Subject: SERCC Newsletter
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From: Scientific Editing and Research Communication Core
To: Widmayer, Heather A

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Scientific Editing and Research Communication Core

Changes to the Review of NIH Grants and Implications for How to Write Them

NIH is introducing a "Simplified Peer Review Framework" that will affect most Research Project Grants, and also "Revisions to the NIH Fellowship Application and Review Process." In both cases, the changes are relevant for applications that are due ***on January 25, 2025 or later.*** These changes are intended to reduce the

complexity of the peer review process, reduce the potential for reputational bias to affect peer review outcomes and, in the case of Individual Fellowship Applications, increase the chances that the most promising candidates will be consistently identified by scientific review panels. For Research Project Grants, the structure and writing should not be affected. In contrast, for Fellowship grants, headings will change and information will be restructured. Below, we provide a summary of the key changes.

Simplified Framework for NIH Peer Review of Research Project Grant Applications

(will affect many U and R applications; will not affect R35 applications)

Impact on review of these applications

The new framework retains the ***five regulatory criteria*** (previously termed ***scored review criteria***): Significance, Investigator(s), Innovation, Approach, and Environment. However, it reframes them as ***three factors*** that should be the focus of the review.

- **Factor 1:** Importance of the Research (Significance, Innovation)
- **Factor 2:** Rigor and Feasibility (Approach)
- **Factor 3:** Expertise and Resources (Investigator, Environment)

All three factors will be considered in deriving the Overall Impact score. Factors 1 and 2 will receive numerical criterion scores (1–9). Factor 3 will be evaluated for sufficiency, and an explanation will be required when a score of insufficient is given.

The use of a binary choice in evaluating Factor 3 is intended to encourage reviewers to consider whether investigator expertise and environment are appropriate to this particular proposal and to reduce the influence of general scientific reputation.

The new framework will also affect ***additional review criteria*** and ***additional review considerations***. Of the original six additional review criteria (which can affect the Overall Impact Score), two will be considered under Factor 2 (Rigor and Feasibility). Of the five additional review considerations (which do not affect the Overall Impact Score), three will be reviewed by NIH staff instead of reviewers.

Impact on how these grants should be written

According to NIH, the structure of Research Project Grants will not be affected because the current instructions align with Factors 1–3 (see FAQ C1).

Revisions to the NIH Fellowship Application and Review Process

(will affect F30, F31, F32, F33, and F99/K00 applications)

Impact on review of these applications

The new framework retains the five ***regulatory review criteria*** (previously termed scored review criteria): Applicant; Sponsors, Collaborators, and Consultants; Research Training Plan; Training Potential; and Environment and Institutional Commitment to Training. However, it reorganizes them into ***three criteria*** that should be the focus of the review.

- **Criterion 1:** Candidate's Preparedness and Potential
- **Criterion 2:** Research Training Plan
- **Criterion 3:** Commitment to Candidate

All three criteria will be considered in deriving the Overall Impact score. Each will receive a numerical criterion score (1–9).

Impact on how these grants should be written

Specifically for these Fellowship applications, the sections (and the documents within them) are being changed to better align with the restructured review criteria, reduce redundancy, and clarify who is responsible for writing each section, as outlined below.

Candidate section (previously *Fellowship Applicant* section) – Candidates will describe their goals, preparedness, and potential in four personal statements with the following headings:

1. Professional and fellowship goals
2. Fellowship qualifications
3. Self-assessment
4. Scientific perspective

Research Training Plan section – Candidates will describe training activities and research in the following sections and subsections:

1. Potential Training Activities and Timeline
2. Research Training Project Specific Aims
3. Research Training Project Strategy
    1. Scientific Foundation & Rationale
    2. Approach

Commitment to Candidate section (previously *Candidate Sponsor and Co-sponsor* section) – Sponsors and Co-sponsors will provide the following six statements:

1. Mentoring Approach and Candidate Mentoring Plan

2. Prior Commitment to Training and Mentoring
3. Commitment to the Candidate's Research Training Plan
4. Research Training Environment
5. Candidate's Potential
6. Clinical Training (required only for candidates proposing to gain experience in a clinical trial as part of the research training plan)

Biosketch document – Grades from past coursework will no longer be required or allowed.

NIH expects to provide updated instructions (SF424 Forms I) soon and to post all relevant Notices of Funding Opportunities (NOFOs) at least 60 days before the first submission deadline. As they do, we will update our templates, so check our website for updates (or contact us) as your due date draws closer.

Keep calm and carry on,

Chris Blaumueller and the SERCC Team

P.S. Changes to the NIH Biosketch are slated for ***all applications due on or after May 25, 2025***. More information on this will be provided in the March 2025 SERCC Newsletter, as well as on the SERCC website.

Resources:

- Simplified Peer Review Framework
- Simplifying Review of Research Project Grant Applications (videos and PowerPoint files from past webinars, as well as a sample critique and mock summary statement, are available)
- Frequently Asked Questions (FAQs) on Simplified Peer Review Framework
- Revisions to the NIH Fellowship Application and Review Process
- Changes to Fellowship Applications
- NIH Presentation: Revisions to the Fellowship Application and Review Process (video, transcript, and PowerPoint file available)
- To ask NIH personnel questions about the simplified framework for peer review, write to: simplifiedreview@nih.gov.

Announcements

2025 SERCC Internships

To meet the growing interest in training for careers in scientific editing among researchers, the SERCC is sponsoring an unpaid Scientific Editing Internship. Interns will receive on-the-job training in substantive editing from an experienced editor and will learn how to improve a range of issues, from mechanics to clarity and scientific logic, with the greatest focus on the latter.

Changes to NIH Biosketches

NIH is adopting the Biographical Sketch Common Form and the Current and Pending (Other) Support Common Form for all applications submitted on or after May 25, 2025. Applicants will need to use Science Experts Network Curriculum Vitae (SciENcv) to produce digitally certified PDF(s). NIH instructions will be updated in the coming months and we will report on them in our March 2025 Newsletter. Stay tuned!

NIH Discourages Figures on the Specific Aims Page

According to the "Format Attachments Page" of the updated NIH website, under "Figures (e.g., Images, Graphics, Charts, Graphs, and Tables)," figures should not be included in the Specific Aims attachment because they can interfere with the NIH post-award process to categorize awards in RePORT.

NSF Organismal Response to Climate Change (ORCC) Program

This program supports integrative, cross-disciplinary research exploring the mechanistic and eco-evolutionary responses of organisms to climate change. The purpose of the program is to improve predictions of life on a warming planet, develop solutions for mitigating impacts, and support the bioeconomy.

Upcoming Opportunities

Have a question about writing grants or research articles?
Contact us and we will answer it in a future newsletter.

2025 FASEB Science Excellence Awards
Nominations due December 3
For more than 30 years, FASEB Excellence in Science Awards have honored recipients' excellence and innovation in their research fields, as well as their exemplary leadership and mentorship (view past recipients). Women scientists who are current members of a FASEB Full Member Society are eligible for nomination. The award is presented with a cash prize and funds to present a lecture at a meeting

of a FASEB member society of their choice. Nominators must also be a current member of a FASEB Full Member Society.
Submit nominations here.

NSF Virtual Grants Conference
December 9–12 | Zoom
The NSF Virtual Grants Conference is designed to give new faculty, researchers, and administrators key insights into a wide range of current issues at NSF. Foundation staff will provide up-to-date information about policies and procedures, as well as specific funding opportunities, and answer attendee questions. Highlights include: new programs and initiatives; proposal preparation; NSF's merit review process; NSF directorate sessions; award management topics; conflict of interest policies; NSF proposal and award policy updates.
Register here.

Webinar: Top Design Tips for Better Graphical Abstracts
December 11 | 2:00–2:30 PM | Zoom
The SERCC and the CCOM Research Office are co-sponsoring a UI-exclusive webinar on this topic by Sydney Burniston of BioRender. This presentation will cover topics that are universal to creating good schematic figures and that can be applied using any graphics program. These include what a graphical abstract is; how to improve the look and quality of your abstract; how to go from an idea sketch to a publication-ready illustration; and how to simplify a "cluttered" figure.
Register here.

Mary Kay Foundation: Innovative/Translational Cancer Research Grant Program
Limited Submission | Internal Deadline December 16
The Mary Kay Ash Foundation funds translational research on cancers affecting women (ovarian, uterine, breast, endometrial, and cervical cancers, among others). Translational research is broadly defined as research that will provide a scientific link between laboratory studies and the clinic, and that is expected to lead to improvement in diagnosis, prognosis, prevention, or treatment of the cancer.
Sponsor Deadline: February 15
Limit: one application per institution
Apply here.

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