

COMMITTEE ON EQUAL OPPORTUNITIES IN SCIENCE AND ENGINEERING (CEOSE)

National Science Foundation

MEETING MINUTES

October 16, 2014

MEETING PARTICIPANTS

CEOSE Members Present

Dr. Karl S. Booksh, University of Delaware, DE
Dr. Nancy Cantor, Rutgers University Newark, NJ
Dr. Evelyn Hammonds, Harvard University, Cambridge, MA
Dr. Ira Harkavy, University of Pennsylvania, Philadelphia, PA
Dr. Charles Isbell, Georgia Institute of Technology, GA
Dr. Alicia Knoedler, University of Oklahoma, OK
Dr. Louis A. Martin-Vega, North Carolina State University, NC
Dr. Robert Eugene Megginson, University of Michigan, MI

Dr. George Middendorf, Howard University, Washington, DC
Dr. Alexander Ramírez, San Antonio, TX
Dr. Wendy Raymond, Williams College, Williamstown, MA
Dr. Keivan G. Stassun, Vanderbilt University, TN
Dr. Joseph A. Whittaker, Morgan State University, MD

CEOSE Members Absent

Dr. Robert Jones, University of Albany, NY
Dr. Gregory Cajete, University of New Mexico, NM

Federal Agency Liaisons to CEOSE Present

Dr. Meldon Hollis, White House Initiative on Historically Black Colleges and Universities
Dr. Susan Heller-Zeisler, NIST/IAAO

CEOSE Designated Federal Officer – Executive Liaison

Dr. Wanda E. Ward, Office Head, Office of International & Integrative Activities, National Science Foundation (NSF)

CEOSE Executive Secretary

Dr. Bernice Anderson, Senior Advisor, Office of International & Integrative Activities, National Science Foundation (NSF)

CEOSE Scientific/Technical/Program Staff

Dr. Joan Burrelli, Science Resources Analyst
Mr. Steven Buhneing, IT Specialist, NSF
Ms. Vickie Fung, Program Analyst, NSF

Welcome, Introduction, and Opening Comments

Dr. Wendy Raymond welcomed everyone to the virtual meeting and introduced two new CEOSE members, Dr. Robert Megginson, Professor of Mathematics at the University of Michigan and Dr. Nancy Cantor, Chancellor of Rutgers University Newark. The one-year renewal membership for Drs. Karl Booksh, Keivan Stassun and Joseph Whittaker was acknowledged, also. Opening comments highlighted the continuing positive response to the CEOSE recommendation for bold thinking to be more impactful in broadening participation in all the STEM fields.

NSF Executive Liaison Report

Dr. Wanda Ward also extended a welcome to the two new CEOSE members and to the new Vice-Chair Dr. Ira Harkavy. She thanked the committee for developing a new report in record time and commended Dr. Stassun for his leadership role in this activity. She also acknowledged that this would be the last meeting for Drs. Evelyn Hammond and Alexander Ramirez, thanking them for their significant contributions to CEOSE. A review of the CEOSE current membership revealed the need for increased representation by gender, disability status, and sector. Effective February 1, 2015, four new members will be appointed to fill those gaps.

Other updates included the following:

- The GS3 – North America reports were recently sent to CEOSE. Gender Summits will be held in South Africa and South Korea in 2015, in Mexico in 2016 and in Canada in 2017.
- CEOSE will receive the new Merit Review Digest and the Broader Impacts report.
- The NSF Broadening Participation Working Group has developed options and recommendations and presented to Senior Leadership in response to the 2011-2012 CEOSE recommendation for a bold new BP initiative. The NSF BPWG is working on a new framework for action; the last BP framework was developed in 2008.
- A Dear Colleague Letter for Hispanic Serving Institutions (which was posted initially in 2011) was reposted in 2014. Seven awards were made plus a capacity building award. The HSI DCLs will be reissued in 2015.
- The CEOSE recommendation for a bold new initiative was well received by senior management and steps have been taken to advance that work. A cover letter and the CEOSE recommendation were sent out to numerous stakeholder groups identified by CEOSE. Additionally, there is a standard slide about the bold new initiative recommendation in many IIA presentations; and the recommendation was handed out at the GS4 summit in Brussels.

- A previous Committee of Visitors recommendation to the Foundation was to provide better broadening participation guidance to the committee visitors. Dr. Stephen Meacham of OIIA is seeking CEOSE's help in developing some broadening participation guidance for the COV training materials.

Presentation: Pathways to Broadening Participation in Response to the CEOSE 2011-2012 Recommendation

Dr. Bernice Anderson and Dr. Scott Edwards, co-chairs of the NSF Broadening Participation Working Group gave an overview of the working group's response to the CEOSE recommendation. The working group was charged in April 2014 to do two things: one was to develop options in response to the CEOSE recommendation and the second was to develop a new strategic framework for action. The first report, *Pathways to Broadening Participation in Response to the CEOSE 2011-2012 Recommendation*, was shared with CEOSE. The NSF BPWG identified proven strategies from NSF funded programs and linked them the components of the CEOSE recommendation and pointed out evidence-based best practices.

The discussion addressed the need to convene BP experts and engage scientific communities through workshops to advance broadening participation efforts. Most of the discussion centered on the matrix of NSF broadening participation options that identified medium- and longer-term investment goals and strategies. CEOSE members expressed appreciation for the BP working group's efforts. CEOSE members asked whether it would be useful to think of priorities--that is to focus on areas that are moving slowly in some of the STEM disciplines, for example. Dr. Edwards thought that the point of setting priorities was a good one, especially if funds are limited. The working group definitely agreed that different fields have different BP challenges. Moreover, CEOSE agreed that all of the disciplines need to be actively engaged in the broadening participation agenda.

Discussion: 2013-2014 CEOSE Biennial Report to Congress

Dr. Keivan Stassun gave an overview of the current status of the report, noting that the aim this time was to reaffirm the previous recommendation on the bold initiative and to suggest five specific components to realize the grand challenge. He thanked Drs. Harkavy and Middendorf for working on Section 5 and indicated that he would expand Section 1 (the Introduction) to make sure that it is in line with the rest of the report. He asked the members to review Section 4 which summarizes the activities and outcomes of CEOSE recommendations.

Dr. Stassun requested edits and comments by November 1, 2014. Additionally, several CEOSE members requested a new graphic in Section 2 that extends back 2 decades to show change (instead of tables 2.1, 2.2 and 2.3). Overall, everyone agreed that the report is coming together well and the middle chapters are in good shape. The last chapter, reaffirming the bold initiative with five more specific facets, is near final.

Discussion with NSF Director

Dr. Wendy Raymond welcomed Dr. Córdova and introduced the two new CEOSE members--Dr. Nancy Cantor and Dr. Robert Megginson. The other members present at the virtual meeting introduced themselves to Dr. Córdova. Dr. Raymond thanked the NSF Director for her commitment to broadening participation and asked her what CEOSE can do to move the bold recommendation forward. CEOSE members expressed appreciation for NSF's response to its 2011-2012 report and asked whether Dr. Córdova had any suggestions for how CEOSE could improve synergy with NSF and with the NSF Broadening Participation Working Group. CEOSE underscored the importance of working collaboratively to sustain the momentum for broadening participation in science and engineering.

Dr. Córdova said that CEOSE and broadening participation are very important to NSF, but despite investments, the needle has not moved much. She stressed that we need to think about what we have learned; what works and what does not work; what can be scaled, and how we can achieve greater efficiency in dollars spent. In 2015, we need to think about how NSF can lay the foundation for better proposals. That might be through workshops, community engagement, or strategic thinking, so that in the future we will be better informed about how we can make a greater impact. Dr. Córdova would like more thought on whether current initiatives represent money well spent. Are there efforts that should be cut? Are there better ways to increase the scientific workforce and science literacy? She stated that there will be a need to free up some resources to do other broadening participation efforts.

CEOSE members said that NSF should be leading efforts in the area of broadening participation and asked how Dr. Córdova sees NSF's leadership role. Dr. Córdova responded that NSF does have a leadership role, but that it was yet uncertain what the FY 2016 budget would be. One way to advance the broadening participation agenda is to leverage money with partnerships, e.g., foundations and industries, and another way is to think about what long-term projects might be replaced by something new. Reaching out and engaging the community in innovative thinking about broadening participation will be emphasized in FY 2015.

CEOSE members also pointed out the need for greater attention to and support for persons with disabilities to pursue STEM careers. NSF was encouraged to have another workshop with Hispanic leaders and the HSI community.

Committee Reports by CEOSE Liaisons to NSF Advisory Committees and Updates from Federal Liaisons

Dr. Raymond reported that the BIO Advisory Committee has discussed the CEOSE recommendation. The commitment to broadening participation was encouraging and that BIO is preparing an internal report on broadening participation. Dr. Booksh reported that broadening participation is a priority area for the broader impacts discussion at the ERE Advisory Committee. Additionally, ERE AC is interested in a coordinated activity with CEOSE, like a joint workshop.

Federal liaisons from the National Institute of Science and Technology (NIST) and the White House Initiative on Historically Black Colleges and Universities provided updates of their broadening participation activities. Dr. Susan Zeisler from NIST reported on a partnership with the University of Maryland to co-host a conference for undergraduate women in physics last January and on a symposium with HBCUs on priority research areas to be held in November. Dr. Meldon Hollis of the White House Initiative also reported on the upcoming NIST conference, as well as, a meeting with the Defense Threat Reduction Agency to come up with potential areas of joint activity and a consortium agreement with that agency and HBCUs, and an upcoming conference with NOAA at the University of Maryland Eastern Shore on "Developing a Premier Future STEM Workforce to Support Environmental Sustainability."

Announcements and Final Remarks

The Chair thanked Drs. Ward and Anderson as well as other NSF colleagues. After thanking CEOSE members for all their terrific work, the meeting was adjourned. The next meeting is scheduled for February 2015.