Program Integrity.

Learn More

- Integrity and Confidentiality in Peer Review Web page
- NIH Guide Notice that outlines the measures in place to ensure confidentiality in the NIH peer review process and consequences of breaching it
Another NIH Guide Notice that outlines applicant responsibilities in maintaining peer review integrity

NIH Reaffirms Commitment to Advancing Basic Science

To address concerns that NIH interest in supporting basic research has lagged the NIH Director and the NIH institute and center directors recently reaffirmed their commitment to basic science in a letter they sent to Science.

“Basic scientific discovery is the engine that powers the biomedical enterprise,” they wrote, “and NIH continues to spend more than half its budget supporting basic research projects. This is critical, because the private sector generally funds projects that yield a more rapid return on investment.”

Driving Home the Commitment in the Application Instructions

NIH leadership also responded to specific complaints about the “Public Health Relevance” statement that applicants must add to their NIH grant applications. Some scientists felt this requirement made it look like NIH favored research with a direct impact on a specific health issue. To make it clearer that NIH wants to fund a diverse research portfolio that includes research to advance basic science, NIH revised the application instructions:

“Using no more than two or three sentences, describe the relevance of this research to public health. For example, NIH applicants can describe how, in the short or long term, the research would contribute to fundamental knowledge about the nature and behavior of living systems and/or the application of that knowledge to enhance health, lengthen life, and/or reduce illness and disability.”

Peer Review of Basic Research

The Science letter highlighted an analysis of funding data provided by the National Institute of Neurological Disorders and Stroke, which saw a gradual decline in basic research grants between 1997 and 2012. Further analysis showed that the problem wasn’t with peer review or the applications. The Institute’s basic research applications actually did better in review than others. The main problem was that researchers submitted fewer basic research applications.

“Nonetheless, we want to make sure that there are no misconceptions about NIH interest in basic research,” said CSR Director Dr. Richard Nakamura. “That’s why our training for new study section chairs and reviewers include a reminder that
proposed basic research can get a high impact score though there is no likely clinical impact in the near term.”

**Read more and join the policy discussion** on the [Open Mike blog](https://www.nih.gov), hosted by the NIH Office of Extramural Research.

### New Form Helps Guide the Assignment and Review of Your Application

NIH has created a new electronic form to help you better convey assignment requests and other information you may want to give us before we review your grant application. We made this change to speed-up and more accurately process your applications, since extracting assignment requests and review information from cover letters took time and could easily produce errors.

#### What Do I Include in the New Assignment Request Form?

- Requests for assignment to (or not to) specific institutes/centers
- Requests for assignment to (or not to) specific review groups
- Brief lists of people who might be in conflict with your application (and why)
- Types of expertise needed to review your application

#### What Do I Need to Know About the Form?

- The form will be available in application packets for due dates on or after May 25, 2016
- The form is optional
- If you use the form, you do not need to include more than a single request
- All assignment requests must be made using this form

#### When Do I Still Need to Attach a Cover Letter to My Application?

Use a cover letter if you need to send us:

- Reasons why your application may have been submitted late
- Information about any videos that you may provide as post-submission materials
- A statement that proposed studies will generate large-scale human/non-human genomic data
- Special agency approvals such as $500k or conference grant approvals
- Special information about subaward budgets

Cover letters are kept confidential and only staff with a need to know can see them.
If you submit a cover letter, you should not add an assignment or review request to it. The new Assignment Request Form is the only way to submit these requests.

Learn More

- Assignment Request Form
- Convey Assignment Request and Other Review/Assignment Information to NIH

Results from the Reviewer Quick Feedback Survey

Last year, CSR asked over 10,000 reviewers in all our study sections to give us some quick feedback. “We wanted to take the pulse of the community,” said CSR Director Dr. Richard Nakamura,” so we could assess their review experiences and discover areas in need of more attention.”

“We are very thankful that nearly 5,000 reviewers shared their thoughts with us,” he continued. “The good news is that our reviewers are pretty positive about their experience and the quality of review they witnessed in their study section meeting.” He noted that the vast majority of the reviewers said they either “strongly agreed” or “agreed” that their panels did a good job in terms of scoring and discussion and CSR did a good job in terms of the quality of the roster and assignments.
**General Feedback**

We gave reviewers the opportunity to tell us what else was on their minds. Over 3,000 reviewers did just that. It was a bit overwhelming. CSR decided to work with the NIH Center for Information Technology to use innovative, computational linguistics to capture and categorize reviewer responses and sentiments.

**The Top Three Reviewer Concerns Identified**

1. Having more experienced reviewers especially those with statistical, biostatistical, or clinical expertise
2. Having coffee and refreshments in study section meetings
3. Getting additional training and guidance from CSR on how to do their best on peer review

As would be expected, some scoring and review burden concerns were also raised, but to a much lesser extent.

**Learn More**

View a more detailed survey report on CSR’s Website. This survey is just one of many efforts to get feedback from our stakeholders. The data will help us fine-tune NIH peer review and CSR’s practices.

**New Advice Video for Applicants**

CSR updated its Insider’s Guide to Peer Review for Applicants with a new video that summarizes insights we collected from CSR reviewers and staff to help applicants better navigate NIH peer review. You can view the video and the collected wisdom online.

**Got Advice for Applicants?**

Share your insights in our new comment section.
Top 10 Submission Show Stoppers for NIH Small Business Applicants

After months of hard work developing your NIH small business proposal, don’t let a few preventable errors keep your application from getting reviewed. Be mindful of these top 10 mistakes to help ensure your Small Business Innovation (SBIR) or Small Business Technology Transfer (STTR) application is successfully submitted and sent to review.

1. **Not Having Multiple Registrations in Place:** The SBIR/STTR application process requires **five** registrations. Your application needs to pass through the government-wide portal (Grants.gov). To do this, your company needs an active System for Award Management (SAM) account, which expires after 12 months. To get this account, your company needs a DUNS number, a Taxpayer Identification Number (TIN) and a CAGE code. Getting these numbers and having an active account can take up to 8 weeks. Complete these registrations early so you and your collaborators can be ready on submission day. You and your institution also need separate NIH eRA Commons registrations.

2. **Failing to Appreciate the Fact that Submission Is a Multi-Step Process:** Your application must pass through Grants.gov and then through the NIH eRA system. These systems have separate checks/validations. If your application is stopped at Grants.gov, be sure to alert both help desks immediately. After eRA acceptance, NIH staff performs additional, manual compliance checks.

3. **Submitting Your Application at the Last Minute.** Electronic submission errors can take hours to fix. Give yourself peace of mind and submit early—days, not hours or minutes! Only error-free applications submitted on time can be sent forward to reviewers.

4. **Attempting to Fix a Warning after the Deadline:** Warnings are not show stoppers. Your application will be accepted with a warning. But if you seek to fix a warning after the submission deadline by rejecting your application and submitting a corrected one, your application will be late and will not go forward.

5. **Not Using the Right Application Form:** Different types of grants (with different activity codes) have different forms, and the forms can change. Make sure you are using the right one. Go to the NIH Guide to Grants and Contracts and pull up the Funding Opportunity Announcement (FOA) associated with the specific grant you want. You will be directed to the right form. Our forms are regularly updated, so don’t assume last year’s form will work! You can also find
the SBIR/STTR solicitations and links for accompanying forms on the NIH SBIR/STTR Funding page.

6. **Not Giving the SBIR/STTR Instructions Enough Attention**: They hold the keys to a successful submission and contain step-by-step guidance and specific submission and review considerations for your proposal.

7. **Producing an Incomplete Application**: Including appropriate details in your research proposal is important, so make sure your final grant package has everything you need. Be sure to provide enough information in the Research Strategy section for reviewers to understand what problem you aim to solve, what experimental methods you will employ, how you plan to analyze the results, and what your milestones for success are. Also, make sure to include your budget! Applications lacking sufficient detail cannot be sent to reviewers.

8. **Overstuffing Your Application**: NIH will not let you exceed the page limit by putting important research strategy information in sections of the application that are not page-limited, such as the Vertebrate Animals or Human Subjects sections.

9. **Submitting a New Application but Referring to Previous Review Outcomes or Criticism**: Since NIH now accepts previously reviewed applications as “new,” be careful not to refer to the score of the earlier application or discuss how reviewer comments were addressed.

10. **Using a Small Font**: NIH can withdraw your application before review if you ignore standards for font and text size. Even if we don’t withdraw such an application, reviewers will likely struggle to read your application and see its merits.

**Get More Information**

- [NIH SBIR/STTR Program Web site](#) and [contacts](#)
- [Grants.gov help desk](#)
- [NIH eRA help desk](#)
- [CSR SBIR/STTR Webinar](#)

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