

**COMMITTEE ON EQUAL OPPORTUNITIES IN  
SCIENCE AND ENGINEERING (CEOSE)**

**MEETING Minutes**

**Thursday, October 18 – Friday, October 19, 2018  
National Science Foundation  
Arlington, VA 22314**

**MEETING PARTICIPANTS**

**CEOSE Members Present**

**Dr. Jose Feuntes, CEOSE Chair**, Pennsylvania State University, Philadelphia, PA

**Dr. Alicia Knoedler, CEOSE Vice Chair**, The University of Oklahoma

**Dr. Gilda Barabino**, CCUNY

**Dr. Suzanne, Barbour**, University of Georgia

**Dr. Juan Gilbert**, Clemson University

**Dr. Kaye Husbands-Fealing**, Georgia Institute of Technology

**Dr. Charles Isbell**, Georgia Institute of Technology, GA

**Dr. Daniela Marghitu**, Auburn University

**Dr. Robert Eugene Megginson**, University of Michigan

**CEOSE Members Absent**

**Dr. Peter Eden**, Landmark College

**Dr. Lydia Villa-Komaroff**, Intersections SBD

**Dr. Nai-Chang Yeh**, California Institute of Technology

**CEOSE Designated Federal Officer – Executive Liaison**

**Dr. Suzanne Iacono**, Office Head, OIA/OD/NSF

**CEOSE Executive Secretary**

**Dr. Bernice Anderson**, Senior Advisor, OIA/OD/NSF

**CEOSE Scientific/Technical/Administrative Staff**

**Ms. Una Alford**, Program Analyst, OIA/OD/NSF

**Mr. Steve Buhneing**, Communication Specialist, OIA/OD/NSF

**Mr. John P. White**, Information Technology, OIA/OD/NSF

## Day 1: Thursday, October 18, 2018

### Welcome and the Reports of the CEOSE Chair and NSF Executive Liaison

Dr. Jose D. Fuentes, CEOSE Chair, opened the meeting with a welcome and expressions of appreciation for the smooth leadership transition, followed by committee member introductions. He provided a brief report about the executive teleconference with the NSF director and the Chief Operating Officer, that took place on October 11, 2018; covering the announcement of new senior leaders, a positive outlook for the fiscal and programmatic opportunities for FY 2019 and sharing of the message that harassment of any kind is not tolerated within the Foundation, granting institutions or field sites. Dr. Fuentes stated that NSF leadership is asking CEOSE to think about what broadening participation will look like at NSF five years from now. We need to ask:

- What is missing?
- What is the most powerful thing to transform to be more inclusive in the STEM-related fields?

Dr. Suzanne Iacono, CEOSE Executive Liaison and Head of the Office of Integrative Activities (OIA)/Office of the Director (OD)/NSF, welcomed everyone and provided the NSF Executive Liaison Report; highlighting the content of the NSF sexual harassment portal via the Office of Diversity and Inclusion website, NSF's support of the well-received NASEM Sexual Harassment of Women Consensus Study Report, and recent news releases about NSF's support to minority serving institutions (e.g., research collaboration to increase diversity in materials research and the Louis Stokes regional centers of excellence to broaden participation in STEM). Her report also included an update on the following Big Ideas: Mid-scale Research infrastructure, which has released a Dear College Letter announcement (NSF 19-013); the launch of the NSF Idea Machine for NSF 2026; the seven new awards of Growing Convergence Research in response to NSF DCL 18-058; and FY2018 NSF INCLUDES awards, especially the NSF INCLUDES Coordination Hub led by SRI International and the and the five new alliances addressing STEM BP challenges of HSIs, rural communities, physics graduate education, STEM professoriate, and calculus readiness in community colleges.

### Briefing: Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Science, Engineering, and Medicine

CEOSE received a briefing from the Committee on the Impacts of Sexual Harassment in Academia/National Academies Committee on Women in Science, Engineering, and Medicine (CWSEM). The presenters were: Dr. Marcia McNutt, President of the National Academy of Sciences; Dr. Elizabeth Hillman, Committee Member and President of Mills College; Dr. Gilda Barabino, Committee Member and Dean of Grove School of Engineering, the City College of New York; Mr. Thomas Rudin, Principal Investigator and Director of the CWSEM; and Dr. Ashley Bear, Program Officer. Dr. McNutt provided context, emphasizing that the importance of the report is that it not only shows the magnitude of the problem, it also shows what solutions are working and not working. Overall, the response is overwhelmingly positive within federal agencies and universities and is receiving attention among other organizations. A public health campaign will be employed to raise awareness and motivate action. Additionally, the report was instrumental in the National Academy of Science Council approving a new code of conduct for the National Academy of Sciences. The team presented the report findings and recommendations and announced upcoming events. Open discussion with and among CEOSE members regarding the report and supporting efforts focused on areas such as the roles for NSF; the need for more research, giving special attention to women of color and persons with disabilities; structural changes needed; and institutional branding in the context of positive work climates.

### NSF's Steps to Address Harassment -- Office of Diversity and Inclusion (ODI)

The NSF Office of Diversity and Inclusion, represented by Office Head, Rhonda Davis, and Compliance Program Manager, Robert Cosgrove, as well as the NSF Policy Office Head, Jean Feldman, provided an overview of Title IX and specific details about NSF's new Term and Condition to address sexual misconduct in its awardee community. Effective October 21, 2018, NSF requires awardee organizations to notify the agency of: 1) any findings or determinations that an NSF-funded principal investigator or co-principal investigator committed harassment, including sexual harassment or sexual assault; and 2) the placement of the PI or Co-PI on administrative leave or of the imposition of any administrative action relating to a harassment or sexual assault finding or investigation.

Several points were stressed during this session. Acceptance of an NSF award certifies compliance with laws and regulations. Complaints of discrimination, harassment or retaliation may be submitted to the ODI office at NSF. The NSF Important Notice 144 states that NSF does not tolerate harassment in any areas of NSF programming research being conducted, emphasizing field sites and conferences

## **NSF INCLUDES Learning Agenda**

The learning agenda model for performance improvement of agency mission was co-presented by Dr. Rebecca A. Kruse, Evaluator, OIA/OD and Dr. Jolene Jesse, Program Director, EHR/DRL. They pointed out that NSF strives to lead investments in science and engineering research and education and is among the first of the scientific agencies to embrace the implementation of learning agendas. Moreover, NSF selected INCLUDES initiative to consider learning agenda approach. Learning agenda is defined as a set of broad questions directly related to the work of an agency that when answered enables the agency to work more effectively and efficiently. This model intentionally and purposefully engages stakeholders. The following features illustrate how organizational learning can support complex initiatives, using NSF INCLUDES as case study:

- Aims to build infrastructure to solve problems, is committed to organizational learning since it is a Big Idea, and has established external, independent program level developmental evaluation as well as project level evaluation technical assistance that supports the community
- Has an internal evaluation technical team that temporarily protects valuation, comprised of program and other analytical and communication analytical expertise
- Has a well-articulated theory of change; INCLUDES theory of change reflects NSF's view that funding grantees who engage in interactive collaboration, networking and collective learning strategies will have a greater impact than funding a similar number of standalone broad participation projects
- Engages the community in a shared vision and provide platform for collaborative change, evidence-based decision making and increased communication and visibility -- learning with the field through a pilot process
- Has plans in place for partnerships and networks to have shared goals and metrics that allow for robust data for evidence-based decision making and increase communication among organizations and individuals, increasing connectivity that lead to expansion, sustainability and scale

During this session, CEOSE members shared ideas for the expansion of the NSF INCLUDES efforts, like working with other Federal agencies, engaging/leveraging companies to support the national network, and connecting broader impacts within the framework of NSF INCLUDES.

## Topics for Discussion with NSF Director and Chief Operating Officer

CEOSE leadership noted that October meeting was developed to focus on three key topics: sexual harassment, the NSF INCLUDES learning agenda, and the agency's newer efforts to support minority-serving institutions. Other important areas for consideration included: how to reframe the narrative in support of broadening participation, the Director's markers for success for NSF INCLUDES, more discussion about the needs and support for persons with disabilities and supporting students from small colleges with cutting edge research experiences.

### Day 2: Friday, October 19, 2018

#### Opening Remarks

Dr. Jose D. Fuentes, CEOSE Chair, opened the meeting and provided a recap of the previous day. Additionally, he provided an overview of the development and structure of the forthcoming CEOSE biennial report to Congress and asked the Vice Chair to facilitate the discussion about the 2017-2018 CEOSE report.

#### Reviewing the 2017-2018 Biennial Report to Congress

Dr. Alicia Knoedler, CEOSE Vice Chair, reviewed the draft document with the Committee: the first section of the report sets context; the second section of the report summarizes NSF BP efforts and progress; the third section of the report pertains to CEOSE activities in past two years; and fourth section of the report focuses on CEOSE's recommendation(s) to the Foundation. The recommendation, as it's written now, is for NSF to "give increased attention to including diverse community voices across its research and education portfolios through community-driven projects". Members accepted assignments for updating the third and fourth sections of the report. Members will also consider rephrasing or parsing the proposed recommendation to be more actionable.

#### Voices of the New Members/ Discussion: Future Directions

The four new members of the Committee (Kaye Husband Feeling, Gilda Barabino, Suzanne Barber and Juan Gilbert) were given the opportunity to identify gaps and/or pressing areas that need to be considered to inform the future work of CEOSE. These ideas included:

- STEM employment of individuals with disabilities, especially veterans with disabilities, supporting effective policy development and implementation/practice (e.g., networks, observatories and toolkits)
- Curating of knowledge about underrepresentation in STEM fields and expand science of broadening participation regarding access, opportunities and outcomes
- Systems approach to understanding the science of inequality
- Achievement gap from a global perspective
- Diversification of faculty
- Integration of science and engineering (S+E) and the humanities and the arts (H+A) toward S+E and H+A literacy for all students and the public
- Qualitative/analytical approach to diversity, equity, and inclusion for programming and assessment of impact, as well as scaling best practices

- Harnessing the full potential of MSIs via robust research programs/fully engaging MSIs in ground breaking research
- Cultural shifts for greater role of community in research and innovation, data sharing and/or valuing BP for better science
- Support for diverse communities to explore innovation and entrepreneurship as mindset
- Workshop designed to look at it roles and influence of the intersections of race and gender

### **Reports by CEOSE Federal Liaisons**

Shahin Nemazee of the Smithsonian Institution highlighted the agency's new initiative with the D.C. public school system (DCP). The Smithsonian approach to partnership with DCP is three-tiered to 1) create cornerstone events that supplement the D.C. public school curricula, 2) provide high impact immersive experiences for students, and 3) offer rigorous professional development for teachers. Mr. Namazee also shared an overview of their efforts regarding the prevention of workplace harassment, including efforts to address sexual harassment.

Brandi Toliver, Program Director of the HBCU Program at the National Institute of Standards and Technology, provided an update on a range of opportunities that included professional research experience program, undergraduate research fellowship program, and the summer internship for doing hands-on research. She also discussed several STEM outreach efforts.

Kessela Reis, Partnership Liaison for the US Equal Employment Opportunity Commission, discussed how to improve the handling of workplace harassment. Launched in October 2017, EEOC crafted a recent/new trend called respectful workplace, addressing both the legal concerns and the cultural concerns to deter discriminatory practices.

### **Meeting with NSF Director, Dr. France Córdoba and Chief Operating Officer, Dr. Fleming F. Crim**

Dr. France Córdoba thanked the Committee for their work and provided an agency update. Almost all AD and Office Head positions have been filled. NSF is co-chairing three of the six committees of NSTC. An update on the NSF goals and strategic initiatives with other agencies (e.g., NOAA, NASA and US Airforce) was also discussed, reiterating her commitment to the NSF INCLUDES initiative. In closing, Dr. Córdoba stressed that NSF is committed to ensuring the safety and security of the people its awards support and does not tolerate sexual harassment or any kind of harassment.

### **Building the Capacity and Competitiveness of MSIs – New Efforts /New Awards**

CEOSE received a briefing about three new efforts designed to build the capacity and competitiveness of MSIs. Dr. Talitha Washington, HSI Program Director, reported that NSF was directed to create the HSI program at no less than \$15 million. In the formation of the program, NSF held listening sessions and established a subcommittee of the advisory committee of EHR. The listening sessions were held at HSI conferences and universities. Recommendations from the community included support for faculty development, faculty release

time to do research, paid undergraduate research opportunities (including community colleges), bridge programs, and the creation of a consortia among HSIs and between HSIs and industry. The new HSI Program (NSF 18-524) has two tracks; Track 1: Building Capacity and Track 2: HSIs New to NSF. In FY 2018, NSF supported twenty-eight Track 1 projects, three Track 2 projects and two Resource Hub awards (that facilitate networking and collaboration among HSIs).

Dr. Clytrice Watson, Program Director for HBCU-UP, reported on the HBCU Excellence in Research (EiR) Program. EiR supports projects that enable STEM and STEM education faculty at HBCUs to conduct research and to further develop research capacity. There are 100 HBCUs in the USA ranging from small liberal arts colleges to research universities. All NSF directorates participate in this program. For this track in the HBCU-UP solicitation (NSF 18-522), PIs submit through HBCU-UP and select a secondary program division within one of the NSF Directorates. There are two award types, single-investigator projects of up to \$500K, and multi-investigator projects up to \$1 million. In the first cohort (FY 2018), 47 awards (30 small and 14 large) were made across the Directorates at NSF.

Dr. Regina Sievert, Program Director for the Tribal Colleges and Universities Program (TCUP), reported on the TCU Enterprise Advancement Centers. There are more than 30 TCU in the USA and faculty at these TCUs have very high teaching loads; therefore, research is a challenge. The TCU Enterprise Advancement Centers build on TCUs' STEM capacity to expand their role as a STEM partner with tribes or communities to link STEM to local needs, addressing infrastructure, environmental, research, and/or educational needs. The awards are up to \$3 million, up to 5 years, and have the potential for renewal. Four awards were made in FY18.

## **Announcements and Final Remarks**

The next CEOSE meeting will be held in February 2019. Up to four new CEOSE members will be appointed in 2019. The Committee will aim to have a final draft of the 2017-2018 biennial report by the first week of January 2019.