

COMMENT SUMMARY

Challenge 1

Reducing Administrative Burden on Applicants, Reviewers, and NIH Staff

Recommended Action: *Provide unambiguous feedback to all applicants by establishing a “Not Recommended for Resubmission” (NRR) category*

The concept of establishing a NRR decision option raised a great deal of concern in the scientific community. It was not generally felt the “NRR” category would reduce the number of applications, as applicants will repackage their grants in a manner that allows them to resubmit. Ideas that are not considered to be competitive with one group might be more favorably viewed by another. The NRR decision option was considered very detrimental for early career investigators since they may end up having an entirely new set of concerns raised about their grant because the reviewers will be different.

Recommended Action: *Eliminate the “special status” of amended applications by considering all applications as being new.*

The fact that each grant submission will be treated as a new submission will lead to greater inconsistency in reviewing and can direct an investigator over time in several different directions. There is a concern that if all applications are to be considered new, and the previous critique is not available for scrutiny by the study section, all reviewers will have to be new and previous reviewers excluded from discussion.

Moreover, eliminating the special status of amended application and treating all grants as “new” would ensure that resubmitted grants will not reach reviewers who can evaluate small changes recommended by the peer review committees, and “institutionalizes” the practice of an entirely new review when the initial committee only desired a limited number of focused changes.

However, there was a general concern that these changes would not significantly reduce administrative burden, and might even increase it.

The ability to respond to a review, and potentially correct a misconception, that is available with the current peer-review system, would either be diminished or eliminated by the proposed changes. The avenues for the “dialogue” between the review panel and the PI are an essential part of peer review and should be clarified and piloted in the new system.

AAMC members support the bidirectional “prebuttals” (for applicants and/or reviewers) to correct factual errors or explain factual items in review.

Recommended Action: *Shorten the length of the application and align it to specific review elements.*

Our constituents believe that shortening and improving the structure of the research project grant applications is entirely feasible and beneficial to the reviewers and experienced applicants with an established record of accomplishment. However, there was a concern that shortening may penalize new or first-time applicants. Young investigators should be able to provide more supporting data to show that they can perform and analyze data in the manner that they propose.

Challenge 2
Enhancing the Rating System

Recommended Action: *Modify the rating system.*

The review of early career and mid-level independent investigators should not place as much weight on past accomplishments, high impact level or environment, including information on institutional support for the applicant. This could place faculty at smaller institutions at risk. With opportunities for collaboration among institutions increasing, it seems that environment needs to take all collaborative efforts into account. Moreover, the definition of institutional commitment to an applicant needs to be clarified.

AAMC members support the notion of both scoring and then ranking all the grants considered in a cycle and an approach in keeping study section members engaged throughout the review and application ranking at the conclusion of the review meeting, providing all reviewers are attending the meetings until the end. However, asking all charter section members to review all grants in detail will add significantly to reviewer time commitment, and could be a further disincentive to participation in peer review as a regular member of a study section.

Challenge 3
Enhancing Review and Reviewer Quality

Goal: *To enhance review quality*

Engaging more reviewers per application may be very beneficial and enhance the quality of review. Nevertheless, for young investigators, it may prove to be more difficult to satisfy the demands of a larger number of reviewers.

Recommended Action: *Pilot anonymous review in the context of a two-level review system such as the editorial board model.*

There is a concern that the use of two-stage review models will create more work for reviewers and administrators. Depending on how it is structured, there is potential for the second tier of the two-tiered review to have inordinate influence on which grants are given a higher priority. The two-tiered review will allow a small number of reviewers to direct funding of projects based on their own biases in the process of reconciling the scores from different study sections. This responsibility is most fairly managed using a larger group (such as the whole study section). Having the charter members review every grant would be an inordinate amount of work, and would make it more difficult to recruit charter members of study section.

Recommended Action: *Create incentives for reviewers.*

Some of our constituencies suggested that to decrease the time commitments and increase the budget available for funding new grants by young investigators, etc., the current peer review system involving traveling to one location, being paid for travel, per

diem, and honorarium, should be abolished. Rather, with available technology, Study Sections should be able to review grants via video conferences, or via other appropriate technology. Actual calculation of the total amount of money that is spent per year in the current review process, may free up additional money to fund grants.

Flexible service and deadlines are not a sufficient compensation for the time and frustration (the likelihood that only one of 10 reviewed grants will be funded) involved in study section service. A more valuable incentive would be extension of the funding of reviewers' existing grants by 6 month – 1 year at the same budget as the last funded year.

Recommended Action: *Shorten summary statements by focusing solely on the merit of science as presented.*

Implementation of this recommendation will require substantial cultural changes in the reviewer's expectations. In the current process, reviewers often comment (which translates to lower scores) when the investigator does not give a lot of detail either in the Progress Report or in the Research Design Section. Comments about not including enough preliminary data, not discussing every alternative hypothesis and interpretation are fairly common.

Challenge 4

Optimizing Support at Different Career Stages

Recommended Action: *Pilot the separate review, by generalists, of early-career investigators, to enhance innovation and risk-taking by applicants.*

The concept of reviewing applications of early-career investigators separately is of concern since funded applications may not be truly competitive and may result in problems for these young scientists when applying for subsequent competitive renewals.

Recommended Action: *Refine the NIH MERIT/Javits/NIH Director's Pioneer Award mechanisms to enhance productivity of the most accomplished investigators and to add to the pool of accomplished investigators available as potential reviewers.*

AAMC members believe that this recommendation should be expanded to all NIH grantees with independent (non-mentored) awards, as anyone funded by NIH at this level should be expected to participate in regular peer-review service, as asked.

Challenge 5

Optimizing Support for Different Types of Science

Recommended Action: *Determine the underlying causes of submission patterns and results in CSR and IC panels and consider corrective actions if needed.*

Our members would like to see a strong NIH oversight on the following issue: Multiple grants held by a single investigator with several of those grants studying essentially the same topic. Sometimes these are grants awarded by different institutes, each unaware of a similar project elsewhere and at other times the content of each grant

is not scrutinized rigorously by NIH administrators; the investigator's claim for "no overlap" is taken at face value. Some institutes limit the total \$ amount awarded to a single investigator by the same institute. The limited NIH resources should be spread across more investigators.

Challenge 7

Meeting the Need for Continuous Review of NIH Peer Review

Recommended Action: *Mandate a periodic, data-driven, NIH-wide assessment of the peer review process.*

There was a consensus that one of the most productive things that could be done is to accelerate the review process, decreasing the time between submission, review and report of summary statement.

AAMC members would like to encourage an assessment of the current appeal process, which in theory is to be used when a grant has truly been unfairly reviewed, and exists in name only. In order for an appeal to be considered, it has to go back to the SRA and the reviewers, who then decide whether the appeal has any basis. There is a strong belief that there is no way anyone will ever get past step 1. Program Directors discourage applicants from appealing, no matter how valid the basis is, because to get through to the next step, the SRA and Reviewers have to be willing to admit that they gave a biased, unfair, irrelevant review. "Even condemned criminals who face the death sentence have an avenue open for appealing their conviction which does **not** depend on their appeal being reviewed by the jury and judge who condemned them in the first place. At the very least, the scientific community should have an appeal process that actually works in practice."