



NIH Director Announces Enhancements to Peer Review

NIH Will Commit \$1 Billion over Next Five Years to Investigator-Initiated High Risk, High Impact Transformative Research

National Institutes of Health (NIH) Director Elias A. Zerhouni, M.D., announced June 6th at the 96th Meeting of the Advisory Committee to the Director (ACD) critical changes to enhance and improve the NIH peer review system.

This marks the end of a year-long effort to determine ways to further enrich the process. An important component of the new plan is an increased commitment to investigator-initiated high-risk, high-impact research to prevent a slowdown of transformative research, despite difficult budgetary times.

"The scientific community became truly engaged in this comprehensive effort to figure out how to make peer review work better for both the reviewers and the applicants," Zerhouni said. "The results of this collective effort are concrete solutions that will maximize flexibility, remove any unnecessary burden, stimulate new innovation, and promote transformative research."

There was a remarkable response to the director's call-to-action by both the internal and external NIH communities. The initiatives presented to the ACD by Lawrence Tabak, D.D.S., Ph.D., Director of the National Institute of Dental and Craniofacial Research (NIDCR) and co-chair of the two peer review working groups, reflect NIH's response to thousands of comments, opinions, and criticisms received throughout the year. Taken together, these proposals bring to fruition the original charge, "to fund the best science, by the best scientists, with the least administrative burden."

Collaborative teams of participants worked to tackle challenges of the system and discover solutions. A comprehensive framework was created and implementation will be carried out over the next 18 months.

The Implementation Plan Report consists of four main priorities and highlights include:

- Priority 1 — Engage the Best Reviewers: Increase flexibility of service, formally acknowledge reviewer efforts, further compensate time and effort, and enhance and standardize training
- Priority 2 — Improve Quality and Transparency of Reviews: Shorten and redesign applications to highlight impact and to allow alignment of the application, review and summary statement with five explicit review criteria, and modify the rating system
- Priority 3 — Ensure Balanced and Fair Reviews Across Scientific Fields and Career Stages
 - Support a minimum number of early stage investigators and investigators new to NIH, and emphasize retrospective accomplishments of experienced investigators
 - Encourage and expand the Transformative Research Pathway
 - Create a new investigator-initiated Transformative R01 Award program funded within the NIH Roadmap with an intended commitment of a minimum of \$250 million over five years



- Continue the commitment of — and possibly expand the use of — the Pioneer, EUREKA, and New Innovator Awards. NIH will invest at least \$750 million in these three programs over the next 5 years.
- Reduce the burden of multiple rounds of resubmission for the same application, especially for highly meritorious applications
- Priority 4 — Develop a Permanent Process for Continuous Review of Peer Review

"As we contemplated possible changes, we were guided by several fundamental principles. First, while improving the system, do no harm. That is, ensure that any changes to the peer review system bring significant value and outweigh costs," said Zerhouni. "Second, continue to maximize the freedom of scientists to pursue high-risk, high-impact research. Moreover, we want to cultivate a sense that we continuously re-evaluate the peer review system to ensure that it is the best that it can be."

For more information about enhancing peer review at NIH and to learn about the implementation plan, please visit <http://enhancing-peer-review.nih.gov>