

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

**SUBJECT:** Summary Report of the May 6-7, 2014 Meeting

The major actions and approvals of the National Science Board (Board, NSB) and a preliminary summary of the proceedings at the Board's May 6-7, 2014 meeting are provided. This memorandum is also made available for public review. The minutes of the Plenary Open Session for the May 2014 meeting will be posted on the Board's public Web site (<http://www.nsf.gov/nsb/>) following Board approval. The archived webcast of the meeting is located at the following URL: <http://www.tvworldwide.com/events/nsf/140506/>.

**1. Major actions and approvals at the 436th meeting of the Board included the following (not in priority order):**

- a. The Board authorized the NSF Deputy Director, at her discretion, to make an award for the construction of the Large Synoptic Survey Telescope (LSST).
- b. The Board approved the recommendations to the *NSB Annual Portfolio Review of Facilities FY 2013* (APR; NSB-13-72) from the Committee on Strategy and Budget (CSB) and the CSB Subcommittee on Facilities (SCF).
- c. Dr. Dan Arvizu was re-elected to a 2-year term as Chairman of the Board, and Dr. Kelvin Droegemeier was re-elected to a 2-year term as Vice Chairman. Drs. Arvizu and Droegemeier were also re-elected to 2-year terms as members of the Executive Committee (EC).
- d. The Board accepted the 2013 Annual Report of the Executive Committee (NSB/EC-14-1) as presented by the committee chairman, Dr. France Córdova, NSF Director.
- e. The Board Chairman discharged the *ad hoc* Committee on Honorary Awards (AWD) with thanks to Dr. Ruth David, chairman, and Drs. Stephen Mayo and Douglas Randall, members.
- f. The Board Chairman discharged the *ad hoc* Committee on Nominating for NSB Elections (NOMCOM), with thanks to Dr. Douglas Randall, chairman, and Drs. Bonnie Bassler, Ray Bowen, and Vinton Cerf, members.
- g. The Board approved the minutes of the Plenary Open Session (NSB-14-17) for the February 2014 meeting (<http://www.nsf.gov/nsb/meetings/2014/0225/minutes.pdf>). Minutes for the Plenary Executive Closed (NSB-14-15) and Plenary Closed Sessions (NSB-14-16) for the February 2014 meeting of the Board were also approved.

## 2. Board Chairman's Introduction and Report

Dr. Dan Arvizu, NSB Chairman, welcomed Dr. France Córdova as the 14th NSF Director. She was sworn in by Dr. John Holdren, Director, Office of Science and Technology Policy (OSTP), for a 6-year term on March 31, 2014.

Dr. Arvizu also recognized and thanked the Board Members of the Class of 2014. The Members of the Class of 2014 are: Drs. Ray Bowen, Esin Gulari, G.P. "Bud" Peterson, Douglas Randall, Diane Souvaine, Arnold Stancell, Claude Steele, and France Córdova (who was a member of the Class of 2014 until she became NSF Director). Each member received a plaque in appreciation for his or her service.

Additionally, Dr. Arvizu recognized the diligent efforts of Dr. Cora Marrett, who had served as Acting Director for the past year, with a letter of appreciation from the Board.

On the topic of delegation of award-approval authority to the Director, Dr. Arvizu noted the "Delegation of Award-Approval Authority to the Director Resolution of February 2011" and list of "Current Statutory Authorities and Obligations of April 2014."

At the invitation of Dr. Córdova, Dr. Joan Ferrini-Mundy, Assistant Director, Directorate for Education and Human Resources (EHR), presented information on the Common Core initiative to the Board.

Dr. Arvizu reported on the annual Awards Ceremony and Dinner at the Department of State's Diplomatic Reception Rooms on May 6, 2014, where the Board was honored to receive a message from President Obama. The following honorary award recipients were recognized for their distinguished contributions:

- Dr. Richard Tapia, mathematician at Rice University's Computational and Applied Mathematics Department, received the Vannevar Bush Award for outstanding contributions toward the welfare of mankind and the Nation through public service in science and technology.
- Dr. Feng Zhang, a faculty member at the Broad Institute of the Massachusetts Institute of Technology (MIT) and Harvard University, received the Alan T. Waterman Award, which recognizes young investigators for outstanding capability and exceptional promise for significant future achievements.

The 2014 Public Service Awards for contributions toward increasing public understanding of science and engineering were presented to the following:

- Dr. Arthur Caplan, Founding Head of the Division of Bioethics at the New York University Langone Medical Center, received the individual Public Service Award.
- The group Public Service Award was presented to the American Association for the Advancement of Science (AAAS) Science and Technology Policy Fellowships Program.

Dr. Arvizu also announced recent recognition of the following Board Members:

- Dr. Deborah Ball was elected to the American Academy of Arts and Sciences.

- Dr. Inez Fung was elected to the American Philosophical Society founded by Benjamin Franklin and the American Academy of Arts and Sciences.

He also announced the retirement of Ms. Jean Pomeroy, Senior Policy Analyst, after 27 years of service at NSF and more than 20 years with the Board Office (as of April 30, 2014).

Additionally, in honor of Public Service Recognition Week, Dr. Arvizu extended his thanks to all NSF public servants. He especially thanked NSF management—the Assistant Directors, Office Directors, and staff—who increasingly have become engaged with the Board’s activities. Also, on behalf of all of the Board Members, he expressed appreciation for the Board Office staff, who skillfully work to support 25 presidential appointees and accomplish countless tasks.

Dr. Arvizu announced the results of the elections for NSB Chairman and NSB Vice Chairman (see 1.c). He also discharged two committees: AWD and NOMCOM (see 1.e and 1.f, respectively).

### **3. NSF Director’s Report**

In her first report as NSF Director, Dr. France Córdoba, thanked Dr. Cora Marrett, who had served as Acting NSF Director, along with the Office of Director staff, the NSF Assistant Directors, as well as the Board Office staff for all their support. Additionally, she acknowledged the NSF staff in honor of Public Service Recognition Week for all their efforts.

She introduced the following NSF staff:

- Dr. Jane Silverthorne, Deputy Assistant Director, Directorate for Biological Sciences (BIO) (as of April 6, 2014).
- Ms. Irene Qualters, Division Director, Division of Advanced Cyberinfrastructure (ACI), Directorate for Computer and Information Science and Engineering (CISE) (as of April 6, 2014).

Dr. Córdoba also announced the following honors to NSF staff:

- The 2014 Samuel J. Heyman Service to America Medal (Sammie) announced that Dr. Scott Borg, Head, Antarctic Sciences Section, Division of Polar Programs (PLR), Directorate for Geosciences (GEO), was named a finalist for the Career Achievement Medal.
- Dr. John Wingfield, BIO Assistant Director, was elected as a member of the American Academy of Arts and Sciences.

For the congressional update, Dr. Córdoba reported that the House Science, Space, and Technology Committee’s Subcommittee on Research and Technology passed H.R. 4186, the Frontiers in Innovation, Research, Science, and Technology (FIRST) Act, on March 13, 2014. Full Committee consideration is expected shortly. This bill would reauthorize NSF for FY 2014 and 2015.

On April 9, 2014, the Senate Commerce, Science, and Transportation Committee reported out

S. 2022, the Forensic Science and Standards Act of 2014. It now awaits Senate floor action. This bill authorizes forensic research activities at NSF as well as creates a coordinating office at OSTP.

On April 29, 2014, the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies released the details of NSF's appropriation bill for FY 2015. The bill would provide NSF with \$7.4 billion, an increase of \$237 million (or 3.2 percent) over the current funding level, and it is \$154 million (or 2.1 percent) above the President's FY 2015 request. The full committee will take up the bill on May 8, 2014.

On the same day that the appropriations bill was released on the House side, Dr. Córdova testified before the Senate Appropriations Committee on NSF's contribution to driving innovation. NSB Chairman, Dr. Dan Arvizu; NSB Vice Chairman, Dr. Kelvin Droegemeier; and Board Member, Dr. Arthur Bienenstock, also attended.

The 2013 Annual Report of the EC was approved by the committee and accepted by the full Board (see 1.d).

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

[Note: The EC, Committee on Education and Human Resources (CEH), and Task Force on Administrative Burdens (AB) did not meet at the May 2014 Board meeting. AB provided an oral report to the full Board during the Open Plenary Session on May 7, 2014. An abridged version of that report can be found under item 4.e.]

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

Drs. Wanda Ward and Steve Meacham provided a brief overview of the structure of the annual report on NSF's merit review process. Committee members raised a number of issues for further consideration; NSF promised to follow up on each.

Inspector General (IG) Allison Lerner discussed an investigation of a Maryland professor that resulted in his conviction on seven counts of wire fraud, mail fraud, falsification of records, and theft. Mr. Sal Ercolano of Clifton Larson Allen, partner-in-charge of NSF's financial statement audit, presented an overview of the audit plan for FY 2014. Mr. Ercolano noted next year's audit faces challenges due to NSF's implementation of a new financial system and resulting impact on the agency's preparation of the FY 2014 financial statement.

Ms. Martha Rubenstein, Chief Financial Officer (CFO), affirmed that implementing the new NSF financial system was challenging and added complexity to the requirements and timing of the FY 2014 financial statement audit. She noted that the implementation of the new system is on schedule, on budget, and that test data loads have been working out well.

## **b. Committee on Science and Engineering Indicators (SEI)**

The committee received a brief status update on the 2014 State Data Tool, the 2014 SEI app, and the Science, Technology, Engineering, and Mathematics (STEM) Education Data and Trends online tool. Jeri Mulrow [National Center for Science and Engineering Statistics (NCSES)] provided an update on the project to redesign *Science and Engineering Indicators (Indicators)* as a primarily digital document. The committee provided feedback on NCSES' approach for implementation. The committee reviewed an overview of the 2014 companion to *Indicators* on the STEM workforce and provided feedback to staff.

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

During CPP Open Session, the committee heard two information items:

1. Update on the status of the National Solar Observatory
2. Division of Material Research (DMR) briefing on the National Research Council Magnet Science Report.

CPP engaged in a Program Portfolio Planning session, titled "GEO Vision: Strategic Planning Process in the Geosciences."

During the Closed Session of the committee meeting, CPP heard an information item on Polar Issues and the Antarctic. CPP also considered an action item (NSB/CPP-14-34) on LSST (see 1.a).

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

During Open Session of the CSB meeting, Dr. France Córdova reported that the House Subcommittee on Commerce, Justice, Science, and Related Agencies approved a \$7.409 billion budget for NSF in FY 2015. This is an increase of 3.2 percent over FY 2014 Enacted and \$154 million, or about 2 percent, above the current FY 2015 Request. She further reported that she had testified before the Senate Appropriations Committee along with representatives from other federal funding agencies and that there seemed to be shared concern on the state of research funding on both sides of the aisle.

Mr. Michael Sieverts, Director of the Budget Division, noted that the House marks described by Dr. Córdova are in line with NSF priorities. The Senate mark is expected in late May or early June 2014. It is unclear at this time if October 1, the start of FY 2015, will bring a continuing resolution or a full year appropriation.

Dr. Carl Lineberger, chairman of SCF, discussed a set of recommendations from SCF related to the 2013 APR (see 1.b). CSB voted to forward the recommendations to the full Board for a vote in Plenary Session.

During CSB Closed Session, the committee received an update on the FY 2014 budget and FY 2016 budget development.

## CSB Subcommittee on Facilities (SCF)

During SCF Open Session, SCF discussed the proposed 2013 APR recommendations, focusing on two: the recommendation to the Board to revisit its earlier guidance that NSF allocate 22 percent to 27 percent of its budget on research infrastructure; and the recommendation that several NSF facility reports be combined and that brief summaries of each facility be developed. SCF voted to approve the FY 2013 APR recommendations (see 1.b). The session ended with a brief discussion of the 2014 APR, which will be the subject of a forthcoming teleconference.

During the Closed Session of the meeting, the committee discussed the Regional Class Research Vessels (RCRV) and the Facility Plan draft templates.

### **e. Task Force on Administrative Burdens (AB)**

The Board report, “Reducing Investigators’ Administrative Workload for Federally Funded Research,” was released on May 1, 2014. The report is located on the NSB website: <http://www.nsf.gov/pubs/2014/nsb1418/nsb1418.pdf>.

Prior to the release, Members of Congress and congressional staff were briefed on the report during two days of meetings on Capitol Hill. Also briefed were staff from the Office of Management and Budget (OMB) and OSTP. The findings and recommendations were presented at National Council of University Research Administrators (NCURA) and Council on Governmental Relations (COGR) meetings and discussed with presidents and chancellors from Association of American Universities (AAU) member institutions. The report received favorable feedback during these meetings.

Several news outlets reported on the release, including *Inside Higher Ed* and *The Chronicle of Higher Education*. In addition, statements in support of the report were released by the Presidents of the AAU, COGR, and the Association of Public and Land-grant Universities (APLU); a press release was issued by the Federation of American Societies for Experimental Biology (FASEB). The report was also highlighted at the AAAS Science and Technology Policy Forum in a speech by AAU President Hunter Rawlings.

The report has been distributed to associations representing researchers and research institutions and to vice presidents and chancellors for research at institutions with the highest research activity. Task force chairman, Dr. Arthur Bienenstock, stated that he anticipates ongoing discussions and participation in reform efforts.

[Signed]  
Michael L. Van Woert  
Executive Officer