

**MEMORANDUM TO MEMBERS OF THE NATIONAL SCIENCE BOARD**

**SUBJECT:** Summary Report of the February 8, 2007 Meeting

The major actions of the National Science Board (Board) at its 396th meeting on February 8, 2007 and a preliminary summary of the proceedings are provided. This memorandum will be publicly available for any interested parties to 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 2007 meeting.

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

- a. The Board approved the minutes of the Plenary Open Session (NSB-06-130) for the November 2006 meeting (<http://www.nsf.gov/nsb/meetings/2006/1129/minutes.pdf>). Minutes for the Plenary Executive Closed and Closed Sessions for the November 2006 meeting of the Board were also approved.
- b. The Board approved a resolution to close portions of the upcoming March 29-30, 2007 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/2007/0329/closing.pdf>).
- c. The Board approved the draft report, *Enhancing Support of Transformative Research at the National Science Foundation* (NSB-07-6) ([http://www.nsf.gov/nsb/documents/2007/tr\\_draft.pdf](http://www.nsf.gov/nsb/documents/2007/tr_draft.pdf)) for release to the public for review and comment.
- d. The Board approved the recipients for the 2007 Vannevar Bush Award and the NSB Public Service Awards. Vannevar Bush Award: Dr. Shirley Ann Jackson, President of Rensselaer Polytechnic Institute. NSB Public Service Award – Individual: Dr. Bassam Shakhshiri, Professor of Chemistry at the University of Wisconsin-Madison and William T. Evjue Distinguished Chair for the Wisconsin Idea. NSB Public Service Award – Group: NUMB3RS television series.
- e. The Board authorized the Chairman to send a letter to the U.S. Senate expressing the Board's full endorsement to the FY 2007 Joint Resolution of Congress for the NSF research and related activities account, but also strongly encouraging congressional approval of a similar budget increase for the NSF education and human resources budget account.

## 2. Board Chairman's Report

Dr. Steven Beering, Board Chairman, reported that in Executive Closed Session, the Board approved honorary awards for the Vannevar Bush Award and the NSB Public Service Awards (See page 1.). The awards will be presented at the annual awards dinner on May 14, 2007 at the Department of State's Diplomatic Reception Rooms.

Dr. Beering announced that the Board Office will begin working on the 2008 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 whose terms expire in May 2008, but could continue as Board Consultants. The Board will vote on the meeting schedule as part of its annual business in May.

The Chairman was pleased to present the latest Board report: *Hurricane Warning: The Critical Need for a National Hurricane Research Initiative (NSB-06-115)*. On September 28, 2006, the Board approved the "Draft Report for Public Comment." The following day, this report was presented to the President and Congress and released to the public for comment. The "Final Draft of the Report" was approved at the November 30, 2006 Board meeting, subject to final editing. Finally, the "Published Copy" was presented at the February 2007 Board meeting and will be distributed to Congress, workshop participants, NSF advisory committees, and others.

The Commission on 21<sup>st</sup> Century Education in Science, Technology, Engineering, and Mathematics (STEM) continued to make progress. Dr. Beering called on Dr. Jo Anne Vasquez, a Board Member and Commission Vice Chairman. Dr. Vasquez reported that, since the November 2006 Board meeting, the Commission held teleconferences on December 22, 2006 and January 10, 2007, and met January 18, 2007 in Phoenix, Arizona to consider the "Proposed Draft Action Plan Section," which was provided to Board Members. At the meeting in Phoenix, Governor Janet Napolitano, Governor of Arizona and the Chairman of the National Governors Association, addressed the Commission. The "Proposed Draft Action Plan Section," which is only a draft portion of the entire report yet to be developed, addresses an overarching recommendation for Congress to charter a national body, similar to the National Academies, which would work in partnership with the National Governors Association to ensure coordination of STEM education among states. The Commission will also recommend that states use P-20 Councils as a key mechanism for ensuring vertical alignment of STEM education from pre-K through college within a state.

Dr. Beering requested that Board Members review the STEM education draft plan and forward comments to Dr. Michael Crosby, Executive Officer. Dr. Crosby will compile and forward Board comments to the Commission. The Commission will address these comments as it prepares a revised full report for the March 2007 Board meeting.

### **3. NSF Director's Report**

Dr. Arden Bement, NSF Director, reported on the following NSF staff:

- Dr. Cora Marrett, Assistant Director, Directorate for Education and Human Resources (EHR), who served as a consultant for several months, joined NSF full time (as of February 1, 2007)
- Dr. Margaret Leinen, Assistant Director, Directorate for Geosciences (GEO) retired in January 2007. While a nation-wide search is conducted, Dr. Jarvis Moyers, Division Director, Atmospheric Sciences (GEO/ATM), will serve as Acting Assistant Director for that directorate.
- Dr. Jeanette Wing began serving as a consultant for the Directorate for Computer and Information Sciences and Engineering (CISE), and will join NSF full time in June 2007. In the interim, Dr. Deborah Crawford will serve as Acting Assistant Director for CISE.

Dr. Kathie Olsen, NSF Deputy Director, reported on the outcome of a Federal Human Capital Survey conducted by the Office of Personnel Management. NSF was ranked again as the second best place to work in the Federal Government by the Partnership for Public Service and American University's Institute for the Study of Public Policy Implementation.

In the congressional update, Dr. Bement reported on appropriations. He stated that the House passed a year-long continuing resolution (CR) on January 31, 2007 that would provide NSF with the requested 7.7 percent increase for the research and related activities account. If agreed by the Senate, other NSF accounts – salaries and expenses, education and human resources, major research equipment and facilities construction (MREFC), National Science Board, and Office of the Inspector General – would be frozen at the FY 2006 level. Overall this CR provided \$334 million increase over last year, and represented an affirmation of support for NSF by the House. The Senate action on the CR would occur before February 15, 2007 to avoid an additional short-term CR. The NSF FY 2008 budget request was formally released on February 5, 2007.

NSF was scheduled for hearings by the House Appropriations Committee's Subcommittee on Commerce, Justice, and Science on February 28 and March 1, 2007. The Senate Appropriations Committee counterpart will hold its hearing on March 15, 2007. The House Science Committee scheduled a hearing on the NSF budget request for March 20, 2007. Since the November 2006 Board meeting, six bills were introduced in Congress that would have significant implications for NSF. A listing of those bills was provided to Board Members.

### **4. Board Committee Reports**

#### **a. Audit and Oversight (A&O) Committee**

##### A&O Open Session

Dr. Dan Arvizu, A&O chairman, commented on congressional interest in correcting ongoing reportable conditions in NSF's annual audits, and indicated A&O's determination to work with NSF management and the NSF Office of Inspector General to resolve these conditions.

The committee addressed the major agenda item, which concerned reportable conditions identified by NSF financial auditors, Clifton-Gunderson LLP. Dr. Olsen reported on NSF's Corrective Action Plan (CAP) for reportable conditions in the FY 2006 financial audit. Her report addressed reportable conditions for Post Award Oversight for High Risk Grants and Cooperative Agreements for Contract Monitoring.

Ms. Deborah Cureton, Associate Inspector General for Audit, also provided comments on NSF's CAP to address the FY 2006 reportable conditions. She stated that the OIG agreed with NSF's proposed actions to correct all four of the grant monitoring recommendations and that the upcoming FY 2007 audit would evaluate NSF's implementation of these corrective actions. For the contract monitoring recommendations, she reported that NSF's proposed actions to strengthen its contract administration policies and procedures and to provide for a risk based contract oversight program satisfactorily addressed the first recommendation. Also, NSF's action to continue to work with the Defense Contract Audit Agency (DCAA) to conduct audits of contractor quarterly expenditure reports partially resolved the second recommendation. But NSF's plan to act on the Raytheon incurred cost audit reports remains an open issue. Similarly, in order to resolve the third recommendation, NSF needs to develop a plan to improve the timeliness and accuracy of the property, plant and equipment reporting systems associated with its Antarctic program.

#### A&O Closed Session

The committee was presented information about several ongoing investigations.

#### **b. Education and Human Resources (EHR) Committee**

The meeting was dedicated to new topics for future activities for the EHR Committee over the next year. New topics would be in addition to planned and ongoing activities including: follow-on to the Engineering Education workshops; report to Congressman Rush Holt on evaluation procedures and results for the NSF/EHR Directorate programs; discussion on the new National Academies' report, *Beyond Bias and Barriers*, and the Board's report, *Broadening Participation in Science and Engineering Faculty* (NSB-04-41), distributed at the November 2006 meeting; and a report by Dr. Bement on the organizational changes in the NSF EHR Directorate at the March 2007 meeting.

Dr. Lanzerotti, chairman of the Subcommittee on Science and Engineering Indicators, asked all Members to finalize their choices of a chapter or chapters of *Science and Engineering Indicators 2008* for review, and to consider taking the lead for the Workforce chapter.

#### **c. Committee on Programs and Plans (CPP)**

##### CPP Open Session

The committee expressed interest in the impacts to the MREFC program by the realities of the FY 2007 budget and the subsequent impact of the FY 2008 request. The committee asked for a comprehensive discussion on this issue at the March 2007 meeting, including the process for

making decisions on changes in yearly funding for projects. The release of the NSF *Facilities Plan* at the same time as the President's budget was called to the attention of committee members.

The committee considered the draft report of the Task Force on Transformative Research (NSB-07-6). The chairman of the Task Force on Transformative Research, Dr. Douglas Randall, described changes to the report following comments received from Board Members. After a discussion regarding the recommendations of the report, the committee recommended approval to the Board of the draft's release for public comment. *[The full Board subsequently approved the draft report, Enhancing Support of Transformative Research at the National Science Foundation (NSB-07-6) for release to the public for review and comment. (See page 1).]*

#### **d. Committee on Strategy and Budget (CSB)**

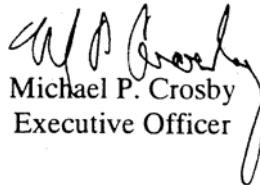
##### CSB Open Session

In December 2004, the Board set a policy to eliminate cost sharing on NSF awards (except for mandatory 1 percent). Some Board Members expressed concerns about unintended consequences of implementation of NSF and Board cost sharing policies at universities. Dr. Bement agreed to review the issue within NSF, including discussions with principal investigators, and report back to CSB at the March 2007 meeting.

Dr. Bement provided an update of the FY 2007 and FY 2008 NSF budget requests to Congress. CSB was especially interested in the impact of the budgets on EHR MREFC projects.

##### CSB Closed Session

In Closed Session, Dr. Bement described some of the implications of the FY 2007 appropriations on future budgets. If NSF is to achieve the 10-year doubling called for in the American Competitiveness Initiative, then annual incremental increases must be obtained. One of the high priorities mentioned by Dr. Bement was the restoration of the EHR budget. General NSF priorities were represented in the FY 2007 request. *[The full Board subsequently authorized the Board Chairman to send a letter to the U.S. Senate expressing the Board's full endorsement to the FY 2007 Joint Resolution of Congress for the NSF research and related activities account, but also strongly encouraging congressional approval of a similar budget increase for the NSF education and EHR budget account.]*

  
Michael P. Crosby  
Executive Officer