

NSB-08-20 February 15, 2008

MEMORANDUM TO MEMBERS OF THE NATIONAL SCIENCE BOARD

SUBJECT: Summary Report of the February 6-7, 2008 Meeting

The major actions of the National Science Board (Board) at its 402nd meeting on February 6-7, 2008 and a preliminary summary of the proceedings are provided. This memorandum will be publicly available for review. A more comprehensive set of Board meeting minutes will be posted on the Board's public Web site (http://www.nsf.gov/nsb/) following Board approval at the March 2008 meeting.

1. Major Actions of the Board (not in priority order):

- a. The Board approved the minutes of the Plenary Open Session (NSB-07-139) for the December 2007 meeting (http://www.nsf.gov/nsb/meetings/2007/1205/minutes.pdf Minutes for the Plenary Executive Closed and Closed Sessions for the December 2007 meeting of the Board were also approved.
- b. The Board approved a resolution to close portions of the upcoming March 26-27, 2008 Board meeting dealing with staff appointments; future budgets; grants and contracts; specific Office of the Inspector General investigations and enforcement actions; and National Science Foundation (NSF) participation in a civil or administrative action, proceeding, or arbitration (http://www.nsf.gov/nsb/meetings/2008/0326/closing.pdf).
- c. The Board approved the recipients for the 2007 Vannevar Bush Award and the NSB Public Service Awards. Awardees will be announced after the Board Chairman has notified the awardees of their selection.
- d. The Board approved a "Report to Congress on Cost Sharing Policies at NSF" (NSB-08-17) http://www.nsf.gov/nsb/publications/2008/rprt_congress_cs_policy.pdf.
- e. The Board approved a "Report to Congress on Pre-construction Funding and Maintenance and Operations Costs Associated with Major Research Equipment and Facilities at NSF" (NSB-08-15).
- f. The Board approved a Resolution on Competition and Recompetition of NSF Awards NSB-08-12) http://www.nsf.gov/nsb/publications/2008/nsb0812_comp_recomp.pdf.
- g. The Board approved a Statement on Competition, Recompetition, and Renewal of NSF Awards (NSB-08-16) http://www.nsf.gov/nsb/publications/2008/nsb0816_statement.pdf.

- h. The Board approved the Guidance for NSF Average Award Size and Duration, and Proposal Success Rate" (NSB-08-14)
 http://www.nsf.gov/nsb/publications/2008/nsb0814_avg_awd.pdf.
- The Chairman discharged the Committee on Programs and Plans, Task Force on International Science with thanks to Dr. Jon Strauss, chairman, and task force members Drs. Dan Arvizu, Ray Bowen, Patricia Galloway, Karl Hess, Alan Leshner, Thomas Taylor, and Mr. Arthur Reilly.

2. Board Chairman's Report

Dr. Steven Beering, Board Chairman, welcomed and introduced Dr. Craig Robinson, the recently appointed Acting Executive Officer and Board Office Director. Dr. Robinson served NSF in a variety of capacities since joining the agency in 1998. Over the past few years, Dr. Robinson led NSF's performance assessment and chaired the group that drafted the recent NSF Strategic Plan. Most recently, Dr. Robinson served for a year as a Brookings Legislative Fellow on the personal staff of Senator Joe Lieberman where he worked on various issues, including the America COMPETES Act. (COMPETES: America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science.) He received his Ph.D. in Astronomy and Astrophysics from Pennsylvania State University under the direction of Dr. France Cordova.

Dr. Beering also introduced Ms. Pamela McKinley, Senior Associate for Operations for the Board Office. A long-time Government employee, Ms. McKinley was employed by the U.S. Agency for International Development before her present assignment. Ms. McKinley is responsible for the administrative and operational functions in the Board Office. She received her M.A. Degree in Adult Education and Human Resources Development from the University of Rhode Island.

Although the Board approved honorary awards for the Vannevar Bush Award and the NSB Public Service Awards, the names of the awardees will not be made public until contacted by the Chairman. The awards will be presented at the annual awards dinner on May 6, 2008.

Dr. Beering announced that the Board Office will begin working on the 2009 calendar for Board meeting dates. All Board Members will be polled to ensure attendance by the highest number of voting Members possible. The poll will include those Board Members who could continue as Board Consultants. The Board will vote on the 2009 schedule as part of its annual business at the May 2008 meeting.

The Chairman discharged the Committee on Programs and Plans, Task Force on International Science with thanks to its chairman and members. (See 1.i.) He also thanked Misses Clara Englert, Amanda Slocum, and Tami Tamashiro of the Board Office staff, who have served as Executive Secretaries.

3. NSF Director's Report

Dr. Arden Bement, NSF Director, introduced Dr. Lance Haworth, Director of the Office of Integrative Activities, and the replacement for Dr. Nathaniel Pitts who retired in January 2008.

Dr. Bement announced that the Association for Computing Machinery (ACM) Turing Award, widely considered the most prestigious award in computing, named Dr. Edmund Clarke, Carnegie Mellon University, Dr. E. Allen Emerson, University of Texas, Austin, and Dr. Joseph Sifakis, University of Grenoble, as the 2007 award recipients for their work in Model Checking. Through the Directorate for Computer and Information Science and Engineering (CISE), NSF has supported research in Model Checking since its inception in the early 1980s, through its breakthrough research in the 1990s, and more recently in the 2000s transforming how major software companies are debugging their code.

For the congressional update, Dr. Bement reported on appropriations. The President signed the Omnibus Appropriations bill on December 26, 2007. NSF is funded at \$6.065 billion for FY 2008 that began on October 1, 2007 and ends on September 30, 2008. This is an increase of 2.5 percent.

For the FY 2009 budget request, the President sent his FY 2009 budget request to Congress on February 4, 2008. The NSF FY 2009 budget request reflects the commitment of the President and Congress to sustain competitive advantages by a total request of \$6.85 billion, which is an increase of 13.6 percent over 2008. The NSF also hosted its budget rollout on February 4, 2008, and had well attended exhibits in the NSF atrium showcasing NSF-sponsored research and education projects.

Upcoming hearings are as follows:

February 14, 2008 rescheduled to February 27, 2008 House Appropriations: Commerce, Justice, Science Subcommittee

February 26, 2008

House Science and Technology Committee, Subcommittee on Research and Science Education

March 13, 2008

Senate Appropriations: Commerce, Justice, Science Subcommittee

February 28, 2008 or March 12, 2008 (likely dates)

Senate Commerce: Science, Technology, and Innovation Subcommittee

April 2, 2008

House Science and Technology Committee, Subcommittee on Research and Science Education

4. Board Committee Reports

Note: The Education and Human Resources (EHR) Committee did not meet in February 2008.

a. Executive Committee (EC)

The committee met briefly to approve the minutes from its meeting held in August 2007.

b. Audit and Oversight (A&O) Committee

A&O Open Session

The committee was briefed on NSF's activities to address concerns raised in an Office of Inspector General audit of the management of NSF's research centers programs. Mr. Thomas Cooley, NSF Chief Financial Officer, provided an update on NSF's actions to resolve findings from the FY 2007 audit and to meet the Office of Management Budget requirements for management of internal controls. The committee was also updated by Dr. Christine Boesz, NSF Inspector General, regarding the progress in resolving a major external audit and ongoing audit work assessing the quality of university effort reporting.

A&O Closed Session

The NSF Inspector General presented a summary on ongoing investigations.

c. EHR Subcommittee on Science and Engineering Indicators (SEI)

The subcommittee discussed the rollout of *Science and Engineering Indicators 2008* on Capitol Hill and at the Chamber of Commerce on January 15, 2008, and the preparation of *Science and Engineering Indicators 2010*. SEI also heard a presentation by Dr. Joseph Kennedy, Chief Economist, Economics and Statistics Administration, Department of Commerce, and Dr. J. Steven Landefeld, Director of the Bureau of Economic Analysis, on the recently released Department of Commerce report, *Innovation Measurement: Tracking the State of Innovation in the American Economy*.

d. Committee on Programs and Plans (CPP)

The committee approved the "Report to Congress on Pre-construction Funding and Maintenance and Operations Costs Associated with Major Research Equipment and Facilities at the National Science Foundation" (NSB-08-15), subject to minor edits. [The full Board subsequently approved this report.] (See 1.e.)

The committee approved the revised Board Statement on Competition, Recompetition, and Renewal of NSF Awards (<u>NSB-08-16</u>) and the revised Resolution on Competition and Recompetition of NSF Awards (<u>NSB-08-12</u>). [The full Board subsequently approved the above statement and resolution.] (See 1.f. and 1.g.)

e. CPP Subcommittee on Polar Issues (SOPI)

The subcommittee heard presentations on two items: a European Science Foundation-led effort to establish a multinational polar infrastructure network of stations to support research, including climate and environmental observations at both poles; and an NSF-funded effort underway to investigate the changing freshwater cycle in the Arctic. The subcommittee also viewed a short film of the dedication ceremony of the new South Pole Station held on January 12, 2008. Additionally, SOPI heard a presentation on an information item on the upcoming rebid for polar services.

f. CPP Task Force on International Science (INT)

Dr. Jon Strauss, INT chairman, presented his last report to CPP and indicated that the INT report, *International Science and Engineering Partnerships: A Priority for U.S. Foreign Policy and Our Nation's Innovative Enterprise* (NSB-08-4), would be published in the upcoming weeks and released in March 2008.

g. CPP Task Force on Sustainable Energy (SE)

The task force discussed the first SE Roundtable Discussion, which would be held on February 8, 2008, the day after the Board meeting. The task force reviewed the Roundtable agenda, list of participants, and background paper that were provided to Board Members. SE also discussed tentative plans for additional roundtables to be held later in 2008.

h. Committee on Strategy and Budget (CSB)

The committee discussed an approach to preparing a report to Congress on limiting proposals from institutions, as described in the America COMPETES Act. Mr. Arthur Reilly agreed to assist the CSB chairman in drafting a report for discussion at the May 2008 meeting.

Dr. Bement presented an NSF budget summary of the FY 2008 appropriations and the FY 2009 request.

The committee approved the Guidance for National Science Foundation Average Award Size and Duration, and Proposal Success Rate (NSB-08-14), subject to minor edits. [The full Board subsequently approved this guidance.] (See 1.h.)

i. CSB Task Force on Cost Sharing (CS)

Since the last Board meeting, CS held a Roundtable Discussion at NSF on December 7, 2007 involving experts on cost sharing; held two full task force teleconferences; and met with directors and center evaluators from the NSF Industry/University Cooperative Research Center (I/UCRC) program.

The task force approved the "Report to Congress on Cost Sharing Policies at the National Science Foundation" (NSB-08-17), subject to minor edits. This report was due to Congress on February 9, 2008, per the America COMPETES Act. [The full Board subsequently approved this report.] (See 1.d.)

The task force also discussed a preliminary plan for two additional Roundtable Discussions to further study cost sharing and compile a second report later in 2008. Additionally, CS discussed its progress on developing a Web-based survey on cost sharing to be distributed to key stakeholders.

Craig R. Robinson
Acting Executive Officer