

MEMORANDUM TO MEMBERS AND CONSULTANTS OF THE NATIONAL SCIENCE BOARD

SUBJECT: Summary Report of the September 24, 2009 Meeting

The major actions and approvals of the National Science Board (Board, NSB) and a preliminary summary of the proceedings at the Board's September 2009 meeting are provided. This memorandum is also made available for public review. The minutes of the Plenary Open Session for the September 2009 meeting will be posted on the Board's public Web site (<http://www.nsf.gov/nsb/>) following Board approval at the December 2009 meeting.

1. Major Actions and Approvals at the 411th NSB Meeting (not in priority order):

- a. The Board authorized the NSF Director, at his discretion, to make an award for additional funding authorization for the Management and Operation of the National Astronomy and Ionosphere Center (NAIC), Cornell University.
- b. The Board authorized the NSF Director, at his discretion, to make an award for the Preliminary Design for the Deep Underground Science and Engineering Laboratory (DUSEL), University of California at Berkeley.
- c. The Board approved a statement on open Board meetings that reaffirms transparency and openness to help build understanding and interest in Board activities. (Attachment)
- d. The Board approved a Board Member proposal review process, which requires a change to the *NSF Proposal and Award Manual* stipulating that the Board review may take place in Plenary Executive Closed Session of Board meetings or by polling Board Members between meetings.
- e. The Board Chairman appointed Dr. Ray Bowen as chairman of the *ad hoc* Committee on Honorary Awards to work on the Vannevar Bush Award and the NSB Public Service Award, with Drs. Douglas Randall and Thomas Taylor, members.
- f. The Board approved the minutes of the Plenary Open Session (NSB-09-75) for the August 2009 meeting (<http://www.nsf.gov/nsb/meetings/2009/0805/minutes.pdf>). Minutes for the Plenary Executive Closed (NSB-09-73) and Closed (NSB-09-74) Sessions for the August 2009 meeting of the Board were also approved.

- g. The Board approved a resolution to close portions of the upcoming December 9-10, 2009 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/2009/1209/closing.pdf>) (NSB-09-76).

2. Board Chairman's Report

Dr. Steven Beering, Chairman, announced the chairman and committee members for the *ad hoc* Committee on Honorary Awards. (See 1.e.) This *ad hoc* committee will work on the Vannevar Bush Award and the NSB Public Service Award. As part of the Board's communication plan, a call for nominations was placed in the October 9, 2009 edition of *Science Magazine*.

The Chairman addressed the "Statement on Open Board Meetings" (NSB-09-85) (See 1.c. and Attachment). He reported that the Board remains committed to public observation of Board Meetings. If future budgets permit, the Board hopes to Webcast the meetings to allow greater opportunities for public observation.

He also reported that starting with the August 2009 Board meeting, members of the public who did not pre-register for Board events needed to be escorted by security staff to the Board meeting rooms. Although this security measure was implemented without problems for the August Board meeting, this change did produce challenges for the "Next Generation of STEM Innovators Expert Panel Discussion" held at NSF on August 24-25, 2009, where over 150 members of the public pre-registered but many others came without registering. Fortunately, in order to accommodate the pre-registrations, staff had provided for two overflow rooms with video monitors ready, as only about 100 visitors fit in the Board Room. This arrangement also addressed Department of Education expressed security concerns prior to the visit of U.S. Secretary of Education, Mr. Arne Duncan, at the STEM Innovators discussion.

Although technically permitted under the Sunshine Act, the Board did not support a suggestion by NSF security staff that the public view Board meetings on video screens from the public conference rooms on the first floor of the NSF building, beginning in December 2009, because it would interfere with important opportunities for Board interaction with the public and the press.

The Board has not yet developed firm guidelines for meetings under the Sunshine Act that address the concerns expressed in the 2004 National Academy of Public Administration (NAPA) Report to Congress that opening essentially all NSB gatherings to public observation was inappropriate and that such an approach "could hamper the NSB's effectiveness and adversely affect scientific advancement." They encouraged "thoughtful adherence to the Sunshine Act" and recommended that the Board define which NSB gatherings are "meetings" subject to the Sunshine Act.

The "Statement on Open Board Meetings" is first step in that process. The statement includes principles that help to further transparency of Board decisions. It covers many of the Board's activities -- from Board committee meetings and teleconferences, to the annual retreat, occasional workshops, and special commissions. It reaffirms the Board's commitment to Congress in 2002

that the 2-day Board meetings will be open to the public. The Board's goal is also to keep, as pointed out in the Office of the Inspector General audit reports, the presumption in favor of open meetings when the Board decides to use exemptions that are permissible under law.

[Additionally, in Plenary Open Session, the Board approved a process for Board Member proposal review. (See I.d.)]

3. NSF Director's Report

Dr. Cora Marrett, NSF Acting Deputy Director, served as NSF Acting Director in the absence of Dr. Arden Bement.

Congressional Update

For the congressional update, Dr. Marrett reported that on September 23, 2009, the Subcommittee on Research and Science Education, House Committee on Science and Technology, held a markup on draft legislation to authorize activities for support of cybersecurity research and development.

Dr. Marrett reported on upcoming hearings. On October 8, 2009, the Subcommittee on Research and Science Education, House Committee on Science and Technology will hold a hearing entitled, "Investing in High-Risk, High-Reward Research." Dr. James P. Collins, Assistant Director, Directorate for Biological Sciences, was asked to testify on behalf of NSF. The purpose of this hearing would be to examine mechanisms for funding high-risk, potentially high pay-off research, and the appropriate role of the Federal Government in supporting such research.

For the Continuing Resolution, the House will begin work on a continuing resolution to keep agencies operating at FY 2009 levels while Congress completes the 12 annual appropriations bills. The House passed all 12 of its FY 2010 appropriations bills, while the Senate passed 6.

Dr. Marrett also reported on the Medal of Science. President Obama recently named nine researchers as recipients of the National Medal of Science and four inventors and one company as recipients of the National Medal of Technology and Innovation, the highest honors bestowed by the U.S. on scientists, engineers, and inventors. The recipients would receive their awards on October 7, 2009 at a White House ceremony.

Additionally, Dr. Marrett reported on congressional briefings. On July 9, 2009, NSF held a congressional luncheon briefing and open house in the Hart Senate Office Building where over 50 researchers and students presented their research to members of Congress, academia, and industry. The research was supported by NSF's program on Cyber-Physical Systems (CPS). The event featured special guest Senate Majority Leader Harry Reid, who, along with Dr. Bement, delivered remarks on the importance of CPS research, noting the "tremendous impact" that the technologies can make on many sectors of the economy. The total number of participants was about 250, which included over 70 congressional staff. The luncheon speakers included Dr. Jeannette Wing, Assistant Director, Computer and Information Science and Engineering (CISE); Mr. Don C. Winter, Vice President, Engineering and Information Technology, Boeing Phantom Works; and Dr. Julian M. Goldman a physician at Massachusetts General Hospital in Boston and the Medical Director of Partners HealthCare System Biomedical Engineering. The event brought together experts from

diverse backgrounds, allowing congressional staff, researchers, and the general public to explore recent breakthroughs and improve their understanding of the potential impacts that cyber-physical systems can make on securing a safer, healthier, and more prosperous future.

Also, in June 2009, NSF, DISCOVER, the Institute of Electrical and Electronics Engineers (IEEE), and the American Society of Mechanical Engineers (ASME) launched “The Road to the New Energy Economy,” a series of congressional briefings on the science and technology required to achieve the nation’s energy goals. On September 17, 2009, NSF held a congressional luncheon briefing on “Increasing Efficiency,” during which leading experts discussed how increasing energy efficiency can produce a cleaner more economical world. Approximately 75 people attended the briefing, including Hill staffers.

Track-2C Update

Dr. Marrett presented an update regarding an information item that the Office of Cyber-infrastructure (OCI) provided to the Board in August 2009. OCI had discussed the status of the Track-2C award to the Pittsburgh Supercomputer Center (PSC). The funding had been authorized by the Board but not yet awarded due to vendor financial difficulties, timing and technical issues. Because of the concerns expressed by the Board and the fact that the awardee was unable to arrive at a set of satisfactory terms and conditions with their chosen vendor partner or with an alternative partner, OCI consulted with the Director and the Office of the General Counsel and decided not to make this award. Instead, OCI will issue a new solicitation in FY 2010.

The new solicitation will be focused at acquiring an innovative system to meet the specific needs of the S&E research community and to close the gap between computational resource requests and available assets. Drawing on the requirements of the S&E communities, as well as new architectures that are becoming available, the solicitation will provide the opportunity to significantly increase the capability and range of computational resources available to NSF-funded researchers.

Dr. Marrett noted that NSF appreciates the significant efforts by PSC, its openness and cooperation in discussions with OCI, and its willingness to be as flexible as possible during this very active negotiation process. All parties worked hard at trying to arrive at a satisfactory conclusion that would benefit all stakeholders, while ensuring that NSF funds were not expended unless certain guarantees and financial commitments were in place. It was anticipated that the new solicitation and subsequent award will more than compensate for any delay in meeting the needs of the community.

4. Board Committee Reports*

a. Executive Committee (EC)

Dr. Marrett served as the EC acting chairman in the absence of the Dr. Bement. She reported on senior managers leaving NSF and those who will temporarily hold the positions until replacements are selected. She also discussed the Human Frontier Science Program (HFSP) and NSF’s

* Only the Executive Committee, Committee on Programs and Plans, and the Committee on Strategy and Budget held meetings in September 2009.

contribution to this multi-national, nonprofit organization. NSF will continue to support the HFSP as requested by the Office of Science and Technology Policy (OSTP). Dr. Marrett noted that the return on investment in this research program is approximately 2 dollars for every Federal dollar invested.

The committee discussed NSB Priorities for FY 2010 and will continue this discussion at the December 2009 Board meeting. Dr. Marrett noted the letter regarding NSF's Agency Operations and Awards Management Accounts (AOAM), which was sent from the Board to the chairmen and ranking members of the House Appropriations Committee and the Senate Appropriations Committee in September 2009.

b. Committee on Programs and Plans (CPP)

In CPP Closed Session, the committee considered two action items and forwarded the following to the full Board for approval.

- ◆ Additional Funding Authorization for the Management and Operation of the National Astronomy and Ionosphere Center (NAIC), Cornell University.
- ◆ Preliminary Design for the Deep Underground Science and Engineering Laboratory (DUSEL), University of California, Berkeley.

[The full Board subsequently approved the two award resolutions.] (See 1.a. – 1.b.)

c. Committee on Strategy and Budget (CSB)

In CSB Closed Session, the committee thanked Dr. Beering for preparing and transmitting a letter to congressional appropriations chairmen in support of the FY 2010 NSF AOAM budget request. Additionally, Dr. Marrett presented an overview and highlights of the FY 2011 NSF Budget Submission to the Office of Management and Budget (OMB).

[signed]

Craig R. Robinson
Acting Executive Officer

Attachment: NSB-09-85, Statement on Open Board Meetings

STATEMENT ON OPEN BOARD MEETINGS

The National Science Board reaffirms that transparency and openness is important because, among other things, it helps to build understanding, interest and support in the Board activities from stakeholders. These communications also help to inform the Board as it makes policy decisions that apply to the National Science Foundation.

The Board believes that the principles below help to further transparency of Board decisions:

- The National Science Board benefits from input from its constituencies, and public observation of Board activities is an important part of this process.
- National Science Board Meetings are defined by statute and the Board is subject to all provisions of the Government in the Sunshine Act and NSF Regulations, including those related to notice, recorded vote, closure, and public observation.
- The Board remains committed to public observation of committee, subcommittee and task force discussions at Board meetings.
- Board committee, subcommittee, and task force meetings and teleconferences, will be open to the public whenever attendance reaches at least a quorum of the Board, even though committees and Board subunits, other than the Executive Committee, cannot by the terms of the NSF Act, take actions on behalf of the Board. The Board's website will provide advance 'notice' to the public whenever such meetings or teleconferences are expected to include at least a quorum of the Board. All committee, subcommittee and task force advice must still be presented to the full Board for deliberation and action at Board meetings.
- The annual Board retreat is intended to provide an opportunity for Board Members to exchange ideas and to identify and frame issues for possible future Board consideration. These issues and opinions would then be open to full consideration at a Board meeting before any action is taken. Board retreats are structured so as to fall outside the definition of "meeting" defined in the Sunshine Act, since all discussion is informal and preliminary, informational and exploratory or tentative, and focused on identifying, clarifying, or framing issues or options.
- The National Science Board occasionally hosts workshops and other public events to gather input from the science, engineering, and education communities on a variety of topics of interest to the Board. The Board will publicize these events on its 'notice' website, as appropriate, and these workshops will remain open to the public.
- The National Science Board occasionally establishes "special commissions" to advise the Board on a variety of topics. These commissions, which are subject to the Federal Advisory Committee Act and the Board, will comply with all applicable public notice, public access, recordkeeping, and reporting requirements.