

**APPROVED MINUTES¹
OPEN SESSION
404TH MEETING
NATIONAL SCIENCE BOARD**

National Science Foundation
Arlington, Virginia
May 6-7, 2008

Members Present:

Steven C. Beering, Chairman
Kathryn D. Sullivan, Vice Chairman
Mark R. Abbott
Dan E. Arvizu
Camilla P. Benbow
Ray M. Bowen
John T. Bruer
G. Wayne Clough
Kelvin K. Droegemeier
Kenneth M. Ford
Patricia D. Galloway
José-Marie Griffiths
Daniel Hastings
Elizabeth Hoffman
Douglas D. Randall
Arthur K. Reilly
Jon C. Strauss
Thomas N. Taylor
Richard F. Thompson
Jo Anne Vasquez

Arden L. Bement, Jr., *ex officio*

Members Absent:

Barry C. Barish
Karl Hess
Louis J. Lanzerotti
Alan I. Leshner

¹ The minutes of the 404th meeting were approved by the Board at the August 2008 meeting.

The National Science Board (Board, NSB) convened in Open Session at 2:10 p.m. on Wednesday, May 7, 2007 with Dr. Steven Beering, Chairman, presiding (Agenda NSB-08-45, Board Book Tab 12). In accordance with the Government in the Sunshine Act, this portion of the meeting was open to the public.

AGENDA ITEM 7: Recognition of Class of 2008 and Executive Secretaries

Dr. Beering recognized Board Members of the Class of 2008 and expressed deep appreciation on behalf of the entire Board and NSF for their accomplishments and dedication over the past 6 years. Each Board Member of the Class of 2008 was presented with an award honoring “achievements in promoting the progress of science and engineering.” Recognized were: Drs. Barry Barish (who was not present), Ray Bowen, Kenneth Ford, Daniel Hastings, Karl Hess (who was not present), Elizabeth Hoffman, Douglas Randall, and Jo Anne Vasquez.

Dr. Beering also recognized the following Executive Secretaries to the Board’s committees and subcommittees in appreciation for their dedicated service: Mr. Bruce Carpel, Audit and Oversight Committee(A&O); Ms. Patricia Crumley, Committee on Programs and Plans (CPP); Dr. Joan Frye, Subcommittee on Polar Issues; Ms. Sonya Mallinoff, CPP; and Ms. Joanna Rom, A&O.

Additionally, Dr. Beering noted special recognition and appreciation for retiring Executive Secretaries, Dr. Lorretta Hopkins, Education and Human Resources (EHR) Committee, and Dr. Alan Rapoport, EHR Subcommittee on Science and Engineering Indicators.

AGENDA ITEM 8: Approval of Open Session Minutes, March 2008

The Board unanimously APPROVED the Open Session minutes of the March 2008 Board meeting (NSB-08-40, Board Book Tab 12F).

AGENDA ITEM 9: Closed Session Items for August 2008

The Board unanimously APPROVED the Closed Session items for the August 12-13, 2008 meeting (NSB-08-46, Board Book Tab 12G).

AGENDA ITEM 10: Chairman’s Report

Dr. Beering reported on several issues:

a. Results of Board Elections

Dr. Beering announced that in the Plenary Executive Closed Session, the Board re-elected him as Chairman and Dr. Patricia Galloway as Vice Chairman for the 2008 - 2010 term. Both were also elected to serve as members of the Executive Committee from 2008 to 2010.

b. Annual Awards Ceremony and Dinner

Dr. Beering described the annual Awards Ceremony and Dinner at the Department of State's Diplomatic Reception Rooms. He stated that the event is one of the few opportunities that the Board has to recognize the distinguished contributions of individuals and organizations to the advancement of science. The Board was honored to receive a message from President George W. Bush.

The major purpose of the Awards Ceremony and Dinner is to recognize recipients of the Board's honorary awards. The following honorary award recipients were recognized for their distinguished contributions:

- Mr. Norman H. Augustine, Retired Chairman and Chief Executive Officer, Lockheed Martin Corporation received the Vannevar Bush Award (Mr. Augustine's award was accepted by his daughter, Ms. René Augustine Alaire), and
- Dr. Terence C. Tao, Professor of Mathematics, University of California, Los Angeles, received the Alan T. Waterman Award.

Although there was no individual NSB Public Service Award this year, there were two group NSB Public Service Awards.

- Bayer Corporation, and
- SAE International.

Dr. Beering stated that it was an honor and a privilege to present the awards to these distinguished, talented, and creative people. He thanked the Board Office and NSF staff for the smooth operation of this event, which required a vast amount of planning, coordination, and hard work.

c. Board Meeting Calendar for 2009

The Chairman announced to Board Members that they will be polled in the upcoming weeks for the 2009 calendar of Board meeting dates to ensure attendance by the highest number of Members possible. The Board Office will provide a draft 2009 meeting schedule to all Board Members before the August meeting, and the Board will vote on the meeting dates at the upcoming August 2008 meeting.

d. Committee Announcements

Dr. Beering made four committee announcements: He discharged the *ad hoc* Committee for the Vannevar Bush Award with thanks to Dr. Kathryn Sullivan, chairman, and Drs. Kelvin Droegemeier, Patricia Galloway, José-Marie Griffiths, and Thomas Taylor, members. He also discharged the *ad hoc* Committee on Nominating for NSB Elections with thanks to Dr. Hoffman, chairman, and members Drs. Bowen, Randall, and Vasquez members.

As the Board's 60th anniversary will occur in 2010, less than 2 years away, Dr. Beering established the Board's Task Force for the NSF 60th Anniversary. Lastly, Dr. Beering announced that Board Members will be appointed before the August 2008 meeting to serve on the *ad hoc* Committee on NSB Nominations for the Class of 2010 - 2016. He asked interested Board Members to contact Dr. Craig Robinson, Acting Executive Officer and Board Office Director, to serve on this task force or *ad hoc* committee.

AGENDA ITEM 11: Director's Report

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

a. NSF Staff Announcement

In March 2008, Mr. Thomas Cooley, NSF Chief Financial Officer, was awarded the Special Achievement Award by the National Grants Management Association for continued, dedicated commitment and leadership of grants management streamlining and improvement initiatives.

Dr. Fae Korsmo accepted the position of Senior Advisor in the Office of the Director. She will be coordinating NSF's efforts to broaden participation from underrepresented groups and diverse institutions across all geographic regions in all NSF activities. Dr. Korsmo received her Ph.D. from the University of New Mexico. She came to NSF in 1997 from the University of Alaska Fairbanks, where she was an Associate Professor of Political Science.

Dr. Timothy Killeen was appointed as Assistant Director, Directorate for Geosciences (GEO). He currently serves as Director, National Center for Atmospheric Research (NCAR). Dr. Daniel Atkins, Director, Office of Cyberinfrastructure (OCI), will leave NSF in June 2008 to return to his home institution, the University of Michigan.

b. Congressional Update

Hearings

On April 2, 2008, Dr. Bement testified at the Subcommittee on Research and Science Education, House Committee on Science and Technology hearing on "International Science and Technology Cooperation." The following also testified: Dr. John Marburger, Director, Office of Science and Technology Policy (OSTP); Dr. Nina Fedoroff, Science and Technology Advisor to the Secretary, U.S. Department of State; Mr. Jeffrey Miotke, Deputy Assistant Secretary of State for Science, Space and Health U.S. Department of State, Bureau of Oceans and International and Environmental and Scientific Affairs; and Mr. Michael O'Brien, Assistant Administrator for External Relations, National Aeronautics and Space Administration (NASA).

On April 24, 2008, a joint hearing was held with the Subcommittee on Research and Science Education, House Committee on Science and Technology and the Armed Services Subcommittee on Terrorism, Unconventional Threats and Capabilities. The purpose of the joint hearing was to explore the role of the Social and Behavioral Sciences in National Security. The following also testified: Dr. Mark Weiss, Director, Division of Behavioral and Cognitive Sciences, Directorate

for Social, Behavioral, and Economic Sciences (SBE); Dr. David R. Segal, Professor of Sociology, University of Maryland; Dr. Andrew Van Tilborg, Deputy Under Secretary for Science and Technology, Department of Defense; and Colonel Martin Schweitzer, Commander of the 4th Brigade, U.S. Army, 82nd Airborne Division.

Upcoming Hearings:

On May 8, 2008, the House Committee on Science and Technology will hold a hearing on “Fulfilling the Potential of Women in Academic Science and Engineering Act of 2008.” Witnesses scheduled to testify are: Dr. Lynda Carlson, Director, Division of Science Resource Statistics, SBE; Dr. Linda Blevins, Senior Technical Advisor, Office of the Deputy Director for Science Programs, Department of Energy; and Dr. Donna Ginther, Associate Professor of Economics and Director of the Center for Economic and Business Analysis, Institute for Policy Research, University of Kansas.

On May 12, 2008, the House Committee on Science and Technology will hold a field hearing on “STEM Education Before High School: Shaping our Future Science, Technology, Engineering and Math Leaders of Tomorrow by Inspiring Our Children Today.” (STEM: Science, Technology, Engineering, and Mathematics.) Witnesses scheduled to testify are: Dr. Cora Marrett, Assistant Director, Directorate for Education and Human Resources; Mr. James Henry Russell, Superintendent, Texarkana, Texas School District; Dr. Roseanne Stripling, Provost and Vice President, Texas A&M University-Texarkana; and Mr. Mike Leherr, Plant Manager, Alcoa. The hearing, called by Congressman Ralph Hall, Ranking Member of the House Science and Technology Committee, will be at 1:00 p.m. at the Martha and Josh Morriss Mathematics and Engineering Elementary School in Texarkana, Texas.

AGENDA ITEM 12: Open Committee Reports

a. Executive Committee

Dr. Bement, EC chairman, recommended that the Board accept the 2007 Annual Report of the Executive Committee, covering the period from May 2007 to April 2008 (Board Book Tab 11B).

The Board unanimously ACCEPTED the 2007 Annual Report of the Executive Committee (NSB/EC-08-5) (Appendix).

Dr. Bement also presented a memorandum of understanding between the U.S. Agency for International Development (USAID) and NSF on April 30, 2008, regarding shared and complementary goals. It was signed by Ms. Henrietta Fore, USAID Administrator, and Dr. Bement.

b. Audit and Oversight (A&O) Committee

Dr. Dan Arvizu, A&O chairman, reported that he announced that the Inspector General Reform Act of 2008 was passed by the Senate and would likely be enacted later in 2008. A&O will continue to monitor the legislation.

Dr. Christine Boesz, NSF Inspector General, discussed the Office of Inspector General (OIG) *Semiannual Report to Congress, March 2008*, and Dr. Joan Frye relayed the management response with data tables. The committee approved the transmittal letter and management response for the report, and recommended approval by the full Board.

The Board unanimously APPROVED the transmittal letter and management Response to the *Semiannual Report to Congress, March 2008, Office of the Inspector General*.

Dr. James Lightbourne and Mr. Max Bronstein, Office of the Director, and Ms. Beth Ann Velo, Office of Budget, Finance, and Award Management (BFA), reported on NSF's annual *Report to the National Science Board on the National Science Foundation's Merit Review Process, Fiscal Year 2007*. The committee made several suggestions for material to be included in the 2008 report. The committee also expressed interest in information on the impact of the trend towards greater use of panels on identifying and funding transformative research. Dr. Kathie Olsen, NSF Deputy Director, indicated that NSF will be examining this issue and report back at a future meeting.

Mr. Cooley gave an update on the progress in resolving the FY 2007 audit findings and the considerable work underway to assure full implementation in FY 2008 of Office of Management and Budget (OMB) Circular A-123, "Management's Responsibility for Internal Control." The committee discussed management responsibility for internal controls, which is the document that the Federal Government uses to emulate Sarbanes-Oxley Act.

Mr. Sal Ercolano, partner-in-charge of Clifton Gunderson, NSF's financial statement auditors, presented information on the NSF 2008 audit. Mr. Ercolano stated that during May 2008, the auditors will begin testing controls over financial and electronic data processing (EDP) operations, and compliance with laws and regulations. They will also begin reviewing NSF's progress in addressing significant deficiencies cited in last year's audit. He also stated that the auditors will take a harder look at the risk of material misstatements in the financial statements because of new accounting standards that took effect last year. The report will be released on November 15, 2008.

c. Education and Human Resources Committee (EHR)

Dr. Elizabeth Hoffman, EHR chairman, thanked all who helped the committee accomplish the many activities during the past 4 years: completion of *Broadening Participation in Science and Engineering Faculty (NSB-04-41)*; *Moving Forward to Improve Engineering Education (NSB-07-122)*, the result of a group led Drs. Wayne Clough, Daniel Hastings, and Louis Lanzerotti; the *National Action Plan for Addressing the Critical Needs of the U.S. Science, Technology, Engineering,*

and Mathematics (STEM) Education System (NSB-07-114); communications with Congress, including interactions with Congressman Vernon Ehlers and reports to Congressman Rush Holt on evaluations of EHR programs and results; and serving as the parent committee to the Subcommittee on Science and Engineering Indicators (SEI) for the last two issues of the biannual report, *Science and Engineering Indicators (Indicators) 2006 (NSB-06-1)* and *Indicators 2008 (NSB-08-1)*, with special thanks to Dr. Lanzerotti, current SEI chairman.

The committee was pleased to be joined by Dr. Lee Todd, Chairman, NSF EHR Directorate Advisory Committee, and Advisory Committee members. The committee heard excellent presentations from Dr. Brian Fitzgerald and Mr. Chris Roe of the Business Higher Education Forum (BHEF) on the topic of “Strengthening U.S. STEM Education through New Models of Collaboration.” The committee also heard from Dr. Mary John O’Hair and Dr. Linda Atkinson about the K-20 Center for Educational and Community Renewal, a state-wide interdisciplinary research and development center that connects the University of Oklahoma with over 500 schools and communities across Oklahoma. Dr. Camilla Benbow and Dr. Joan Ferrini-Mundy, NSF EHR Directorate, provided a comprehensive review of a report of the National Mathematics Advisory Panel that was released in March 2008 to the Department of Education.

At the March 2008 meeting, Dr. Benbow introduced a draft document (NSB/EHR-08-3) dated March 26, 2008, on the topic of “Preparing the Next Generation of STEM Innovators” and prepared by Dr. Benbow, with the help of EHR members Drs. Lanzerotti, Griffiths, and Vasquez. This proposed activity will produce a document to complement the Board’s National Action Plan for STEM Education. The *ad hoc* group will prepare a draft charge for discussion in August 2008. Dr. Benbow suggested that the committee also schedule a briefing with NSF staff in connection with the December 2008 Board meeting.

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

Mr. Arthur Reilly reported for Dr. Lanzerotti, SEI chairman. Dr. Lanzerotti and Mr. Reilly were invited to write an article for *Research-Technology Management*, the Journal of the Industrial Research Institute, to appear in the September 2008 issue.

Mr. Reilly reported that he made an informative and productive luncheon presentation to the President’s Council of Advisors on Science and Technology (PCAST) on *Indicators 2008* and the Companion Piece. He was accompanied by Mr. Rolf Lehming, Science Resources Statistics, SBE, and Ms. Jean Pomeroy, Board Office. Dr. Clough also attended as a member of PCAST.

Authors of *Indicators 2010* would soon begin preparation of their narrative chapter outlines, which would be included in the upcoming Board Book, mailed in July 2008 to Board Members, for discussion at the August 2008 meeting.

Mr. Reilly recognized Dr. Alan Rapoport, SEI Executive Secretary, for his exceptional support over the last several years, and expressed best wishes to him in his retirement.

e. Committee on Programs and Plans (CPP)

Dr. Kenneth Ford, CPP chairman, reported on two information items, the first of which was the National Optical Astronomy Observatory (NOAO) and National Solar Observatory (NSO) – Future Action Item on a 5-year Cooperative Agreement Proposal from the Association of Universities for Research in Astronomy (AURA). Dr. Tony Chan, Assistant Director, Directorate for Mathematical and Physical Sciences (MPS), introduced Dr. Thomas Barnes, Program Manager, Division of Astrological Sciences, MPS, who presented this information item to the committee. He reported that NOAO supports ground-based research in optical/infrared astronomy, and NSO supports ground-based research in solar physics. A recompetition for this award was held in 2001, and the cooperative agreement was awarded to AURA. A management review was conducted in 2006, at which time NSF decided not to recompute the award and informed the Board. A proposal for a 5-year period, 2009 - 2014, was received from AURA in December 2007 and merit reviewed in spring 2008. NSF will bring a recommendation to the Board in September 2008.

Dr. James Collins, Assistant Director, Directorate for Biological Sciences (BIO), presented the second information item on the Protein Data Bank, which currently contains over 50,000 3-D structures of macromolecules, including nucleic acids, proteins, viruses, and their assemblies. The current award is under recompetition, and an action item will come before the Board in August 2008.

Dr. Ford then reported on two discussion items, the first of which was an update on the Review of the Major Research Equipment and Facilities Construction (MREFC) Process. In February 2008, the Board submitted a “Report to Congress on Preconstruction Funding and Maintenance and Operations Costs Associated with Major Research Equipment and Facilities at NSF” (NSB-08-15) as required by the America COMPETES Act (COMPETES: Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science.) In that report, the Board committed to provide a follow up report to Congress later in 2008. Dr. Mark Abbott provided the committee with an update on activities related to this discussion item. Currently under discussion is a proposed revision to the process that would have three Board-approval steps: from the conceptual design to the preliminary design stage; from the preliminary design to the final design stage; and from the final design stage to initiation of construction. Dr. Abbott will continue to work with NSF on issues concerning this proposed revision, and a discussion on this topic will be held at the August 2008 meeting.

For the second discussion item, Dr. Lanzerotti provided the committee with a brief summary of the process to date on the draft “Report to Congress on Interdisciplinary Research.” A revised draft will be prepared and submitted to the committee for comment electronically in mid-May 2008, with the goal of presenting a final report to the full Board for approval at the August 2008 meeting.

Dr. David Lightfoot, Assistant Director, Directorate for Social, Behavioral and Economic Sciences (SBE), provided a science presentation to CPP entitled: “The Intertwinement of Fundamental Work in the SBE and Natural Sciences.” Recurrent themes in the presentation included the connections between new technologies and the interconnections between natural

sciences, the mind and the brain. The committee thanked Drs. Lightfoot's staff who also made presentations to CPP: Drs. Mark Weiss, Betty Tuller, and Jacqueline Meszaros.

Dr. Ford thanked Ms. Sonya Mallinoff and Ms. Patricia Crumley for their excellent service as Executive Secretary and Assistant Executive Secretary to CPP during his tenure. He also thanked Drs. Robert Webber and Elizabeth Strickland, former and current CPP Board Office Liaisons respectively.

Subcommittee on Polar Issues (SOPI)

Dr. Ford reported for Dr. Barry Barish, SOPI chairman. The subcommittee heard a report from Dr. Karl Erb, Director of the Office of Polar Programs (OPP), on the announcement of scope for the Request for Proposal (RFP) for the support contract for the U.S. Antarctic Program, released the week prior to the meeting. The announcement invites potential bidders to identify themselves. Questions and concerns can be addressed to Ms. Karen Millisor, Contracting Officer, Division of Acquisition and Cooperative Support. Dr. Erb announced that Mr. Erick Chiang, Division Director, Antarctic Infrastructure and Logistics, OPP, who had worked with the NSF Antarctic Program for the past 29 years, will be retiring.

Dr. Erb introduced several speakers. Dr. Kelly Falkner, Program Director, Division of Antarctic Sciences, OPP, provided an overview of sea ice trends at both poles. Dr. Simon Stephenson, Division Director, Division of Arctic Sciences, OPP, and Dr. Scott Borg, Division Director, Division of Antarctic Sciences, OPP, described several of the recent international collaborative efforts that have taken place or are emerging.

Task Force on Sustainable Energy (SE)

Dr. Dan Arvizu, SE co-chairman, reported that SE discussed the upcoming roundtable discussion to be held on June 19, 2008 in Golden, Colorado. SE discussed plans for a third roundtable discussion in September or October 2008, including the topics, invitation list, and locations. Board Member comments on the upcoming roundtables were welcomed. The Board Office will poll SE members for their availability to participate in this roundtable.

f. Committee on Strategy and Budget (CSB)

Dr. Ray Bowen, CSB chairman, reported that the committee heard a panel presentation on open access to scholarly literature. The panel consisted of Dr. George Strawn, NSF Chief Information Officer; Dr. Clifford Lynch, Executive Director, Coalition for Networked Information; and Dr. Stuart Shieber, Director, Center for Research on Computation and Society, Harvard University.

Dr. Webber, Board Office, updated the committee on the draft report to Congress on the effects of the NSF policy of limiting the number of proposals submitted by institutions in certain NSF programs including the responses to a questionnaire sent to the NSF advisory committees, which will be available in late-May 2008. Initially, the report was due to Congress just before the August 12-13, 2008 meeting; however, as the report due date was extended a few days, the report can be discussed at the August 2008 meeting and submitted thereafter.

Dr. Bement reported on the 2010 budget development process. Because this is a transition year, the budget development process will be altered to allow the new Administration to create the next budget recommendation to Congress. Dr. Bement suggested that CSB devote time at the August 2008 meeting to a discussion of major budget issues and opportunities, and continue at the October 2008 meeting, leading to a December 2008 approval of the NSF budget by the Board. The consensus of CSB was to follow Dr. Bement's recommendation.

Dr. Bowen expressed his appreciation to the Board Office staff, specifically Dr. Robinson, Dr. Michael Crosby, and Dr. Webber, who have helped the committee during his tenure as CSB chairman.

Task Force on Cost Sharing (CS)

Dr. Kelvin Droegemeier, CS chairman, reported that the task force discussed the agendas for the July 9 and July 10, 2008 roundtables, which will be held at NSF. The roundtable on July 9 will address Voluntary Cost Sharing Specification and Forms: Tracking and Role in the NSF Decision Process. The roundtable on July 10 will address Implications of Mandatory Voluntary Cost Sharing for Broadening Participation in Science and Engineering Research and Education.

The task force heard a presentation from Mr. Cooley on NSF's progress toward implementing the recommendations made in the February 2008, "Report to Congress on Cost Sharing Policies at NSF" (NSB-08-17).

Dr. Droegemeier updated the task force on progress made with sending questions on cost sharing to NSF advisory committees, in lieu of distributing a Web-based survey. The questions were provided to NSF assistant directors.

Additionally, the task force will put forth a formal Board resolution prior to the release of the second report toward the end of this calendar year. This report would formally amend the resolution passed in 2004 that eliminated cost sharing. Dr. Droegemeier will meet with Ms. Jean Feldman and others from BFA to analyze potential trends from the 2004 data when the policy changed until the present time, and to review quantitative information on potential impacts. He also will perform case studies at selected institutions to look at some of the issues, challenges, and benefits of cost sharing, both mandatory and voluntary.

Dr. Droegemeier thanked Ms. Jennifer Richards, CS Executive Secretary, as well as Dr. Webber and Dr. Robinson. He also specifically thanked Ms. Feldman, Mr. Cooley, and Dr. Korsmo who have worked with the task force.

AGENDA ITEM 13: Presentations by Honorary Awards Recipients

Honorary award recipients made presentations to the Board:

- Mr. Norman Augustine, recipient of the Vannevar Bush Award (via video).
- Dr. Mae Carol Jemison, National Spokesperson for "Making Science Make Sense," the program for which Bayer Corporation received the NSB Public Service Award.

- Dr. Thomas Ryan, III, 2008 President of SAE International, who also presented a video of some of the programs for which SAE received the NSB Public Service Award.
- *[Dr. Terence Tao, recipient of the Alan T. Waterman Award, (between meetings, via video).]*

Dr. Beering adjourned the Open Session at 3:25 p.m.

[signed]
Ann A. Ferrante
Executive Secretary
National Science Board

Attachment:

Appendix: NSB/EC-08-5, National Science Board, 2007 Annual Report of the Executive Committee

**2007 Annual Report of the Executive Committee
National Science Board**

In accordance with the requirements of 42 U.S.C. § 1865 (d), I hereby submit this annual report of the National Science Board (Board, NSB) Executive Committee, as approved at the Executive Committee meeting on May 7, 2008. This report covers the period from May 2007 through April 2008. I served as Director of the National Science Foundation and the Board's Executive Committee chairman during the above time period.

The elected Board membership of the Executive Committee during the past year was as follows:

From May 1, 2007 to May 10, 2007:

Dr. Barry C. Barish

Dr. Steven C. Beering

Dr. Ray M. Bowen

Dr. Kathryn D. Sullivan

From May 11, 2007 to April 30, 2008:

Dr. Mark R. Abbott

Dr. Steven C. Beering

Dr. Patricia D. Galloway

Dr. Kathryn D. Sullivan

The following served as Executive Secretary of the Executive Committee: from May to December 2007, Dr. Michael P. Crosby, NSB Executive Officer; from January to April 2008, Dr. Craig R. Robinson, NSB Acting Executive Officer.

The Executive Committee met three times during this period (May 2007, August 2007, and February 2008) at the National Science Foundation in Arlington, Virginia. Oral reports of its activities were made at meetings of the full Board and are reflected in the minutes of those meetings.

The Executive Committee's powers and functions are based on a delegation of authority to it by the Board according to 42 U.S.C. § 1865(a). The Board's current delegation to the Executive Committee (Attachment B to NSB-99-158) authorizes the Executive Committee to approve awards on behalf of the Board when an immediate decision is required between Board meetings and when the necessary action is not within the authority of the Director of the National Science Foundation. There were no occurrences of this condition or Executive Committee actions on behalf of the Board during the above time period.

[signed]

Arden L. Bement, Jr.

Chairman

Executive Committee