**THE NATIONAL SCIENCE FOUNDATION ADVISORY COMMITTEE FOR INTERNATIONAL SCIENCE AND ENGINEERING**

**Minutes**

**Thursday, March 26, 2015**

- ***Welcome and opening Remarks; Approval of March 2013 and November 2014 Minutes***

Advisory Committee Chair, Susan Avery, provided welcoming remarks and also called for the approval of the minutes from March 2013 and November 2014. These minutes were approved.

***Greetings and Overview***

Wanda Ward, Office Head International and Integrative Activities, provided greetings and an overview of the upcoming meeting. She emphasized that this is a Foundation-wide committee, others are Environmental Research and Education (ERE), Cyber Infrastructure and Committee for Equal Opportunities in Science and Engineering (CEOSE) - Congressionally mandated. She presented FY 2016 budget information and reiterated the need to promote broadening participation. She announced Rebecca Keiser coming on board as OISE's Office Head.

- ***FACA Briefing and Overview of International Science and Engineering; Realignment and Hiring Update***

Kelsey Cook explained the new OISE structure. He stated the OISE programmatic activities are the same as they were in November.

- ***ISE Strategic Framework and Strategic Directions***

Graham Harrison and Kelsey Cook led a discussion on the ISE Strategic Framework and Strategic Directions [Attached]. The Framework was developed by OISE staff in 2013. It was noted that the Framework should be more than just responsive to global research; it should be intentional and strategic. The Framework is for the entire Foundation, not just ISE, and must be driven by programmatic decisions and research needs of the Foundation. Specifically, workforce efforts need to be consistent with ISE mission and NSF goals; partnerships need to go beyond the individual PI to ensure broad engagement and ensure access; and leadership should leverage NSF's reputation and engage with partners worldwide. We must understand that the goal of the Foundation is to enable participation globally where it is of benefit to the US community.

- ***Discussion of Implementation of Leadership Pillar of the Framework***

Graham Harrison led a discussion of implementation of the Leadership Pillar of the Framework. Clarifying the role of the Foundation in international collaboration is important. It is also important to understand how NSF is perceived by other agencies and the research community. Data mining was mentioned as a potentially useful tool to understand NSF's international activities. Some raised the point that scientists need to better learn to articulate to Congress the need for international collaboration and education and its value to the United States

There are 3 key areas to emphasize dealing with expanding international collaboration:
- Expand the Partnerships for Enhanced Engagement in Research (PEER) program in terms of how it provides an example of how to engage. PEER and NSF can be great conveners of organizations with significant resources and work together.
- Global frontiers call for global efforts (e.g. sustainable science – not just sustainability but the science that underpins it).
- Expose US scientists to opportunities to work with African and Middle Eastern scientists along with European scientists.

Concern was expressed about possibly doing more harm than good if the right personnel are not involved in doing this global science, as some can be paternalistic about the science itself. Some expressed the opinion that extractive science has destroyed trust and that in the future efforts need to be made with sharing research information and not just hoarding it.

- ***Report on the Global Research Council (GRC)***

Graham Harrison provided an update on the GRC. NSF organized a meeting on merit review - 40 countries came. Five regional meetings also put out a global endorsement of merit review principles. The GRC is also looking at capacity building.

- ***Meeting with France Cordova, NSF Director, and Richard Buckius, NSF Chief Operating Officer***

Dr. Cordova announced that Rebecca Keiser will begin April 6th, and Cliff Gabriel will be the Acting Deputy while a search is conducted. One aspirational goal for the Office is to think about setting up an NSF office in Latin America. The discussion focused on the need to make sure Congress understands the importance of NSF's international engagements. A short report would help Congress understand NSF's activities. It would help to have ISE put together facts and charts and then have the AC review it.
Dr. Cordova recommended informing the incoming Office Director about big data and on private and public engagement.

- **Discussion of Public Access**

Amy Friedlander, Acting Deputy Division Director, Advanced Cyber infrastructure provided an update on NSF's public access activities. She mentioned the particular challenges associated with data. For example, personally identifiable data are not the same across international borders. Most are concerned with how to manage publications. NSF will not stand up its own repository because of cost. The key issue is to minimize burden for our staff and for our PIs.

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- *Overseas Office Discussion*

Anne Emig, NSF Tokyo; Nancy Sung, NSF Beijing; and Mark Suskin, NSF Europe discussed the work of NSF's 3 overseas offices. Specifically, they stated the need to facilitate scientific agreements and for NSF to take a leadership role on policy. A need was expressed to help our community understand how to handle permits and how to pursue cooperation. In general (not strictly related to the overseas offices), OISE needs a more nuanced statement about how it can be more valuable to all of NSF and the US. There are two major needs: 1) the Head of OISE needs to sit on SMaRT and 2) OISE needs to provide information to Dr. Cordova on NSF's international mission statement and future strategy.

*Committee for Equal Opportunities in Science and Engineering (CEOSE)*

George Middendorf provided an update on CEOSE. We need to continue to fund effective programs and groups that want to implement programs that are effective elsewhere. In addition to broadening participation, we need to focus on institutional change so we can take advantage of our full workforce. We need to be more systemic in addressing diversity and equity issues in STEM, and work with other federal agencies to do this.

*Advisory Committee-Environmental Research and Education (AC-ERE)*

Alan Tessier, Bio Directorate Coordinator for the AC-ERE provided an update on this advisory committee. The AC's vision is a three part concept: 1) understanding the environmental challenge; 2) designing the system- engineering and other areas to change the trajectory; and 3) enabling and securing the future infrastructure and activities to get where we need to go (data, sensor networks). There are two new environmental research funding allocations: INFEWS (Innovations at the Nexus of Food Energy and Water Systems) and Risk and Resilience. As a whole the Foundation needs to think about the integrated nature of these efforts and how can OISE be more

effective to the rest of the environmental science groups in furthering their international scope?

### *Partnerships in International Research and Education (PIRE)*

John Tsapogas provided an update on PIRE, which is the largest NSF program where international partnerships is one of the key review criteria which is unique across US Government. To date, NSF has funded 59 PIRE projects.  ).  There is an on-going evaluation of PIRE that will be completed by the end of this year.

### *Closing Remarks and Wrap-up*

AC chair, Susan Avery thanked everyone for their participation.  She recommended that we prepare a letter to the incoming OISE Office Head to inform her of the major discussion items.  However, FACA requires that all reports be discussed publicly if these include advice to the agency.  However, a letter including information that has already been discussed publicly can be prepared and sent to the new Office Head.  Therefore, a motion made, seconded and all participants agreed to sending a short letter to the incoming OISE Office Head summarizing elements of this meeting's discussion.

**The meeting was adjourned.**