



AMERICAN ACADEMY OF
ORTHOPAEDIC SURGEONS

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Elias Zerhouni, MD
Director
National Institutes of Health (NIH)
1 Center Drive
Building 1/114
Bethesda, MD 20892-0189

Dear Dr. Zerhouni:

The American Academy of Orthopaedic Surgeons (AAOS), representing over 19,000 board-certified orthopaedic surgeons and researchers, welcomes the opportunity to respond to the National Institutes of Health (NIH) Request for Information (RFI): NIH System to Support Biomedical and Behavioral Research and Peer Review, Notice NOT-OD-07-084.

The AAOS applauds your decision to seek input from the scientific community on the NIH's support of both biomedical and behavioral research, as well as peer review, in the current system. It is our hope that commentary will lead to opportunities for the NIH to review internal and external processes, which will ultimately lead to an optimization of efficiency and effectiveness for all users.

It is also our hope that the NIH will include commentary and findings from the Center for Scientific Review's (CSR) 2007 Open House series. The CSR is in the midst of a six month long series of open houses, which include attendance from specific research sectors of the scientific community. The CSR has been gathering feedback from these participants at each meeting, and it is our hope that NIH staff might review the CSR findings to utilize within the greater NIH structure.

Per your RFI, there are several specific sections on which we would like to comment:

1. Challenges of NIH System of Research Support:

The AAOS believes that the NIH has evolved appropriately with various scientific advances. However, some outstanding challenges remain, which the AAOS believes can be easily addressed. We believe that information and guidance should be provided to the research community on grant submissions. This should include transparent, Web-based staff contact information. There is a wealth of funding opportunities from which to seek support, and this can be confusing to the new investigator, who must navigate these options and select a mechanism through which to apply. This is of particular concern when applications span across institutes or are more narrowly focused research issues.

While many AAOS researchers may apply to the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) for funding, musculoskeletal research is truly trans-NIH in nature. For example, musculoskeletal research interests and applications can be found at the National Institute of Biomedical Imaging and BioEngineering (NIBIB), the National Center for Complementary and Alternative Medicine (NCCAM), the National Institute of Dental and Craniofacial Research (NIDCR), the National Institute on Aging (NIA), the National Institute for Child Health and Human Development (NICHD), and the National Center for Medical Research and Rehabilitation (NCMRR). Additional information dissemination on these institutes, their research interests, and grant submission information would be very useful for the AAOS community.

2. Challenges of the NIH Peer Review Process/Solutions to Challenges:

The NIH Peer Review Process is unparalleled. The process is free of prejudice, conflict-of-interest, and allows for renowned field experts to review applications. It is also independent of industry influence or industry funding. That said, there are several challenges to the NIH Peer Review Process, particularly for our membership.

For AAOS clinician scientists, timing is of a particular concern. This population is increasingly stretched to provide the best patient care and juggle their practice, while spending time in their respective labs. Several days out of the office can present a challenge to their peers, patients, and practice.

There are several “pilot” projects that are in use at the moment, such as “online reviews.” We encourage the NIH to test and evaluate these practices and alter as needed.

With the increasing amount of applications, it is important to avoid overloading the section members and to dedicate adequate time for thorough discussion of applications. Additionally, some study sections are becoming increasingly diverse due to multidisciplinary research. This consequently puts a strain on ensuring that all members understand the science behind the application and ensuring that the right mix of reviewers are present. The problem can be compounded when an application is re-submitted, only to have a completely different set of reviewers.

Possible solutions include reducing the number of new applications, increasing the number of study sections, and facilitating continuity in the review process. The idea of “sharing” or “part-time” reviewers could assist in alleviating the time pressures on some reviewers. Reviewer continuity could be considered with applications that have been re-submitted. A novel way of implementing this might simply be allowing several reviewers from the initial section to participate via teleconference.

There are several challenges to reviews that take place without face-to-face interaction, which included non-contiguous dialogue, personal interaction with peers, and the dialogue that ensues at sessions. The AAOS encourages the use of video-conferencing options which could help alleviate the burden of these obstacles. It would also save both NIH travel funding and panel members' time. Lastly, it can be particularly challenging for West Coast attendees to participate

in sections, given the travel/time changes. The AAOS suggests implementation of regionally-based reviews as a pilot consideration for addressing this issue.

3. Core Values of the NIH Peer Review Process:

The AAOS believes that the current core values that exist at the NIH do not require changes. It is the AAOS' belief that nearly all reviewers are impartial, thorough, and informed. In order to maintain core values, it is imperative that the NIH emphasize conflict-of-interest to reviewers, provide a reasonable number of applications to each reviewer, assemble a diverse, dynamic, and knowledgeable review panel, and continue to provide professional and fact-based written critique.

4. Peer Review Criteria and Scoring:

The AAOS believes it would also be helpful for reviewers if references were linked to Pub Med Central or to a specified journal URL, which would facilitate the review process.

5. Career Pathways:

The AAOS applauds the NIH for having positively addressed some of the new investigator initiatives, including the K99/R00 Pathway to Independence award. Continued and evolving opportunities will allow young, mid-level, and senior investigators to obtain federal funding.

The AAOS is appreciative for the opportunity to provide feedback. We look forward to our continued dialogue and partnerships with the NIH in the future. If you have any questions about our comments, please feel free to contact either one of us or Christy M.P. Gilmour, AAOS Manager, Medical Research, Office of Government Relations, at 847-384-4323 or gilmour@aaos.org.

Respectfully submitted,



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