

## Member Societies

The American Physiological Society  
 American Society for Biochemistry and  
 Molecular Biology  
 American Society for Pharmacology and  
 Experimental Therapeutics  
 American Society for Investigative  
 Pathology  
 American Society for Nutrition  
 The American Association of  
 Immunologists  
 American Association of Anatomists  
 The Protein Society  
 Society for Developmental Biology  
 American Peptide Society  
 Association of Biomolecular Resource  
 Facilities  
 The American Society for Bone and  
 Mineral Research  
 American Society for Clinical  
 Investigation  
 Society for the Study of Reproduction  
 Teratology Society  
 The Endocrine Society  
 The American Society of Human  
 Genetics  
 Society for Gynecologic Investigation  
 Environmental Mutagen Society  
 International Society for  
 Computational Biology  
 American College of Sports Medicine  
 Biomedical Engineering Society

March 5, 2009

Antonio Scarpa, M.D., Ph.D.  
 Center for Scientific Review  
 National Institutes of Health  
 RKL2 - Two Rockledge Center, 3030  
 6701 Rockledge Drive  
 Bethesda, MD 20892-7776

Dear Dr. Scarpa,

On behalf of the Federation of American Societies for Experimental Biology (FASEB), I am writing to offer our perspective on the recent changes to NIH's peer review system. FASEB supports efforts to improve the quality, consistency, and efficiency of the peer review process, and we applaud NIH for taking on this challenge. We were pleased to see that many of the comments we submitted in response to the "NIH 2007-2008 Peer Review Self Study Final Draft" (April 23, 2008) were incorporated into the recent policy revisions. We offer the following additional suggestions regarding resubmissions, application length, review and scoring procedures, and reviewer training for your consideration.

**Resubmission Policy.** NIH's ability to attract high quality reviewers is compromised by the overwhelming number of submissions received by the NIH Center for Scientific Review. Limiting all new and competing applications to a single amendment will undoubtedly reduce the number of applications and ease the administrative burden on reviewers and NIH staff. However, we are concerned that in its current form, this policy may have unintended, negative impacts on young investigators and meritorious applications that score near the payline.

FASEB recommends exempting early stage investigators from the single resubmission policy. We fear that limiting early stage investigators to a single amended application will delay their transition to independent research careers. These scientists benefit immensely from the constructive feedback they receive from reviewers. The opportunity to revise and resubmit their applications is vital to strengthening their proposals and improving their grant writing skills.

We also recommend that NIH revise the resubmission policy. In the current funding climate, it is not uncommon for applicants to receive very high scores, yet fall just below the payline. We are concerned that the new policy may be overly harsh for those applicants. Requiring them to submit an almost completely new grant will place an unnecessary burden on qualified scientists and delay the funding of meritorious research projects. NIH should develop mechanisms for flexibility in these cases. In particular, we propose that NIH strongly consider some mechanism to allow resubmission—*without* major changes to goals and approaches—of applications falling within a small distance of the payline (e.g., 2-3%). Efforts

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already underway at NIH, such as providing individual review criteria scores, will help to reduce the number of resubmissions in need of substantial revision. We support this policy, and we encourage NIH to explore additional opportunities to provide applicants with detailed and accurate feedback.

**Application Length.** FASEB does not disagree with reducing the page limit of the research plan section of R01 applications. Although opinions about the size of the reduction are highly variable among the scientific community, we believe it is reasonable to try a new length limit, while encouraging collection of feedback on the change from applicants, reviewers, and CSR staff following its implementation. However, requiring applicants who submit an A0 application under the current page limit rule to comply with the new rule at the time of resubmission will require that they significantly alter their proposals. We are concerned that reviewers will suggest revisions that would be appropriate for an application with a 25 page research plan, but not for one with a shorter plan. This would make it difficult for applicants to make the suggested modifications. NIH could address this concern by making certain that all reviewers are aware that applicants are expected to reduce the length of their proposals and encouraging them to take this into consideration in their critiques. We also recommend that NIH continue to allow applicants submitting A1 amendments to use up to three introductory pages to respond to the review.

FASEB does not think it is necessary to extend the page limit for applicants proposing human subjects research. Although we appreciate the additional regulatory requirements clinical and translational researchers must address, we believe this information should be incorporated into the existing human subjects protection section of the application.

We also caution NIH against assigning more applications to each reviewer. Study sections are already overwhelmed with applications; reducing the page limit does not guarantee that grants will be more easily or expeditiously reviewed. Indeed, at least in the early stages of implementation, it is likely that reviewers will spend more time on each application, because they will need to look up important details on technical approaches for which there will no longer be space in the shortened applications.

**Review and Scoring Procedures.** FASEB encourages NIH to assess the impact of formatted reviewer critiques. Reviewer assessments are critical both in identifying the best science as well as in promoting improved scientific applications. To ensure that formatted critiques provide applicants with more specific, focused, and valuable information about the strength of their proposals, we recommend that NIH provide all those involved in the peer review process with an opportunity to provide feedback on the benefits and weaknesses of this change.

FASEB is concerned that the new scoring system could result in more applications with identical scores. In these cases, institutes may end up using other criteria to make programmatic decisions, such as the new individual component scores for Significance, Investigator(s), Innovation, Approach, and Environment. If these components are prioritized differently from one institute to another, it could introduce a degree of arbitrariness into the funding process and diminish the value of priority scores. We encourage NIH to monitor the distribution of scores and gather feedback on the impact of the new approach from applicants, study section members, and review staff.

**Training Peer Reviewers and Staff.** As with any transition, the changes to the peer review system will present challenges to applicants, reviewers, and NIH staff as they learn and adjust to the new

procedures. We believe that NIH can mitigate these challenges by providing proper training to *everyone* involved in the peer review process—including study section members.

Training sessions should address the changes that have been made to the peer review system, provide guidance on utilizing the new evaluation criteria and scoring procedures, demonstrate best practices for providing useful feedback to applicants, and help participants to anticipate the challenges that may arise during the transition period. A training video or webcast may be an effective way to ensure that all reviewers and staff have access to standardized training. NIH might also consider providing training at short sessions immediately preceding study sections or through several national videoconferences held prior to the May 2009 review meetings. Formalized training administered by NIH will ensure that all reviewers and staff have access to the same information, thereby promoting high quality and consistent evaluations.

In conclusion, FASEB supports efforts to enhance NIH's peer review system, and we remain receptive to new approaches aimed at furthering this goal. However, we strongly encourage NIH to use pilot projects to evaluate the effectiveness of new review mechanisms. In addition, we hope NIH will share the outcomes of these pilots with the research community before implementing new policies and procedures.

On behalf of FASEB's 22 member societies and the more than 80,000 scientists they represent, thank you for taking the time to consider our comments. Please do not hesitate to contact me if FASEB can be of assistance to you in any way.

Sincerely,

A handwritten signature in cursive script that reads "Richard B. Marchase".

Richard B. Marchase, Ph.D.  
FASEB President