

MEMORANDUM TO MEMBERS OF THE NATIONAL SCIENCE BOARD

SUBJECT: Summary Report of the February 25-26, 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 February 25-26, 2014 meeting are provided. This memorandum is also made available for public review. The minutes of the Plenary Open Session for the February 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/140225/>.

1. Major actions and approvals at the 435th meeting of the Board included the following (not in priority order):
 - a. The Board approved the recipient of the 2014 Alan T. Waterman Award. The name of the awardee will be revealed in a public announcement in the spring.
 - b. The Board elected the following Board Members to the *ad hoc* Committee on Nominating for NSB Elections, informally called the Elections Committee: Dr. Randall, chairman, and Drs. Bassler, Bowen, and Cerf, members.
 - c. The Chairman discharged the *ad hoc* Committee on Nominations for the NSB Class of 2014 - 2020, with thanks to Dr. Kelvin Droegemeier, chairman and committee members Drs. Bassler, Bowen, David, Lineberger, Randall, Sargent, and Stancell.
 - d. The Board approved the *NSB Annual Portfolio Review of Facilities FY 2013 (NSB-13-72)* from the Subcommittee on Facilities (SCF), Committee on Strategy and Budget (CSB), subject to final edits by the SCF chairman, CSB chairman, and the Board Chairman.
 - e. The Board approved the report, *Reducing Investigator's Administrative Workload for Federally Funded Research (NSB-14-18)*, from the Task Force on Administrative Burdens (AB), subject to final edits by the AB chairman and the Board Chairman.
 - f. The Board approved the minutes of the Plenary Open Session for the November 2013 meeting (NSB-13-70) <http://www.nsf.gov/nsb/meetings/2013/1121/minutes.pdf>. Also approved were the Board minutes for the Plenary Executive Closed (NSB-13-68) and Plenary Closed Sessions (NSB-13-69) for the November 2013 meeting.

2. Board Chairman's Introduction and Report

Dr. Dan Arvizu, NSB Chairman, announced that *Science and Engineering Indicators (Indicators) 2014* and the *2014 Indicators Digest* were publicly released on February 6, 2013. *Indicators* received significant press attention with coverage in major news venues such as *New York Times*, *U.S. News and World Report*, *The Washington Post*, and the *L.A. Times* - just to name a few. The virtual media press conference and the two briefings on Capitol Hill were successful.

The Chairman announced committee changes. (See 1.b and 1.c)

Dr. Arvizu recognized a fellow Board Member, Dr. Geraldine Richmond, who was chosen to serve as President-elect of the American Association for the Advancement of Science (AAAS). She began her 3-year term on February 19, 2014 at the 180th Annual Meeting of AAAS in Chicago.

He also mentioned that the Royal Swedish Academy of Sciences will award the 2014 Crafoord Prize in Geosciences to Dr. Peter Molnar of the University of Colorado for his ground-breaking contribution to the understanding of global tectonics. Dr. Molnar worked collaboratively with Board Member Dr. Inez Fung.

Dr. Kelvin Droegemeier, NSB Vice Chairman, announced that Dr. Arvizu was elected to membership in the National Academy of Engineering (NAE). He was cited by NAE for his leadership in the renewable and clean energy sectors and for promoting national balanced energy policies.

Lastly, Dr. Arvizu welcomed back Ms. Kim Silverman, Science Policy Analyst with the Board Office. Kim returned from working on Capitol Hill on a Brookings Institute Congressional Fellowship for the past year.

3. NSF Director's Report

Dr. Cora Marrett, Acting National Science Foundation (NSF) Director, introduced the following NSF staff:

- Dr. Sambasiva Kosaraju, Division Director, Computing and Communication Foundations, Directorate for Computer and Information Science and Engineering (CISE) as of January 2, 2014.
- Ms. Mercedes Eugenia, Division Director, Division of Administrative Services, Office of Information and Resource Management (OIRM) as of January 27, 2014.
- Dr. Michael Vogelius, Division Director, Division of Mathematical Sciences, Directorate for Mathematical and Physical Sciences (MPS) as of January 27, 2014.
- Ms. Jolaina Jeff-Cartier, Labor Relations Officer as of September 13, 2013.

Dr. Marrett also announced the following upcoming retirements of NSF staff:

- Dr. Joann Roskoski, Deputy Assistant Director for Biological Sciences (BIO) will retire after 25 years of service to NSF on March 31, 2014.

- Dr. Kesh Narayanan, Deputy Assistant Director for Engineering (ENG) will retire after 20 years of service to NSF on March 31, 2014.

Dr. Marrett reported that NSF conducted the review of the FY 2014 Graduate Research Fellowship Program (GRF) through virtual panels held during January and February 2014. Over 13,500 applications were reviewed involving over 1,300 panelists. This was accomplished by the efforts across NSF of program officers, administrative and technical staff, and science assistants.

For the congressional update, Dr. Marrett reported that since the last meeting of the Board, Congress completed its work on the FY 2014 spending process. She stated that the House Science Committee is updating the *FIRST Act* draft legislation and will likely consider the revised legislation in the upcoming weeks. NSF has provided feedback on the draft version of the legislation and NSF looks forward to seeing what provisions are modified as the committee moves forward. She noted that Dr. John Wingfield, Assistant Director, BIO, was invited to testify before the House Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies. He will discuss NSF's role in the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative. Board Member, Dr. Alan Leshner will also testify at the hearing.

4. Board Committee Reports

[Note: The Executive Committee (EC) did not meet at the February 2014 Board meeting.]

a. Committee on Science and Engineering Indicators (SEI)

Ms. Nadine Lynn, NSB Office (NSBO) Communications Director, and Nirmala Kannankutty, NSF National Center for Science and Engineering Statistics (NCSES) Senior Advisor and SEI Executive Secretary, briefed the committee on the rollout of *Indicators 2014*, including a summary of the release events, media and public attention, and Web site analytics. The remaining pieces of *Indicators* (full interactive version and the State Data Tool) will be released at the end of February 2014. Ms. Jeri Mulrow, NCSES, provided a historical summary and update on the project to redesign *Indicators* as a primarily digital document. A working group under the committee is continuing to develop a companion report to *Indicators 2014*, tentatively titled "STEM and the American Workforce." Members will see a draft of this report in May 2014 and expect to finalize the report by summer 2014.

b. Committee on Audit and Oversight (A&O)

Inspector General (IG) Allison Lerner introduced Mr. Sal Ercolano of Clifton Larson Allen and Partner-in-Charge of the NSF financial statement audit to present the results of their FY 2013 final report. The audit report issued an unqualified opinion and found no material weaknesses. Mr. Ercolano noted the Federal Information Security Management Act (FISMA) report on NSF's IT security program found no significant deficiencies. He also stated that this year's Management Letter raised a new issue regarding NSF's grant accrual methodology, a finding with which NSF disagrees.

Next, IG Lerner introduced Dr. Brett Baker, Assistant Inspector General for Audit who presented the Office of the Inspector General's (OIG) FY 2013 Audit Plan. He discussed how the plan is developed, the sources it draws from, and that it is adjusted throughout the year.

Chief Financial Officer Marty Rubenstein noted that American Recovery and Reinvestment Act (ARRA) reporting requirements are no longer in effect. She also discussed plans for implementing iTRAK, NSF's new financial COTS (commercial off the shelf) system, at the beginning of FY 2015. The Board had questions on the details of NSF's risk mitigation strategy. Ms. Rubenstein will provide the Board with follow-up information.

c. Committee on Programs and Plans (CPP)

During CPP Open Session, CPP heard three information items:

1. Update on the status of the iPlant Collaborative
2. Update on the Large Synoptic Survey Telescope (LSST)
3. Annual update on the Atacama Large Millimeter Array (ALMA)

CPP also discussed three written information items, including: an annual update on the Arctic Support Contract; a status report on the National Ecological Observatory Network; and the annual status report on progress for operations and management of the Gemini Observatory.

CPP engaged in a Program Portfolio Planning (PPP) session, titled "Transformative Research to Innovating for Society through Talented People." This framework served as an outline for discussing higher level strategic issues, including the convergence between NSF disciplines and how that can help maximize long-term societal benefit as well as solve education problems.

During the Closed Session of the meeting, CPP heard two information items:

1. An update on the MPS/Division of Astronomy Portfolio
2. An update on Polar Issues and the Antarctic.

d. Committee on Strategy and Budget (CSB)

During the CSB Open Session, the committee heard updates related to NSF's Merit Review report and NSF's Strategic Planning processes. The new NSF Strategic Plan will be released with the FY 2015 budget. Dr. Cora Marrett provided an update on the FY 2014 Budget which was signed into law on the 17th of January 2014. Dr. Marrett reported that panel reviews for this year's GRF competition, were conducted using all virtual panels. The CSB chairman, Dr. France Córdova, commended staff for this impressive undertaking and suggested that the Board would like to hear more about lessons learned from this ambitious innovation at a future meeting. Finally, CSB voted to approve the Subcommittee on Facilities' Annual Portfolio Review (APR) for transmittal to the full Board.

During CSB Closed Session, the committee received an update from Dr. Marrett on the FY 2015 budget.

CPP-CSB Joint Meeting

CPP and CSB held a joint meeting to receive NSF's annual Facility Plan. The meeting was jointly chaired by CPP, CSB, and the Subcommittee on Facilities (SCF). Mr. Scott Horner, Acting Deputy Director of NSF's Large Facilities Office, presented the Plan to the committees, highlighting trends in the Major Research Equipment and Facilities Construction (MREFC) account. Dr. Marrett introduced Dr. John Wingfield, Assistant Director (AD) for BIO; Dr. Roger Wakimoto, AD for Geosciences; and Dr. Fleming Crim, AD for MPS. The ADs and Board Members discussed several important topics related to facilities, including science drivers, how communities prioritize future projects, and how projects are coordinated across agencies and international collaborators and the associated risks. SCF and NSF will work together to better define and share additional important facility information that should be available in the Facility Plan in time for the May 2014 NSB meeting.

CSB Subcommittee on Facilities (SCF)

SCF discussed and approved the FY 2013 Annual Portfolio Review (APR; see 1.d) and also discussed potential recommendations arising from the review. Members discussed near term projections for the MREFC account, the information NSB needs to make decisions about large facilities, options for informing the NSB about horizon projects, and NSB guidance on facilities. In particular, Members pointed out that information on trends in utilization would help give a better sense of facility health over time. It was agreed that the subcommittee would continue discussions with NSF about how to best proceed, with the aim of gathering some of this information for May 2014. SCF also discussed lifecycle planning and whether Congress would allow the MREFC account to be used for decommissioning or divestment.

The Director agreed to review the APR draft recommendations in the MREFC Panel and will use this discussion to help focus a response around the concerns raised in the recommendations.

e. Task Force on Administrative Burdens (AB)

Dr. Arthur Bienenstock, AB chairman, briefly introduced the two discussion items on the agenda. The first was on the recent streamlining of Office of Management and Budget (OMB) circulars into a set of Uniform Guidance. The discussion, led by task force member Dr. Kelvin Droegemeier and Mary Santonastasso, Director of the NSF Division of Institution and Award Support (DIAS), provided an overview of the process for developing the Guidance and what the issuance will mean for NSF and the research community.

Discussion then turned to the task force's draft report, *Reducing Investigators' Administrative Workload for Federally Funded Research*. Dr. Bienenstock provided an overview of the report's overarching recommendations. Board Member feedback on the report was positive. Members inquired about the level of engagement on the recommendations with other agencies and NSF staff to ensure that the recommendations will have the desired effect of reducing administrative burden. The task force has, and will continue to engage staff at NSF and other Federal agencies and offices. Ms. Allison Lerner responded to questions on time and effort reporting and the

current payroll certification pilots that are underway. The task force voted unanimously to approve the draft report subject to final edits and present it for full NSB approval. (See 1.e)

[Signed]
Michael L. Van Woert
Executive Officer