

# COMMITTEE ON EQUAL OPPORTUNITIES IN SCIENCE AND ENGINEERING

## MEETING NOTES

February 8-9, 2011

### Meeting Site

Hilton Hotel Arlington; 950 North Stafford Street; Arlington, VA 22203

### Meeting Participants

#### Members Present:

Ms. Sandra Begay-Campbell, Sandia National Laboratories, Albuquerque, NM  
Dr. Cecilia Conrad, Pomona College, Claremont, CA  
Dr. Evelyn Hammonds, Harvard University, Cambridge, MA  
Dr. Richard E. Ladner, University of Washington, Seattle, WA  
Dr. Marigold Linton, University of Kansas, Lawrence, KS  
Dr. George Middendorf, Howard University, Washington, DC  
Ms. Lueny Morell, Hewlett-Packard Company, Aguadilla, PR  
Dr. Maria (Mia) Ong, TERC, Cambridge, MA  
Dr. Muriel Poston (CEOSE Chair), Skidmore College, Saratoga Springs, NY  
Dr. Alexander Ramírez, HACU National Headquarters, San Antonio, TX  
Dr. Wendy Raymond, Williams College, Williamstown, MA

#### Members Absent:

Dr. Eugenia Paulus, North Hennepin Community College, Brooklyn Park, MN  
Dr. Joseph S. Francisco, Purdue University, West Lafayette, IN

#### CEOSE Executive Liaison/CEOSE/Executive Secretary:

Dr. Margaret E. M. Tolbert, Senior Advisor, Office of Integrative Activities, NSF

#### OIA/NSF Primary Support Staff Members

Ms. Geraldine (Geri) Farvés, Program Specialist, Office of Integrative Activities/NSF  
Ms. Crystal Blue, Program Assistant, Office of Integrative Activities/NSF

#### Non-Members Who Attended/Participated in Discussions/Made Presentations at the Meeting:

<p>Dr. Robert Barnhill, SACNAS Dr. Rodey Batiza, NSF/GEO/OCE Dr. Vladimir Blasko, MTRC Dr. Henry N. Blount, NSF/OD/OIA/EPSCoR Dr. John T. Bruer, NSB Member (Virtual Participant) Dr. John Cherniavsky, NSF/EHR/DRL Dr. Walter V. Collier, Beyond The Bottom Line, Inc.</p>	<p>Ms. Carmen Cromartie, Captioner, Precise Reporting Dr. Janice (Jan) Cuny, NSF/CISE Ms. Laura-Lee Davidson, QEM Network, Inc. Ms. Corinda Davis, Beyond The Bottom Line, Inc. Ms. Rhonda Davis, NSF/OD/ODI Dr. Jessie A. DeAro, NSF/EHR/HRD Ms. Shannon Dunphy-Lazo, DOE/SC (DOE Liaison to CEOSE)</p>
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<p>Ms. Lisa Evans, NIH (NIH Liaison to CEOSE)  Dr. Joan Frye, NSF/OD/OIA  Dr. Clifford Gabriel, NSF/OD/OIA  Ms. Tracy Gorman, NSF/OD  Dr. Jong-on Hahm, NSF/OD/OISE  Ms. Linda Hallman, AAUW  Dr. J. Arthur (Art) Hicks, NSF/EHR/HRD  Dr. Meldon Hollis, WHI-HBCU  Dr. Ceasar Jackson, NSF/EHR/HRD  Dr. Pamela L. Jennings, NSF/CISE/IIS  Dr. J. Arthur Jones, QEM Network, Inc.  Ms. Susan (Sue) C. Kemnitzer, NSF/ENC  Dr. Mark Leddy, NSF/EHR/HRD  Dr. James (Jim) Lightbourne, NSF/EHR/DRL  Dr. Elizabeth (Libby) Lyons, NSF/OD/OISE  Ms. Sarah Mandell, SRCD  Ms. Camsie Matis, NSF/CISE (Einstein Fellow)  Mr. Shawn Murray, NSF/OD/ODI  Dr. Sarah Ogden, NSPE</p>	<p>Dr. Carl Person, NASA (NASA Liaison to CEOSE)  Ms. Carolyn Piper, NSF/OD/ODI  Ms. Claudia J. Postell, Esq., NSF/OD/ODI  Dr. Claudia Rankins, NSF/EHR/HRD  Mr. Eric Russell, NSF/CISE (Einstein Fellow)  Dr. Victor Santiago, NSF/EHR/HRD  Ms. Terri Sisley, NSF/OD/ODI  Ms. Pamela Smith, NSF/OD/ODI  Dr. Richard N. Smith, NSF/EHR/HRD  Ms. Marilyn Suiter, NSF/EHR/HRD  Dr. Subra Suresh, NSF/OD  Dr. Joanne Tornow, NSF/BIO  Ms. Kim Silverman, NSB Staff  Dr. Wanda E. Ward, NSF/OD  Dr. Robert Webber, NSF/OD/OISE  Mr. Kevin Wiggins, NSF/OD/ODI  Dr. David Wilson, SACNAS  Dr. Terry S. Woodin, NSF/EHR/DUE</p>
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## Meeting Minutes

### Tuesday, February 8, 2011

#### Opening Statement and Discussion

The CEOSE meeting was called to order at 9 a.m. by **Dr. Poston**, CEOSE Chair. After welcoming everyone, she called for introductions. Following the introductions, **Dr. Poston** reviewed the agenda and planned accomplishments for the meeting, which included a discussion of the next biennial report to Congress, finalization of recommendations based on suggestions from the Mini-Symposium on Women of Color in STEM, and the future Mini-Symposium on the Science of Broadening Participation. Two highlights of the current meeting are the discussions with the new Director of the National Science Foundation (NSF) and the Chair of the NSB Task Force on NSF Merit Review Criteria, especially the criterion on Broader Impacts. Additional features of the meeting include presentations by invited guests and reports by CEOSE Liaisons to NSF advisory committees.

#### ***PRESENTATION: Key Points from Meeting of Dr. Muriel Poston and Others with Dr. Subra Suresh, Director of the National Science Foundation***

In her report on the February 7, 2011 meeting with **Dr. Suresh**, the new NSF Director, **Dr. Poston** acknowledged the participation of the following individuals in the meeting with her and **Dr. Suresh**: **Ms. Begay-Campbell** via telephone, **Dr. Gabriel**, **Dr. Ladner**, **Dr. Tolbert**, and **Dr. Ward**. **Dr. Poston** complimented **Dr. Suresh** for his interest and support of many of the issues about which CEOSE is

concerned. He is cognizant of the recommendations submitted to him by CEOSE to improve the status of women of color in STEM. Also, he is interested in making improvements relative to the participation of underrepresented groups and women and persons with disabilities in the STEM pathway, particularly as active scientists and engineers and science and engineering educators.

**REMARKS by Dr. Clifford J. Gabriel, Acting Director of the Office of Integrative Activities, National Science Foundation**

**Dr. Gabriel**, Acting Director of the NSF Office of Integrative Activities (OIA), expressed his delight in having the opportunity to work with CEOSE. Note that CEOSE is under the auspices of OIA, and **Dr. Gabriel** was appointed Acting Director of that office in January 2011. Also, he stated that CEOSE is in very good hands with **Dr. Tolbert** as its Executive Liaison. After those remarks, **Dr. Gabriel** provided information on himself. He has been employed at NSF for a little more than three years (2008-2011); two of those years were spent as Acting Executive Officer of the Mathematical and Physical Sciences Directorate. This provided him with a good cross section of NSF activities. He also served as Chair of the NSF Strategic Planning Group. The deliverable from this group is the NSF Strategic Plan for 2011-2016 ([www.nsf.gov/news/strategicplan/](http://www.nsf.gov/news/strategicplan/)). Before his appointment at NSF, **Dr. Gabriel** was employed at the U.S. Environmental Protection Agency (EPA) where he directed a science policy office that dealt with pesticides, toxic substances, and biotechnology regulations. During his tenure at EPA, he had an advisory committee as a part of his office. Therefore, he has experience with and an appreciation of advisory committees. Prior to his EPA tenure, he served for about ten years as an official of The White House Office of Science and Technology Policy, working with five different science advisors and three U.S. Presidents. This provided him with an up close and personal view of the Executive Branch and the White House perspective. In addition to the above, he has had a stint at the National Academy of Sciences where he worked on a number of different policies. **Dr. Gabriel** received his Ph.D. from the University of Wisconsin.

**DISCUSSION: Plans for the Conversation with Dr. Subra Suresh, Director of the National Science Foundation**

Committee members discussed plans for their meeting with **Dr. Suresh**. Several members decided to ask specific questions and request comments from **Dr. Suresh**.

**CONCURRENCE: The CEOSE Minutes on the October 25-26, 2010 Meeting**

On January 7, 2011, **Dr. Poston** approved the minutes of the October 25-26, 2010 meeting of CEOSE. CEOSE members attending the February 2011 meeting concurred with her approval.

**DISCUSSION: Action Items from the Minutes of the October 25-26, 2010 CEOSE Meeting**

Action items discussed are those that were included in the minutes of the October 2010 meeting of CEOSE. Although some of the action items have been addressed, there are a few on which actions are still needed. In the discussion on the Comprehensive Broadening Participation for Undergraduates

Program, note was made of the congressional response, which indicated that the programs will not be combined in FY 2011. In reference to another action item, there will not be a white paper to accompany the “2009-2010 CEOSE Report to Congress.” Two action items resulted from the discussion. Those are presented below. **ACTION ITEM:** *CEOSE members are encouraged to complete the NSB survey on NSF Merit Review Criteria.* CEOSE has two membership vacancies, and members expressed the need to fill those vacancies as soon as possible. The announcement for new members of CEOSE was published in the *Federal Register* and online. **ACTION ITEM:** *CEOSE members are encouraged to submit to Dr. Tolbert the names, biographical sketches, and contact information on persons they recommend for CEOSE membership. The deadline is March 14, 2011.*

### **REPORTS: CEOSE Liaisons to NSF Advisory Committees**

CEOSE members who serve as liaisons to NSF advisory committees gave reports on the meetings that they attended. As required, they focused their reports primarily on the broadening participation components of those meetings. **ACTION ITEM:** *Per Dr. Poston, the CEOSE Chair, Dr. Tolbert is to advise the appropriate person in SBE of the reappointment of Dr. Ong to CEOSE for a second three-year term, which will end January 31, 2014, and Dr. Ong’s continuation as CEOSE Liaison to the SBE AC.* **ACTION:** *Ms. Morell agreed to send to CEOSE members a copy of the two survey results on grand challenges in education.*

### **GENERAL DISCUSSION: Unfinished Business**

During the discussion session, CEOSE members and Federal Liaisons to CEOSE covered a number of topics, including the proposed combination of selected HRD programs plus the yet-to-be formed program on Hispanic Serving Institutions into a single comprehensive set. As presented at an earlier meeting by the Assistant Director of EHR, this proposed program was to be named the Comprehensive Broadening Participation of Undergraduates in STEM (CBP-US) Program.

**Dr. Hollis** of the White House Initiative on Historically Black Colleges and Universities made comments on congressional action relative to the issue of the EHR proposal to combine selected HRD programs. He reminded CEOSE members that at its last meeting, the status of the program combination was as follows: Attached to the appropriations bill is a line that suggests that no further action be taken until the National Academy of Sciences (NAS) released its report “*Expanding Underrepresented Minority Participation: America’s Science and Technology Talent at the Crossroads*” from a study committee chaired by Dr. Freeman Hrabowski. The NAS report has been received, and it contains recommendations that the HRD programs not be combined. Also, President Obama signed the America Competes Reauthorization Act (H.R. 5116) on January 4, 2011. In section 512 of that Act is a clear statement that the programs shall remain separate, and no timeline for that separation is mentioned. See the entire content of section 512 below:

H. R. 5116—30

#### **SEC. 512 UNDERGRADUATE BROADENING PARTICIPATION PROGRAM.**

The Foundation shall continue to support the Historically Black Colleges and Universities

Undergraduate Program, the Louis Stokes Alliances for Minority Participation program, the Tribal Colleges and Universities Program, and Hispanic-serving institutions as separate programs.

**UPDATE: *Plans for the Mini-Symposium on the Science of Broadening Participation* by Dr. Cecilia Conrad, CEOSE Member & Chair of the CEOSE Ad Hoc Subcommittee on the Mini-Symposium on the Science of Broadening Participation**

**Dr. Conrad** provided an update on plans for the Mini-Symposium on the Science of Broadening Participation. Goals and objectives of the mini-symposium were reviewed and the implementation strategy was discussed. **ACTION ITEM:** *The Mini-Symposium on the Science of Broadening Participation is to be implemented in conjunction with a meeting of CEOSE in 2012.* **ACTION ITEM:** *Anyone who has an issue to recommend for discussion at the next CEOSE mini-symposium should send it to Dr. Conrad.* **ACTION ITEM:** *During future CEOSE meetings, Dr. Conrad is to give updates on preparations for the Mini-Symposium on the Science of Broadening Participation.*

**DISCUSSION SESSION: Review of the Draft “2009-2010 CEOSE Biennial Report to Congress”**

It was acknowledged that for the preparation of Chapter One of the draft report, CEOSE has the assistance of a subcontractor, SRI International, and this chapter covers the status of broadening participation, post-secondary education, and the workforce. **ACTION ITEM:** *Representatives of the SRI subcontractor are to be advised to prepare a short informative version of the chapter to be included in the report and the long version to be uploaded to the CEOSE website.* **ACTION ITEM:** *CEOSE members and Federal Liaisons to CEOSE are to send their comments on the draft “2009-2010 CEOSE Biennial Report to Congress” to Dr. Tolbert via e-mail ([mtolbert@nsf.gov](mailto:mtolbert@nsf.gov)).*

For Chapters Two through Four, CEOSE has the assistance of the contractor, Beyond The Bottom Line, Inc. **ACTION ITEM:** *The contractor that is assisting CEOSE in preparing the “2009-2010 CEOSE Biennial Report to Congress” must make sure that the correct recommendations are included in the final version of the report, the report is readable, the desired points on each topic are easy to find, the terminology is consistent, and the needed information (e.g., inclusion of names of current and former CEOSE members—Ms. Sandra Begay-Campbell, Dr. Evelyn Hammonds, Dr. Wesley L. Harris, Dr. Shirley McBay, and Dr. Willie Pearson—who served on the NRC Committee on Underrepresented Groups and the Expansion of the Science and Engineering Workforce Pipeline/Committee on Science, Engineering, and Public Policy and Global Affairs that prepared the report, “Expanding Underrepresented Minority Participation: America’s Science and Technology Talent at the Crossroads”) is included.*

**CONVERSATION: Dr. Subra Suresh, Director, National Science Foundation**

**Dr. Suresh** was appointed to the position of NSF Director only four months earlier, and it is noteworthy that he is knowledgeable of issues pertinent to broadening participation in STEM. He mentioned that he met with the leadership of CEOSE on the previous day; therefore, he has an idea of the approach that CEOSE is using relative to broadening participation in STEM. He added that he is interested in hearing

perspectives that CEOSE members have on broadening participation in STEM.

In discussing his prior work, he spoke of MIT where he took somewhat of a counterintuitive approach to hiring faculty. He reorganized the way in which MIT search committees in the College of Engineering conducted their work and how they communicated among themselves and with others. As a result of his actions over a three-year period, he and his colleagues in Engineering ended up recruiting approximately 50 faculty members, during the financial crises. This was the largest number of women and minorities recruited in the 148 year history of MIT. His reason for mentioning this information is that there are a lot of seemingly simple steps that one could take that might at first glance appear to be insignificant. However, when combined in a certain way, they have a cumulative effect, which is much larger than originally noted.

With respect to broadening participation, NSF has a number of programs, which he discussed with the CEOSE leadership. There are some programs that work very well. There are programs that could be expanded in the future. There are programs that require even greater financial support. **Dr. Suresh** advised that he has read the CEOSE report and has discussed recommendations contained therein, and he wants to catch up on some of the topics that are under discussion.

**Dr. Suresh** mentioned the following: Some things that NSF does with various programs are very successful. Therefore, one of the conversations that is being held internally is focused on existing programs and what is needed to make a difference, irrespective of the budget climate. Everything cannot be done by an agency like NSF, but it can be a leader in many of the actions to be taken. For example, he called to the attention of everyone the need to identify programs and best practices that will have positive impacts on society. He invited CEOSE members and Federal Liaisons to provide input and insights in regard to what can be done relative to the matter of assisting groups such as African Americans who are veterans of war. He advised that we will have to engage the university community, including community colleges and other sectors of the nation, in the effort. He noted that the help, experience, and advice of CEOSE will be very helpful to NSF relative to this as well as other matters pertinent to women, underrepresented minorities, and persons with disabilities.

**Dr. Suresh** discussed a number of topics in brief: 1) NSF merit review criteria (he acknowledged that CEOSE has submitted recommendations on this topic and that these have been brought to the attention of the National Science Board), 2) the America Competes Reauthorization Act and the sections that require actions by NSF, 3) the NSB Task Force on NSF Merit Review Criteria and the discussion that **Dr. John Bruer will have** with CEOSE members, 4) a new program, STAR METRICS, that has been implemented to improve data gathering and the data analysis process, 5) greater emphasis by NSF on metrics, data gathering, and processes, and 6) the concerns of CEOSE pertinent to the proposed Comprehensive Broadening Participation of Undergraduates in STEM Program.

**Dr. Suresh** assured everyone that he is looking forward to working with CEOSE and addressing their concerns and perspectives, as well as other issues. He noted that CEOSE is seeking two new members and that he is looking forward to hearing the thoughts and suggestions from CEOSE members as the new

members are identified. At this point, he chose to end his commentary and respond to questions from CEOSE members. Following the above remarks, CEOSE members held a question and answer period that covered the following topics: the multi-agency survey on broadening participation that was conducted in 2008, the role of MSIs in helping to solve the problem of underrepresentation, the status of the establishment of the Hispanic Serving Institutions Program, the status of the identification and appointment in the Office of the NSF Director of a Liaison who is responsible for broadening participation NSF-wide, the Broader Impacts Criterion, the published article (**J. Mervis**, *Science*, Vol. 330, November 19, 2010, Pages 1034-1035) in which **Dr. Suresh** was featured, the dissemination of K-12 best practices, **Dr. Suresh's** interactions with the NSF Staff, the development of the "Idea Bank", the synchronization of issues across different parts of NSF, technologies available at NSF, the Director's brown bag lunch meetings with staff, communication within NSF, women of color in STEM, timeline for receipt from NSF of responses to CEOSE recommendations, recommendations that resulted from the CEOSE mini-symposium on American Indians, the planned Mini-Symposium on the Science of Broadening Participation, benchmarks with other countries on the topic of science and technology investments and the distribution of the funds, funds for underrepresented minorities, the possibility of the establishment of an international science and technology advisory committee for the Office of the NSF Director, the NSF Strategic Plan on Broadening Participation, and the NSF budget request for FY 2012.

#### **DISCUSSION SESSION: Draft Framework for Presentations by NSF Assistant Directors and Office Directors at CEOSE Meetings**

In cooperation with **Dr. Raymond**, **Dr. Ladner** presented details on the draft presentation framework suggested for use by NSF Assistant Directors (ADs) and Office Directors (ODs) at CEOSE meetings. This presentation framework was developed by the two of them to facilitate the receipt of consistent data and information that would be acceptable for use in CEOSE Biennial Reports to Congress. Details on the components (e.g., data on women, underrepresented minorities, and people with disabilities; proposals received and number of principal investigators and co-principal investigators by gender and race/ethnicity; NSF scientific staff by gender and race/ethnicity; demographics for committees of visitors; successes and non-successes) suggested for the presentations were included in the discussion. For acceptance of the presentation framework, **Dr. Gabriel** suggested a collaborative process involving NSF staff working with CEOSE members to generate the data needed. It is believed that this would generate greater productivity and acceptance by the ADs and ODs, and it would enable the presentation of data that have undergone the needed reviews within NSF. He also suggested that the draft framework be discussed with the Deputy Assistant Directors and Executive Officers since they are the career employees that know the data and programs. This is where continuity can be found. Also, he agreed that the draft framework be discussed with **Dr. Suresh**. **ACTION ITEM: Dr. Ladner is to send the updated template/presentation framework on the format for ADs and ODs to use in developing their presentations to CEOSE. Dr. Tolbert and Dr. Gabriel are to discuss the revised template with the NSF Deputy Assistant Directors and Executive Officers. Their feedback is to be submitted to CEOSE. The effort is to clearly articulate the exercise with the template and find out how they react to it. Their ideas on how to improve the template are to be welcomed. ACTION ITEM: Dr. Poston is to submit to Dr. Suresh for his comment a cover**

*letter and the revised template on the format for presentations by Assistant Directors and Office Directors.*

**Dr. Tolbert** announced the dates for the next CEOSE meeting. They are June 13-14, 2011. She reported that on June 13<sup>th</sup>, the meeting will be held at The White House Conference Center in Washington, D.C. The June 14<sup>th</sup> sessions will be held at NSF in conference room 1235. This meeting is very important; it will get to the heart of the recommendations that CEOSE has been making.

## **ADJOURNMENT**

The meeting was adjourned at 5:30 p.m.

## **Wednesday, February 9, 2011**

**Dr. Poston** called the meeting to order at 9:05 a.m. and reviewed the agenda for the day. Then CEOSE members discussed several of the recommendations that appear in the draft of the “2009-2010 CEOSE Biennial Report to Congress.” Some of the recommendations need to be reworded. It was decided that at least one of the recommendations should be reworded to address benchmarks. **ACTION ITEM:** *CEOSE members who wish to make comments on the draft of the “2009-2010 CEOSE Biennial Report to Congress” are to send them to Drs. Poston and Ladner within the next week.* **ACTION ITEM:** *Dr. Conrad agreed to send to Dr. Poston, with a copy to Dr. Tolbert, a revised section of the draft of Chapter One of the “2009-2010 CEOSE Biennial Report to Congress.”*

As the discussion continued, **Dr. Poston** mentioned Experimental Program to Stimulate Competitive Research (EPSCoR) states as being of potential interest to CEOSE given their significant populations of underrepresented groups on which EPSCoR programs have impact. **ACTION ITEM:** **Dr. Poston** agreed to discuss with CEOSE members and the appropriate NSF officials the feasibility of CEOSE interacting more closely with the EPSCoR component of the NSF Office of Integrative Activities.

## **REPORT: OISE Technical Support to Minority Serving Institutions by Dr. George Middendorf, CEOSE Member**

**Dr. Lyons** of the Office of International Science and Engineering (OISE) joined **Dr. Middendorf** in his presentation on “OISE Technical Support to Minority Serving Institutions.” **Dr. Lyons** suggested that the title of the presentation should include the word “engagement” since the contents of the presentation cover more than “technical support.” **Dr. Middendorf** is the CEOSE Liaison to the OISE Advisory Committee. OISE is a part of the Office of the NSF Director, and it works across NSF to co-fund and co-review proposals. As it operates with cross-disciplinary funding, the resulting interactions constitute a noteworthy strategy for award making and broadening participation in STEM. Additionally, it operates its own programs. The OISE flagship program is Partnerships for International Research and Education

(PIRE), which fosters research excellence via international collaborations. It funds international research experiences for U.S. students, junior researchers, and faculty participants in research and development. It involves U.S. institutions in partnership with other institutions, sometimes within the U.S., but more often than not with institutions outside of the U.S. Additional details on the PIRE Program were presented, including how the OISE staff analyzed the results of this program to focus on the lack of involvement of MSIs and how corrective actions were taken. The corrective actions resulted in greater involvement of persons at MSIs, but they did not result in the funding of a single MSI as lead institution. Additional efforts will be made to further address this fact, as well as other concerns about the PIRE Program. This presentation by **Dr. Middendorf** and **Dr. Lyons** stimulated a great deal of discussion.

**PRESENTATION: *Update on the National Science Board Study of the NSF Merit Review Criteria* by **Dr. John T. Bruer**, Member of the National Science Board and President of the James S. McDonnell Foundation**

By telephone, **Dr. Bruer** gave an update on the National Science Board (NSB) study of the NSF Merit Review Criteria. He pointed out that the NSB Task Force on the NSF Merit Review Criteria was formed about a year ago with **Dr. Alan Leshner** as the original Chair. In providing the context for the Task Force, he commented that the review criteria were last revised in 1997, and it is timely to evaluate the current criteria with respect to the current definitions and their relevance to the NSF portfolio of increasingly complex interdisciplinary projects. There are two criteria: Intellectual Merit of the proposed activity and the Broader Impacts of the proposed activity, both of which he discussed in detail. Also, he discussed the Broader Impacts Criterion component of the America Competes Reauthorization Act of 2011. Noted is the fact that the Broader Impacts Criterion was designed to address national goals, including broadening participation. The America Competes Reauthorization Act instructs NSF to develop and implement a policy that incorporates a substantive evaluation of broader impacts activity as well as the activities related to broader impacts. What is required by the America Competes Reauthorization Act and the work that the NSB is doing relative to the Merit Review Criteria are out of phase relative to the timetable. NSF has been instructed to develop the implementation plan by June, and the NSB Task Force is working on recommendations for revising the criteria, upon which the implementation plan would be based. Therefore, members of the Task Force are continuing their efforts on a little quicker timetable than originally planned. The Task Force is soliciting input on the Merit Review Criteria from members of the senior NSF staff, advisory committee members (including members of CEOSE), NSF program directors and division directors, and a sample of NSF's principal investigators and reviewers. In addition to these, representatives of institutions, university associations, and scientific societies will be asked to provide input. To uniformly collect the feedback, a survey instrument was published in January. In reference to the website on which the survey instrument can be found, **Dr. Bruer** provided details on how to access that site. The website will be open for comment until March 15th.

The next step in the process will be to continue the review of the criteria and formulate recommendations about how to revise them, if appropriate. A priority is to develop these recommendations in time to inform NSF's response to Congress about the broader impacts criterion by late June as required by the America Competes Reauthorization Act. **ACTION ITEM:** *In the next several months, the Chair of the NSB Task Force or his designee will provide CEOSE with a report on the status of the review of the NSF Merit Review Criteria.* **Dr. Bruer** completed his remarks by suggesting that CEOSE members help the process by providing input via the survey. Already, CEOSE is assisting with the process by way of the current session with **Dr. Bruer**.

During the question and answer period, **Dr. Tornow** joined **Dr. Bruer** in responding to questions from CEOSE members, Federal Liaisons, and guests. **Dr. Poston** called to **Dr. Bruer's** attention the fact that a couple of years ago CEOSE asked the NSB to focus explicitly on the broadening participation component of the Broader Impacts Criterion. The recommendation called for consideration of broadening participation as an independent criterion or as one that was emphasized as having a priority within the Broader Impacts list of ways of achieving that goal. **Dr. Bruer** responded that the Task Force has not addressed that recommendation explicitly since it is important to have as much feedback from the community as possible before making a decision on any aspect of the criterion. He explained that broadening participation is an overall goal of the whole NSF. He suggested that the Task Force must look carefully at exemplars of qualifying activity to see if any of those should be given special consideration. **Dr. Ladner** called to **Dr. Bruer's** attention the omission of people with disabilities in a section of the America Competes Reauthorization Act, and requested that when women and underrepresented minorities are mentioned in discussions on Broader Impacts Criterion, people with disabilities be included too. **Dr. Linton** suggested that a representative of the NSB participate in CEOSE meetings on a regular basis. **Dr. Ong** mentioned that one of the weaknesses of the Broader Impacts Criterion, as it currently exists, is that there is no accountability for what principal investigators promise to do. Several additional CEOSE members made comments and/or asked questions of **Dr. Bruer**, and he graciously responded. **Dr. Poston** called to **Dr. Bruer's** attention the fact that the representation in the NSB membership of individuals from underrepresented groups and those who have disabilities leaves a lot to be desired. Therefore, as new NSB members are sought, the inclusion of individuals from these groups is desired. To that comment, **Dr. Bruer** suggested that a memorandum be sent to The White House about the concern for greater diversity in the NSB membership. CEOSE members and Federal Liaisons continued the discussion with a number of comments and questions to which **Dr. Bruer** responded. **ACTION ITEM: Dr. Tornow is to provide Dr. Tolbert with a copy of the 2007 NSF report to Congress for CEOSE members. This report contains descriptions of broader impact projects by directorate. ACTION ITEM: Dr. Poston, the CEOSE Chair agreed to send a letter to The White House in reference to the concern of the committee about the lack of diversity in the NSB membership. ACTION ITEM: On behalf of CEOSE, Dr. Poston advised that formalized input by the NSB Task Force on NSF Merit Review Criteria should provide instructions on the ways in which the Broader Impacts Criterion should be given special consideration by both the individual project director and that person's home institution. Dr. Bruer** complimented CEOSE members for presenting new Merit Review Criteria issues that require attention, and he agreed to share formal comments received from CEOSE with the NSB Task Force, as well as the full NSB membership.

**PRESENTATION AND DISCUSSION: *The State of the National Science Foundation Relative to Diversity and Inclusion* by Ms. Claudia J. Postell, Esq., Director of the Office of Diversity and Inclusion, National Science Foundation**

The presentation by **Ms. Postell** consisted of an overview of the services that the Office of Diversity and Inclusion (ODI) provides to NSF, the status of NSF relative to regulations of the Equal Employment Opportunity Commission (EEOC), and the MD 715 report process. Additionally, she used the opportunity to provide an update of activities that have been provided to assist NSF in reaching the goal of "Model EEO Status", which is defined by the EEOC. The responsibility is to prohibit discrimination on the basis of race, color, national origin, gender, religion, disability, age for those over the age of 40, and retaliation pertinent to protected EEO activities. ODI also provides reasonable accommodations for persons with disabilities. ODI is primarily geared toward the internal NSF workforce, and it provides accommodations to panelists, advisory committee members, and anyone doing business with NSF upon request. There is a

responsibility to individuals at universities and other institutions that receive federal funds. Those are the Title IX and Title VI obligations. These titles were not covered in her presentation because they are not a part of the EEOC's guidelines for model EEO programs. In fiscal year 2010, ODI processed more than 367 individual requests from NSF employees for various types of accommodations. ODI provides advice on religious accommodations, dispute resolution, early intervention, EEO related issues, and workforce EEO training. Also, the office provides workforce analyses and plans.

A part of **Ms. Postell's** presentation was focused on the MD 715 report, which was devised to assist each federal agency to attract, develop, and retain a top quality diverse workforce. The MD 715 report is submitted to the EEOC annually. ODI reviews NSF to determine if its policy statements are up to date and whether the NSF managers are vigorously enforcing EEO policies and regulations. Another important element of the report is management and program accountability.

In addition to the above responsibilities, ODI conducts annual workforce analyses. As a result of the efficiency of ODI and the cooperativeness of NSF officials, NSF is in compliance with all EEOC statutes and regulations. A diversity and inclusion strategic plan is being developed. It will serve as a road map to ensure efficiency and effectiveness in diversity initiatives. **ACTION ITEM: Ms. Postell is to share the MD 715 report with CEOSE members shortly after it is approved by the EEOC.**

#### **PRESENTATION: The General STEM Pipeline by Ms. Lueny Morell**

**Ms. Morell** presented a detailed description of a graphic illustrating the “the general STEM pipeline.” She strongly encouraged an increase in the baseline of the STEM pipeline so that a larger number of persons will be available for the trained workforce in STEM. In discussing this graphic illustration, CEOSE members expressed their appreciation of it and made suggestions that might result in its refinement and its usefulness.

#### **GENERAL DISCUSSION**

**Dr. Poston** reminded committee members that **Drs. Ramírez, Ong, and Middendorf** each revised a different section of the draft CEOSE report, and they shared their revised versions with the committee. Members discussed the three revised versions of the sections and provided substantive input to facilitate the completion of the sections. Efforts of CEOSE members, as they discussed sections of the draft CEOSE report, were 1) to remove ambiguity in the wording, 2) to make sure that NSF knows that CEOSE members want increases in the financial support for the three programs (e.g., HBCU-UP, TCUP, and LSAMP) and for them to remain separate programs within the NSF portfolio, 3) to have NSF take a leadership role in broadening participation in STEM, and 4) to encourage collaboration relative to broadening participation among NSF and other federal agencies. A point that was made was that NSF has additional programs that directorates and offices could use to support MSIs. It was suggested that the recommendations in the draft report be discussed with OSTP and other federal agencies officials. **ACTION ITEM: CEOSE members agreed to discuss with OSTP and other federal agency officials the recommendations that appear in the draft CEOSE report, as well as the essence of the 2008 draft report on “Joining Forces to Broaden Participation in Science and Engineering.”**

**Dr. Ong** discussed the shortened version of recommendations that are based on suggestions from the Mini-Symposium on Women of Color in STEM. She spoke of her effort to replace some of the text in the draft CEOSE report so that there are about four paragraphs to describe the purpose of the mini-symposium, who attended, the topics discussed, the results, and findings. She told meeting attendees about how to view the entire report on the mini-symposium online.

### **Adjournment**

The meeting was adjourned at 12:30 p.m.

## **CERTIFICATION OF THE ACCURACY OF THE CEOSE MEETING MINUTES**

On May 5, 2011, **Dr. Muriel Poston**, Chair of the Committee on Equal Opportunities in Science and Engineering, approved the minutes of the February 8-9, 2011 meeting via telephone message to **Dr. Margaret E.M. Tolbert**, CEOSE Executive Liaison.