National Science Foundation Advisory Committee for Business and Operations Executive Summary for Fall 2010 Meeting November 16-17, 2010

This is the Executive Summary of the fall meeting of the Advisory Committee for Business and Operations held at the National Science Foundation on November 16-17, 2010.

Finalized on: March 4, 2011

Mary Ellen Sheridan

Chair

Committee members in attendance:

Jake Barkdoll Consultant

Marti Dunne New York University

Mike Gooden Integrated Systems Analysts, Inc Charlene Hayes Johns Hopkins University

Gregory Jackson EDUCAUSE

Philip Joyce George Washington University
Kathryn Newcomer George Washington University

Gloria Rogers ABET, Inc.

Dick Seligman California Institute of Technology
Mary Ellen Sheridan University of Chicago (retired)

Cynthia White Belmont University

Committee members absent:

Cecilia Conrad CEOSE Liaison

Katy Schmoll University Corporation for Atmospheric Research Mildred Smalley Southern University and A&M College (retired)

E. Jennings Taylor Faraday Technology

Meeting commenced at 1:00 pm on November 16, 2010

BFA (Office of Budget, Finance and Award Management) Updates

Marty Rubenstein, BFA Director and Chief Financial Officer, presented information on activities in BFA:

- Strategic plan was submitted to OMB on June 2 and is expected back in early February. Goal: develop implementation plan that links to strategic plan.
- 2011 Budget Update. Funding under a Continuing Resolution is currently through December 3 (currently extended to March 18, 2011). House and Senate previously supported NSF's request.
- ARRA Recipient Reporting: 99.6% reporting rate. NSF will increase sanctions for non-reporters with idea of moving to suspension for repeat offenders.

- 2010 Financial Statement Audit Report: 13th consecutive "clean" opinion. Audit repeats significant deficiency on contract monitoring. We will be working to resolve these issues by developing a corrective action plan and drafting a management letter report to respond to recommendations offered.
 - o In addition, NSF is reviewing a Defense Contract Audit Agency (DCAA) report. The DCAA audits some of NSF's grantees, specifically certain cooperative agreements. The Financial Audit cited the DCCA's audit results which noted a deficiency in construction contingencies. NSF does not agree with this recommendation and is working through it with the auditors.

The Changing Workplace: Challenges in a Federal Context

Overview was presented by Amy Northcutt, Acting Director for the Office of Information and Resource Management (OIRM). A panel discussion consisting of OIRM senior management representatives: Pat Bryant, Joe Burt, Andrea Norris, Amy Northcutt and Judy Sunley followed.

- NSF recognizes that it is in an environment where it will need to be innovative in order to manage change. Three broad themes related to this are:
 - Federal Government rules and best practices often conflict with NSF creativity including incompatible priorities and higher demands/expectations, which stifles innovation;
 - O Managing the increasingly "untethered" workforce including performance, accountability and cultural issues as well as multi-generational workforce (an "untethered" workforce does not work at a standard desk, but teleworks and/or uses mobile devices);
 - O Blending of personal and professional worlds due to technology advances. Issues include 24/7 availability and code of conduct for social media.

Recommendations:

- The Committee advises that the most effective approach to managing the workforce of today and of the future is through clear organizational principles and values (as opposed to managing by "compliance.") This does not imply that NSF needs a "Code of Conduct." It is recommended that NSF consider developing organizational principles and values important to the Foundation and then communicate them clearly and widely.
- The Committee believes that the NSF workforce needs to be fully engaged in order to be productive and successful. To increase workforce engagement, NSF should consider:
 - o Setting expectations and holding employees accountable in meeting expectations
 - o Communicating its vision and goals through the Strategic Plan
 - o Increasing communication across the Foundation, especially involving employees in bottom-up communication such as focus groups.

With regard to communication, NSF's new Director provides an excellent opportunity to reengage employees who may not feel like they are being heard. [Dr. Suresh has made a point to emphasize communication across the organization.

NSF intends to create an "idea bank," an electronic employee forum, to facilitate more communication. The Idea Bank debuted on January 20, 2011.]

- The Committee recognizes that more extensive NSF "branding" can be used as a means to further engage the workforce and smooth the change management process. If there is an NSF brand/logo that is dynamic and properly represents NSF's goals and values, the staff will feel that much more identity with NSF and will be more highly motivated and engaged. Similarly, the future NSF headquarters provides an opportunity to be more "crosscutting" in the building layout so that all areas of the Foundation know what is going on.
- The Committee recommends that NSF create a robust performance management system that reflects NSF's strategic goals and holds employees accountable for meeting those goals.

Committee Expectations: Processes to Best Provide Advice to NSF

The Committee discussed best practice processes that it believes have been most useful in providing the higher value advice to NSF.

- The Committee noted that past presentations from outside consultants were not helpful; it is more productive to hear directly from NSF staff.
- More stimulating meetings occur when time is spent upfront between Committee members (discussants) and NSF staff on the issues at hand. Expertise and opinions of the discussants are then better aligned with the presentations.
- NSF benefits greatly through access to diverse organization through the Committee members, broadening its view as to best practices, possible project and initiatives, etc.

Other Committee observations:

- Overall importance of having a free-flowing discussion during Advisory Committee meetings.
- Use of on-line exchange to enhance the semi-annual face-to-face committee meetings. A new Committee collaborative website has been developed to facilitate this. [Website has been approved by co-chairs and will be rolled out to the entire Committee shortly.]
- Use the formal subcommittee mechanism to examine specific business matters in more depth and with broader external membership than would normally be on the Committee itself. In the past few years, subcommittees have been successful at examining key business processes (for example, Business Systems Reviews) and made valuable recommendations to the Foundation.

Open Government Initiative

Jose Munoz, Office of the Director, Chief Technology Officer, presented information on activities regarding NSF Open Government Initiative.

 NSF has responded to the December 2009 OMB Directive by publishing a number of NSF databases. As indicated by the low number of hits, most of these databases apparently have limited public appeal. NSF is already transparent, engaged and participatory with its grantee community yet it is had limited success in engaging the general public. NSF has not yet identified a flagship initiative, prizes or challenges, which are key components of the Open Government Directive.

Recommendations:

- The Committee recommends that NSF rethink its effort in the prize/challenge arena; this should be treated as an opportunity to engage the public, particularly school age children, with scientific, mathematical discovery-driven possibilities.
- The Committee recommends that NSF emulate the Open Government work of NASA and other research-related agencies that have had more success in prizes and challenges to attract public interest. The Committee challenges NSF to do more as an agency predicated on curiosity, discovery and intellectual challenge.
- The Committee recommends that NSF designate an "owner" for the prizes/challenges activity and provide a satisfactory budget to make it happen.

International Facilities Subcommittee

Mark Coles, Deputy Director of Large Facilities Projects, BFA, updated the Committee on the activities of the ad hoc Subcommittee on Funding and Governance of Future Major Multi-User Facilities.

- Major facilities are expensive to build and operate once construction is complete.
 Each new major facility will significantly impact the budget, so NSF may to need to look at collaborative approaches for the funding of new facilities.
- The subcommittee included key facility players from NSF to represent internal guidance, strategy, and approaches. In addition, non-NSF participants other federal agencies and international institutions were involved. Dr. Coles described and discussed the agenda and outputs of the subcommittee's meeting.
- As a follow-up, the subcommittee is producing a written report that will include recommendations. The report will be distributed to the Committee in advance of the next meeting. Committee members will be asked to review the report in anticipation of a discussion at the May meeting. Following the discussion, the Committee will decide on acceptance of the report and endorsement of its recommendations.

Committee Discussion with NSF Director and Acting Deputy Director, Dr.'s Subra Suresh and Cora Marrett

- The members were thanked for their work by the Director and Deputy Director. The Director wants to hear from committee members since he is relatively new and appreciates input from the vantage point of NSF's "customers."
- Committee members presented a general recap of the meeting and emphasized the following the issues:
 - o NSF's workforce was the primary focus of this meeting. Specifically, NSF should:
 - Evaluate the relationship between management and staff;
 - Address the changing workforce environment (technology, reporting requirements, etc); and
 - Consider changes to performance management processes.
 - O Committee members were concerned by the perceived lack of NSF participation in the federal *Open Government Initiative*. The Committee was unable to identify the group within NSF that has taken ownership of addressing this issue.

Recommendations from Discussion with Director and Deputy Director

Note: This section includes recommendations that were either confirmed or brought up by NSF's Director and Deputy Director. It is not meant to be a summary of the entire report's recommendations.

- NSF should create a set of organizational principles and values with OIRM/HRM taking the lead.
- NSF should develop a robust performance management system for its employees.
- NSF needs to bridge the data connections between its numerous advisory committees in order to integrate their recommendations (not specific to this Committee).