FASEB
Federation of American Societies for Experimental Biology

Representing Over 115,000 Researchers

6120 Executive Blvd., Suite 230, Rockville, MD 20852 | faseb.org

February 10, 2023

Noni Byrnes, PhD
Director, Center for Scientific Review
National Institutes of Health
6701 Rockledge Drive MSC7768
Bethesda, MD 20892-7768

RE: Request for Information on Proposed Simplified Review Framework for NIH Research Project Grant Applications

Comments transmitted electronically via RFI website on February 10, 2023

Dear Dr. Byrnes,

As an organization representing 27 scientific societies and over 115,000 individual researchers in the biological and biomedical sciences, the Federation of American Societies for Experimental Biology (FASEB) appreciates efforts by the National Institutes of Health (NIH) to ensure a rigorous and unbiased process for evaluating applications for federal grant support. The proposed simplified review framework for NIH Research Project Grant applications represents the culmination of years of outcomes assessments, review and deliberation by external and internal advisory committees, and consultation with the research community to ensure that the peer review process achieves its primary purpose of assessing scientific merit with minimal bias. FASEB commends NIH for the thoughtfulness of its process leading to the proposed framework, with changes emphasizing common pain points with the current peer review process, namely expansion of the reviewer workload beyond assessment of scientific merit and growing concerns about implicit or reputational bias affecting funding outcomes.

At its core, the proposed simplified review framework is not that different from the current structure. Reviewers will still provide assessment on the five criteria – significance, innovation, approach, investigator, and environment – used today, just not as five separate scores. Rather, these criteria would be consolidated into three factors to assess scientific merit:

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

Concomitant with the proposed consolidation of the current review factors, the revised framework would update how these areas would be assessed by reviewers and their contribution to the overall impact score of a proposal. Factors 1 and 2 would continue to be scored on the existing 1 – 9 scale. Rather than receiving a numerical score, Factor 3 (Expertise and Resources) would be assessed as "appropriate" or "gaps identified," with the latter requiring explicit explanation of the gaps. While all three factors would contribute to an application's overall impact score, the proposal to shift Factor 3 to a binary selection of

"appropriate" or "gaps identified" is a well-structured solution to reduce reputational bias in assessing the investigator(s) and their institution and amplifies the intent of peer review to emphasize scientific merit rather than the who or where research will be conducted. FASEB applauds these changes, both for reorienting reviewer emphasis on factors contributing to scientific merit and simplifying the review process to three core questions: Should the research be done? Can the research be done well? Are resources in place to ensure it will be done?

In addition to the streamlined factors for evaluating scientific merit, FASEB supports the proposal to utilize pull-down selections for assessment of Additional Review Criteria (e.g., Human Subject Protections; Inclusion of Women, Minorities, and Children; Vertebrate Animal Protections; and Biohazards) as either "appropriate" or "concerns." Reviewers would only be required to provide a brief narrative for proposals for which "concerns" was selected, greatly reducing the workload of both reviewers and Program Officers while providing sufficient information to be considered as part of the overall impact score.

Similar streamlining is proposed for Additional Review Considerations, and FASEB appreciates the careful consideration to eliminate existing elements for which input from the first level of peer review are not required (e.g., Applications from Foreign Organizations; Select Agent Research; and Resource Sharing Plans). FASEB agrees that these elements do not contribute to scientific merit and do not need to be included in the first level of review. While two other considerations – Authentication of Key Biological and/or Chemical Resources and Budget and Period of Support – should be included in the first level of review, FASEB agrees with the proposal to shift to a drop-down rating, with narratives only required if the category "concerns" is selected.

As with any procedural changes affecting the grant application, review, and award process, FASEB strongly encourages NIH to put as much effort into developing and communicating the timeline and plans for implementation to ensure the community is aware of and prepared for the new framework. This includes additional training and support for peer reviewers prior to launching study sections using the new framework and workshop opportunities for applicants to ensure understanding of how applications will be assessed and scored. Implementation of a new framework also provides an opportunity to revisit reviewers' understanding and use of the 1 – 9 scoring system. FASEB strongly recommends development of new resources, such as rubrics, and interactive trainings for reviewers, study section Chairs, and Scientific Review Officers to encourage use of the full range of scores and minimize compression.

FASEB applauds NIH's efforts to revitalize its already strong peer review structure to emphasize scientific merit while taking key steps to minimize implicit bias and reduce reviewer workload. The proposed simplified framework is the result of data-driven assessments of study section outcomes and responsive to common concerns raised by the extramural community. We recognize that such changes will be challenging to implement at the outset due to general resistance to change and are eager to support NIH in socializing this new framework once finalized.

Sincerely,

Kevin C. Kregel, PhD
FASEB President