

Alan I. Leshner
Chief Executive Officer and
Executive Publisher, *Science*

May 18, 2006

The Honorable Daniel Inouye
Ranking Member
Commerce, Science, and Transportation Committee
U.S. Senate
560 Senate Dirksen Office Building
Washington, DC 20510

Dear Senator Inouye:

Thank you for the opportunity to testify at the Committee's hearing on the President's research and development (R&D) budget request for the National Science Foundation (NSF) on May 2. As we stated in our testimony, "AAAS recognizes, as does the Administration in its budget proposal for NSF, the importance of a broad, balanced portfolio of R&D investments. The need for strong support across all scientific fields comes both from the increasing interdependence of physical, biological, behavioral, and social sciences, and from the importance of all these fields to innovation and to the improvement of the economy, health and quality of life of all Americans."

We understand that you will soon be considering a newly introduced bill on innovation (S. 2802) which would affect NSF and other agencies. AAAS appreciates that this bill would authorize substantial increases in the NSF budget over the next five years, and would give special attention to science education.

However, although the bill contains many positive elements, we encourage you to resist efforts that could undermine the ability of some scientific fields to contribute fully to innovation and the U.S. economy of the future.

For over 50 years, the NSF has had a unique role in supporting basic research across the spectrum of scientific disciplines. This support has led to achievements as disparate as the field of nanotechnology and much of modern economic theory. Efforts to force the agency to direct any added resources solely to the physical sciences, engineering, and mathematics while ignoring research and education in the social and life sciences would threaten the ability of these fields to contribute fully, as they have in the past, to the nation's innovation capabilities and its future economic competitiveness.

The National Academies report, *Rising Above the Gathering Storm*, recognizes the importance of these fields to our nation's ability to compete globally. In Action B-1, the recommendation to support the physical sciences, the report emphasizes, "This special attention does not mean that there should be a disinvestment in such important fields as the life sciences or social sciences."

We are also concerned about the Innovation Acceleration Grants and the requirement that 8% of research funding be awarded outside of the peer-reviewed process. The peer-review system has been shown over the past 50 years to be the most effective system designed to identify the best and most innovative research. Not only would this be an extremely high proportion for a set-aside, but the net effect would be to decrease funding significantly for the kind of peer-reviewed research that has resulted in American global scientific pre-eminence and exactly the kinds of base for innovation that we all are seeking. This is especially dangerous during an era of declining budgets.

Finally, we believe that requiring agencies to evaluate the success of the acceleration grants within three years will be problematic. Three years is often not long enough to determine the results of cutting-edge research, and job creation would be an especially difficult impact to assess in this time period.

AAAS urges you to support peer-reviewed research across the broad spectrum of disciplines as currently administered by the National Science Foundation and other agencies.

Sincerely,

A handwritten signature in black ink, reading "Alan I. Leshner". The signature is fluid and cursive, with a long horizontal line extending to the right from the end of the name.

Alan I. Leshner