

**National Science Foundation
Advisory Committee for GPRA Performance Assessment (AC/GPA)
Minutes of the Meeting
June 19-20, 2008**

The Advisory Committee for GPRA Performance Assessment (AC/GPA) met in Open Session from 8:30 AM – 5:30 PM on Thursday, June 19 and from 8:30 AM – 2:30 PM on Friday, June 20 in room Stafford II-555 at the National Science Foundation in Arlington, VA. The purpose of the meeting was to provide advice and recommendations to the Director of the National Science Foundation (NSF) regarding the Foundation’s performance under the Government Performance and Results Act (GPRA) of 1993. All members were present for both meeting days.

AC/GPA Members

David Spencer, Chair
Sharon Dawes, Vice Chair
Mary R. Albert
Diran Apelian
Elaine L. Craft
Julio C. de Paula
Jorge L. Díaz-Herrera
María Alicia López Freeman
Robert Frodeman
Ira Harkavy
John K. Haynes
George Hornberger
Deanna Paniataaq Kingston
Robert L. Lichter
Alan Needleman
Pamela O’Neil
Samuel M. Rankin II
Mary Ellen Sheridan
Joel E. Tohline
Gordon E. Uno

NSF Staff Present:

Morris Aizenman,
MPS/OAD
Bernice Anderson,
EHR/OAD
Jennifer Brostek, BFA/BD
Johnny Casana, SBE/BCS
Jim Colby, EHR/OAD
Patricia Crumley, BFA/BD
Jo Culbertson, ENG/OAD
Connie Della Piana,
OD/OIA

Eduardo Feller, OD/OISE
Joan Ferrini-Mundy,
EHR/DRL
Laura Gent, CISE/OAD
Pamela Green, BFA/BD
Janice Hagginbothom,
BFA/BD
Susan Hamm, MPS/OAD
Judy Hayden, OD/OCI
Tyrone Jordan, EHR/OAD
Rita Koch, CISE/OAD
Diane Okamuro, BIO/DBI

Marty Rubenstein,
BFA/BD
Chantel Sabus, BFA/BD
Gary Scavongelli, OIRM
Michael Sieverts, BFA/BD
William Trinh, BFA/DIAS
Pat Tsuchitani, BFA/BD
Shirley Watt, BFA/BD
Emily Woodruff, OIG

Members of the public present:

Jonathan Breul, IBM

Susan Duby, Contractor, NSF

Hao Feng, IBM

Elizabeth Hallett, IBM

John Kamensky, IBM

Christopher Sheehan, IBM

Elijah Wood, IBM

Thursday, June 19, 2008

Dr. David Spencer called the meeting to order at 8:30 AM in Room II-555. Dr. Spencer welcomed the Committee members and attendees. Committee members, NSF staff, and other attendees introduced themselves.

Michael Sieverts, Deputy Director, Budget Division, welcomed the Committee, and in the absence of Tom Cooley, Director of the Office of Budget, Finance, and Award Management, who was unable to be present, gave the Committee its charge. Mr. Sieverts noted that the motivation behind establishing the Committee in 2002 was the Government Performance and Results Act and the primary purpose of the Committee is to assess the Foundation's three strategic outcome goals of Discovery, Learning, and Research Infrastructure. He stated that the Committee's primary resource is NSF's database of performance highlights and commented that NSF has tried to map the highlights according to NSF's primary modes of support for research and education. Mr. Sieverts also encouraged the Committee to provide feedback on NSF's performance with regard to broader impacts, societal benefit, and transformative research. He noted the significance of the Committee's work, stating that the assessment will form an important part of the Foundation's annual performance report.

Michael Sieverts also discussed the status of NSF's budget request for FY 2010, highlighting the differences between a typical year and a Presidential transition year. He noted that although this is a transition year NSF usually fares differently from most other agencies in that 1) NSF's senior leadership is usually retained as the Director serves a six year term (though this term is at the pleasure of the President), and 2) NSF does not anticipate many program changes because NSF has been stable during past transitions. He explained that while there would be no formal agency submission to OMB in September this year, NSF is still required to submit performance information and current services estimates. The Foundation will submit a budget request to Congress after the new Administration has taken office. Mr. Sieverts also discussed NSF budget trends, noting that NSF's budget has fallen behind goals stated in both the American Competitiveness Initiative and the America Competes Act. He indicated that a Continuing Resolution is likely for the FY 2009 appropriation process. NSF is proactively planning for FY 2010 by clarifying priorities in order to be ready when the transition to a new Administration takes place.

Dr. Julia Lane, NSF Program Director for the Science of Science and Innovation Policy (SciSIP) Program in the Directorate for Social, Behavioral and Economic Sciences, provided an overview of the SciSIP program. She addressed the goals and challenges of the program, provided examples of funded

research, and detailed the current status of the program, including future plans and milestones. Dr. Lane also discussed the Science Policy Interagency Working Group, which includes representatives from 17 agencies, who are currently drafting a report. The key themes of the report are: 1) understanding science innovation, 2) investing in the innovation process, and 3) using science of science policy to address national priorities.

Pat Tsuchitani, Senior Advisor for Performance Assessment, gave a presentation on the Foundation's responses to recommendations made by the AC/GPA at its last meeting in June 2007. Those recommendations focused on process changes for the selection and presentation of NSF Highlights, which form the basis for the Committee's evaluation of the three strategic outcome goals of Discovery, Learning, and Research Infrastructure. All recommendations had been addressed.

The meeting continued with a working lunch at 12:30 PM. Beth Strausser, Senior Policy Specialist, Division of Institution and Award Support, gave a presentation and led a discussion of the National Science Board's request for input on the issue of cost sharing. The discussion focused on the effects that cost sharing produces on grantees, academic institutions, and institutional partners. The Chair asked the Committee to submit their additional thoughts on cost sharing in writing to himself or Vice Chair Sharon Dawes by July 9, after which they will draft a letter to the National Science Board

The four subgroups on Discovery, Learning, Research Infrastructure, and Committee of Visitors (COV) Reports met separately at 1:30PM.

The Committee reconvened at 4:30 PM to share reports on the progress of each subgroup's discussion.

COV Subgroup (Chair: Joel Tohline)

This is the first year that the AC/GPA has had a COV Subgroup. As a group they reviewed 32 COV reports from 2006-2008. Dr. Tohline described the subgroup's process for dividing up and reviewing the reports.

The subgroup focused on Section B (Outcomes) of the COV reports to determine if it provided useful information for the AC/GPA beyond the information provided by the highlights. They found that most COVs did not discuss Outcomes in depth and that many COV reports merely used highlights as examples of outcomes. The subgroup was discussing the value of asking the AC/GPA to focus on COV reports. Overall, the subgroup felt that the reports provided very little added value, in terms of outcome assessment, beyond that provided by the highlights. The subgroup also noted that the COV responses in Part B were quite disparate, and recommended that the Foundation conduct a high level review annually of COV reports to determine if there are recommendations for NSF-wide improvements and changes.

Learning Subgroup (Chair: Julio de Paula)

The subgroup chair reported that the subgroup is beginning to finalize their report. He indicated that the group is excited about the fact that many of the activities reported in the highlights spanned the various objectives of the Learning outcome goal.

Discovery Subgroup (Chair: Diran Apelian)

Dr. Apelian commended the Discovery subgroup for taking this job very seriously. He reported that the subgroup's report was in final draft. The subgroup concluded that the Discovery outcome goal had been met and that some exciting research had been funded. The subgroup felt that NSF was funding high impact research that benefits society and addresses sustainability issues.

Research Infrastructure Subgroup (Chair: Mary Ellen Sheridan)

The subgroup chair reported that the subgroup was still discussing their assigned highlights. One preliminary suggestion is to provide highlights discussing the management of large facilities in addition to highlights reporting on outcomes from research conducted at such facilities. The subgroup also discussed issues related to transformative research and broader impacts.

End of the Day Wrap-Up

The Chair led the Committee in a discussion of topics identified by the subgroups. Topics included: evaluation of the AC/GPA process, the value of highlights as a representation of performance, and the optimal role for the AC/GPA. The Committee also discussed the idea that NSF does not do enough to measure the "people" outcome (the effect that NSF funding has had on the people that it supports) and that NSF should conduct an annual high-level review of COV reports. The Committee also suggested that in the future they would like to have a clearer idea of how program officers determine which research outcomes should be submitted as highlights and how the highlights are ultimately selected for AC/GPA review.

The meeting recessed at 5:30 PM.

Friday, June 20, 2008

The subgroups met separately from 8:30 AM until 10:00 AM to finalize their reports. The Chair reconvened the Committee as a Whole at 10:15 AM. Each subgroup chair reported on the outcome of their discussions.

Learning Subgroup (Chair: Julio de Paula)

The subgroup Chair stated that more information should be provided to the Committee about the selection process for the Highlights. He also suggested it would be useful “to map the Highlights to the evaluation criteria,” to enhance transparency and to see the “drivers of the Highlights” – which he believed would allow the committee to perform a retrospective as well as a prospective assessment. Dr. de Paula also mentioned that the subgroup found it useful to interact with NSF staff during the meeting and suggested this practice be built into the annual AC/GPA process.

Research Infrastructure Subgroup (Chair: Mary Ellen Sheridan)

The subgroup Chair noted that grouping Highlights by performance goals based on how a project was funded caused “silos” to develop. The subgroup felt some highlights addressed more than one performance goal and that the structured selection process sometimes resulted in “artificial categorizing” of the Highlights.

Discovery Subgroup (Chair: Diran Apelian)

Diran Apelian suggested it would be helpful for the Committee to get a broader portfolio of Highlights to review and suggested also providing the AC/GPA with summaries of Advisory Committee reports as well as a list of awards. He also commented that the subgroup felt the value of the assessment would be enhanced by comparing results with other countries’ national assessments.

COV Subgroup (Chair: Joel Tohline)

The Subgroup Chair reported that after reading the COV reports from the last three years, his subgroup had concluded that as currently written they are not useful input for the AC/GPA. He suggested the AC/GPA note to NSF leadership that Part B should need to be revised in order to provide useful input to the AC/GPA or eliminated.

Meeting with the Director and the Deputy Director

Dr. Spencer welcomed Dr. Arden L. Bement, Jr. and Dr. Kathie Olsen to the meeting and gave a quick overview of the meeting activities and discussions. He stated that the Committee as a whole had concluded that NSF had demonstrated significant achievement for each of the strategic goals. He also explained that the Committee had discussed some broader issues related to COV reports and the AC/GPA process.

Dr. Dawes followed-up with a brief discussion of the idea that NSF can present a richer, more integrated story of performance than the highlights alone can tell. She indicated that the Committee’s report would discuss this idea in more detail.

Dr. Bement thanked the members for their service and remarked on the importance of the Committee's role in helping NSF to maintain and improve quality while avoiding complacency. He suggested that although the performance highlights are important measures of NSF's achievement, they fail to capture the effect that NSF funding can have on the people involved. The committee agreed that this is important and urged NSF to find a way to track the impact of NSF funding on the people who are supported by research and education grants. Dr. Olsen told the Committee that this sort of tracking is already being done for the IGERT Program.

Following this discussion, each subgroup chair took a turn summarizing the conclusions of their subgroup. The subsequent discussion included the following topics: a discussion of the terms "discovery," "innovation," and "invention"; the importance of tracking the impact of NSF awards on the people who are supported; the number of very good/excellent projects that are not funded because of lack of funds; assessment of education projects within the EHR portfolio; the Math and Science Partnership (MSP) Program as an example of continuous improvement; teacher training and community college programs; the concern with the growing shortage of scientists and engineers in the United States; and NSF's facilities management and operations. The meeting with the Director and Deputy Director concluded with a brief discussion of the NSF budget.

Closing Remarks

The Committee confirmed their assessment that NSF had demonstrated significant achievement for each of the strategic outcome goals. The Chair and Vice-Chair noted that the committee's recommendations would become the basis for crafting of the final report. The Committee commented that they felt a continued willingness of the NSF leadership and staff to meet the needs and accept the recommendations of the Committee. They also commented that there is improvement of the AC/GPA process each year. Dr. Spencer concluded the meeting by thanking the Committee and NSF staff.

The report will be presented to the Director approximately one month after the meeting.

The AC/GPA meeting was adjourned at 2:30 PM.