**NSB-2023-27**

November 29, 2023

**APPROVED Minutes**

**PLENARY OPEN SESSION**

**485th MEETING**

**NATIONAL SCIENCE BOARD.**

National Science Foundation (NSF)

In Person and Via Videoconference

August 15 - 16, 2023

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| **Members Present:** | **Members Absent:** |
| Dan Reed, *NSB Chair*  Victor McCrary, *NSB Vice Chair*  Sudarsanam Babu  Deborah Ball  Roger Beachy  Dorota Grejner-Brzezinska  Vicki Chandler  Maureen Condic  Aaron Dominguez  Suresh Garimella  Darío Gil  Melvyn Huff  Steven Leath  Matthew Malkan  Julia Phillips  Marvi Ann Matos Rodriguez  Scott Stanley  Keivan Stassun  S. Alan Stern  Merlin Theodore  Stephen Willard  Wanda Ward  Bevlee Watford  Heather Wilson  Sethuraman Panchanathan, *ex officio* |  |

There being a quorum, the National Science Board (NSB, Board) convened in Open Plenary Session at 9:00 a.m. EDT on Tuesday, August 15, 2023, in person and via videoconference with NSB Chair, Dan Reed, presiding.

NSB Chair’s Open Remarks

Reed welcomed Board Members, staff, and guests to NSB’s 485th meeting and began his remarks with updates about NSBO staff including accomplishments and milestone of an NSBO staff member for her 30 years in federal service. The Chair shared highlights of his activities and meetings since the May 2023 NSB meeting including his attendance at a President’s Council of Advisors on Science Technology meeting in June where he participated in a discussion about how to stimulate more high-risk endeavors, ideas around different award mechanisms such as block grants, ways to improve peer review, possible ways to modify the Bayh-Dole Act and the importance of investing in people.

Reed gave an overview of the plenary agenda for the first day of the August 2023 NSB meeting and concluded his remarks with a reflection of NSF’s accomplishments at this halfway mark of his term as Board Chair. Highlights included the passing of the *CHIPS and Science Act* (CHIPS), with its important effects on semiconductors in the U.S., funding to NSF for semiconductor workforce training, and the establishment of NSF’s directorate on Technology, Innovation, and Partnerships (TIP). He noted the Board kicked off its first review of the Merit Review process in over a decade aimed at ensuring NSF continues to meet societal needs in terms of responding to important issues in research and the elevation of talent as its number one priority.

NSF Director’s Remarks

*CHIPS and Science Act*

The Director acknowledged the one-year mark since the passage of CHIPS and provided an overview of NSF accomplishments to date, including new awards, programs, and partnerships with industry, non-profits and federal agencies aimed at inspiring talent, training the future workforce, and strengthening research security.

*Director’s Engagement and Activities*

Panchanathan summarized the status of the Fiscal Year (FY) 2024 Budget request and highlights of his engagements including participating in Congressional briefings on Artificial Intelligence and delivering remarks at the University of Vermont graduation ceremony and at the National Academy of Inventors. He also hosted the Indian Prime Minister and the First Lady at NSF and meetings with met with Members of Congress in their home states of New Hampshire, Tennessee, and Pennsylvania.

*Programmatic Highlights*

The Director shared an important scientific discovery enabled by NSF’s NANOGrav Physics Frontier Center gave examples of benefits yielded by long-term investments in other centers, such as the Materials Science and Engineering Research Centers. Other highlights included major awards and new programs including Expanding the Quantum Information Science and Engineering program and examples of how NSF funded research unleashed new technologies.

*Executive Staff updates*

Panchanathan introduced new NSF Executives: Dr. Susan Marqusee, Assistant Director for Biological Sciences; Mr. Terry Carpenter, Senior Advisor in the Office of the Director; Dr. Daniel Linzell, Division Director for Civil, Mechanical, and Manufacturing Innovation; Dr. Thyagarajan Nandagopal, Division Director for Information and Technology Ecosystems; Dr. Robert Chris Smith, Interim Division Director for Astronomical Sciences; and Mrs. Katerina Antypas, Director of the Office of Advanced Cyber Infrastructure.

Vision 2030 – Developing STEM Talent

Reed introduced the presentation by summarizing the four priority areas of the Board’s *Vision 2030* and turned the floor to Roger Beachy. Beachy provided context for the need to develop America’s STEM talent and summarized the Board’s efforts over the past year. He identified policy successes and gave examples of NSF programs that support STEM talent development. Beachy concluded his presentation with the Board’s planned activities and thanked the Director and NSF Staff for their support of *Vision 2030.*

Members’ comments focused on advocating for a whole-of-government approach to address STEM K-12 education, including attracting and retaining teachers, addressing financial barriers facing undergraduate and graduate students, and conversed about the level of effort required to get traction at the national and local levels.

NSB Panel, STEM Workforce Shortages Across the Federal Government

Vice Chair Victor McCrary opened the session by offering that in recent years through its Skilled Technical Workforce report and Vision 2030, the NSB has taken an increasingly active role in prioritizing STEM talent and workforce development as the lynchpin for US national security and innovation. He noted that in December 2022, the Board began exploring the STEM talent needs required for the semiconductor, advanced manufacturing, and bioeconomy sectors.

Panelists included representatives of the U.S. Department of Agriculture, the U.S. Navy, U.S. Public Health Service Commissioned Corps, and U.S. Department of Energy, and presented agency-specific workforce needs and data, training and education requirements, and related challenges. Following the presentations by panelists, Members engaged in a lively discussion about how to bridge the gap from education to recruitment to federal jobs in STEM to fill critical needs, diversify the workforce and provide opportunities across the U.S. Panelists highlighted emerging and existing programs and discussion with Members centered around scaling up efforts related to recruitment, retainment and building partnerships.

Office of International Science and Engineering, NSF Briefing – Kendra Sharp

Reed turned the floor to Kendra Sharp, Head of the Office of International Science and Engineering (OISE), to discuss OISE’s strategy. Three elements of NSF’s international activities are cross-agency engagement; broadening international partnerships; and diversifying funding sources to include other sources and leverage NSF funds. Sharp gave a couple of examples of how NSF leverages its funds. The first was a multilateral partnership with Canada, the UK, and Australia focused on use-inspired research in climate change and clear energy where NSF asked partners to make significant upfront commitments which resulted in a greater than 1:1 ratio of funding (NSF’s commitment was about $30 million and the partners pledged approximately $40 million). She gave another example of a multilateral opportunity to build resilience in the science and education system in Ukraine and to fund researchers in Ukraine, NSF who does not fund foreign entities, partnered with the National Academies and the Office of Naval Research Global who can.

Sharp gave examples of different types of partnerships (PI-to-PI, direct bilateral and multilateral) and other funding sources. Highlights included the launch of the Global Centers, focused on use-inspired research in climate change and clean energy; and progress towards securing commitment to collaborate on innovation in agriculture among the “Quad”, an Indo-Pacific alliance composed of the U.S., Japan, Australia, and India.

OISE goals are advancing research that benefits the U.S. research and development community, training a diverse, globally engaged STEM workforce, and engaging in international science and technology policy and science diplomacy. Members inquired how OISE measures programmatic success, but Sharp did not offer a formal set of metrics for OISE. Panchanathan suggested that OISE could consider, for example, research on how students acquire global competencies, and then offered overall benefits of international partnerships such as being able to leverage ideas and expertise, gain access to data and facilities, “globalization of thinking” that comes with travel and collaboration, and sharing of values.

Other questions from Members focused on partnerships with Mexico, administrative burdens related to international partnership proposals and awards, partnerships that include the U.S. Department of Agriculture, ideas to scale international partnerships with industry or other private entities, and measurements of success. Reed remarked on the importance of cross-agency conversations about how the U.S. can remain scientifically and economically competitive and engage a broad cross-section of society.

Sharp is the co-chair of a subcommittee of the National Science and Technology Council on International Science and Technology Coordination and invited NSB Members to share their input on how best to build connections with other federal agencies for work in the international space, noting there was more that NSF could do to collaborate across government.

Committee Reports

***COMMITTEE ON EXTERNAL ENGAGEMENT (EE)***

Committee Chair Darío Gil summarized key engagement activities by Committee Members in 2023 and previewed ideas discussed by Members to begin in September 2023. Engagements to date included about 40 meetings with Members of Congress and congressional staff, the administration, science and engineering leaders and others and were focused on U.S. STEM talent vulnerabilities and NSF’s key role to help reverse or mitigate those vulnerabilities. Board members also wrote op-eds and articles and participated in media interviews. Through this work with the Director and others at NSF, NSB Members helped raise awareness of the nation’s STEM talent crisis and NSF’s role to help through its education and training programs, especially in fields that are vital for the U.S. economy and national security.

Ideas for exploration going forward include continued engagement with Congress, ways to meet the nation’s STEM talent needs particularly as it relates to national security, contribution to proposed legislation, leveraging and incorporating new data into NSB’s engagement initiatives from *Indicators* 2024, and engaging with additional partners such as other federal agencies, state entities, STEM professional organizations or influencers who could help continue drawing attention to STEM talent needs in the U.S.

***COMMITTEE ON NATIONAL SCIENCE AND ENGINEERING POLICY (SEP)***

Committee Chair Maureen Condic summarized the Committee’s work on *Indicators 2024* since the May 2023 Board meeting including reviewing and approving the detailed narrative outlines for , “*Knowledge and Technology Intensive Industries*” and “*Research and Development, U.S. Trends and International Comparisons*” and the summary report, “*The State of U.S. Science and Engineering*”. She alerted Members that draft reports would soon be available for review and consideration by the full Board. Condic also shared the news that the National Center for Science and Engineering Statistics (NCSES) would soon have a new program director.

*Indicators 2026*

Condic previewed the Committee’s efforts to update and modernize NSB’s *Indicators* report. First, SEP and NCSES are working to streamline thematic reports moving from nine to three while increasing the relevance of the reports to key policy stakeholders. The three thematic reports would follow themes of particular importance to federal decision-makers – talent, discovery, and translation – significantly reduce the total volume of each report while retaining the same data. Second, the development of an online dashboard/navigation tool to increase the accessibility of the data, which might attract new stakeholders and allow for real-time updates. Going this route could also result in reduced workload for NCSES allowing for timely and relevant ad hoc report releases.

Condic emphasized that useability would be critical for a dashboard especially for existing users of the reports prior to this change. Members expressed concerns about not being able to find data in a newly organized format and suggested creating a mapping or navigation tool, or via interactive chat using natural language. Condic concluded her report and introduced two teams under SEP established after the NSB May 2023 Board meeting – the Talent Development Team led by Julia Phillips - and the National Security Team led by Marvi Ann Matos Rodriquez.

*Talent Developed Team*

Team Lead Julia Phillips provided an overview of the major focus areas and ideas for cohesive policy products across the STEM education and workforce landscape identified by the team. Many of the topics identified by the team tied to the key themes and data from *Indicators* and the team discussed the possibility of aligning resulting policy products with the release of *Indicators* thematic and summary reports.

PreK-12 grade and three main areas within the topic are around building institutional capacity for teachers, expanding NSF focus on pre-K through 5th grade and further exploring impact and accountability of NSF funded research on STEM education.

Skilled technical workforce and the need for a data rich updated skilled technical workforce report that might include projected needs for workers by sectors and certification requirements, employment demand signals, and recommendations for short and long-term solutions that involved both NSF as well as external partners.

Undergraduate and graduate STEM education, with possible themes around how to make STEM education affordable, increasing partnerships between community colleges, certification programs, technical schools, and other institutions of higher learning and exploring how to buoy offices of sponsored research, particularly at minority-serving institutions and other resource-challenged institutions.

A pathways diagram to illustrate the on- and off-ramps for education workforce growth. Such a diagram could be used to eliminate gaps both in data collection and analysis, but also in career and training information dissemination to students, to parents, to schools, career counselors, and other stakeholders.

Phillips concluded her report with a preview of next steps which included exploring relevant data and engaging with NSF broadly and NCSES to parse out specific policy recommendations.

*National Security team*

Team Lead Marvi Ann Matos Rodriquez provided an overview of team discussions about the intersection of STEM and national security which accentuates challenges throughout the STEM pipeline. The team discussed the topic of attracting and retaining foreign-born STEM talent, in the context of the overall high demand for STEM talent in critical technology areas and in areas of national security that are restricted to domestic or naturalized persons. Rodriquez noted synergies with the Talent Development Team and SEP around data and key policy messages. Like the Talent Development Team, this team’s topics and messages should be tied to key themes and data from *Indicators* and the team discussed the possibility of aligning policy pieces on these topics with the release of *Indicators* thematic and summary reports.

*Quadrennial Review, Office of Technology and Science Policy (OSTP)*

Condic reported that SEP has been collaborating with Board Members to identify the most helpful inputs for OSTP’s consideration as it develops the Quadrennial Review to be released by the end of the calendar year 2023.

Approval of Prior Open Meeting Minutes

Reed presented the minutes of the May 2023, Open Plenary session for approval. The minutes were approved as presented.

2024 Meeting Dates

Reed brought a vote on the draft 2024 NSB meeting schedule. The motion passed with no dissent. The NSB 2024 meeting schedule is as follows: (NSB-2023-19)

* Board Meeting, February 21-22, 2024
* Board Meeting, May 1-2, 2024
* Board Meeting, July 24-25, 2024
* Board Retreat, September 11-12, 2024
* Board Meeting, December 4-5, 2024

***Session 2* (August 16, 2023, 8:30 - 8:31 – 10:50 a.m. EDT)**

NSB Chair’s Opening Remarks

Reed welcomed Members back to the second day of the NSB August 2023 Board meeting and previewed the agenda.

Committee/Commission Reports

***SUBCOMMITTEE ON TECHNOLOGY, INNOVATION, AND PARTNERSHIPS***

Subcommittee Chair Dario Gil introduced NSF’s Assistant Director Erwin Gianchandani who recognized NSF and NSB’s partnership over the past two years and the effort it took to design and develop the directorate on Technology, Innovation, and Partnerships (TIP) and launch and implementation of the NSF Engines program. Gianchandani then recapped events prior to May 2023, beginning with NSF’s issuance of the Engines program Broad Agency Announcement / funding opportunity and the award of the 44 type-1 planning grants.

Referring to NSF’s Regional Innovation Engines (RIE or Engines) interactive map or dashboard, Gianchandani pivoted to an update of the Engines type-2 competition. He summarized the proposal review process, including the composition of review teams and data/methods used by NSF to conduct its due diligence and benchmarking. Gianchandani shared some of the characteristics of the finalists’ proposals such as location, number of EPSCoR jurisdictions, and technology areas. NSF is planning to conduct site visits, the final stage of the review process beginning late August through mid-October 2023.

Following the presentation, discussion with Members covered coordination between NSF’s Engines program and the Department of Commerce’s Economic Development Administration (EDA) Regional Tech Hubs program to share information and data, review panel composition and review process, and use of data for benchmarking and indices.

***NSB-NSF COMMISSION ON MERIT REVIEW***

Commission Co-lead Wanda Ward gave an overview of the Commission’s work and its bi-monthly meetings since the NSF’s May 2023 Board and the topics covered at each meeting.

She reminded Board Members of the Commission’s charge and presented the agreed upon seven-step workplan, the updated timeline, previewed topics for the next few Commission meetings, and invited questions and feedback.

Input from Members included a suggestion that the Commission consider how TIP conducted its Merit Review process considering the uniqueness of the Engines program. Other suggestions included hearing from scientists that have not received NSF funding or have chosen not pursue NSF funding and reviewing how non-governmental entities conduct their review processes to understand where there might be room for greater efficiency or opportunities for improvement. One Member asked whether the commission had a sense of NSF’s understanding of broader impacts criteria relative to other agencies. Ward responded that the Commission began this conversation with the panel of representatives from federal agencies and that a report on the evolution of Broader Impacts would be published imminently by the Center for Advancing Research Impact in Society (ARIS). It is anticipated that the ARIS report would recommend interagency discussion and engagement about what BI means across federal agencies. Members emphasized the importance and benefits of a joint (NSB/NSF) Commission on this matter because of the need to include staff who have institutional memory and are the executors of the process.

NSF Update – Research Security and Integrity Information Sharing and Analysis Organization – SECURE (Rebecca Keiser)

NSF established its Research Security and Integrity Information Sharing and Analysis Organization or SECURE in response to the National Security President Memorandum (NSPM) 33 that was finalized in 2021 and to meet requirements in *CHIPS.* NSF Chief of Research Security, Strategy, and Policy, Rebecca Keiser outlined the values upheld by the those in the Science and Engineering (S&E) ecosystem (“the community) to propose, fund, conduct research, and publish results and noted that a recent JASON report confirmed those values are being exploited by some foreign governments.

The mission of SECURE is to empower the research community to make informed decisions about research security concerns. Like the National Weather Service (NWS) when it issues alerts and does analysis for its users it does not tell its users what to do nor does it make decisions for the users. It may be that some members of the S&E community are interested in the information and others not. It will be the job of SECURE to provide information that is helpful and useful along with developing an engagement strategy. SECURE will have a board of directors comprised of representatives from the S&E community, with a U.S. Government steering committee and two tiers - leadership and subject-matter experts.

SECURE will create tools and provide them at no cost, so community members can assess possible threats, such as a maligned foreign talent plan for example. The aim is to reduce the guess work by universities and research institutions. SECURE will assist institutions to establish research security programs as required by NSPM 33, through tools, information, and engagement. Keiser envisions SECURE as the bridge between the government and researchers and institutions. SECURE will not conduct research security investigations on potential violations such as non-disclosure, misappropriation of pre-publication research, and undisclosed conflicts of interest and commitment.

NSF issued a Dear Colleague Letter (DCL) to gather feedback from the community and has also been meeting with many research groups to inform how SECURE will operate. Most important to community members that information be provided to them in a curated way, with a framework for analysis, to mitigate risks, that still allows them to pursue international collaborations. It was also important that SECURE provide uniform quality of service and provide frameworks for best

practices in research, research security, research integrity and international partnerships. Finally, reducing the administrative burden of establishing research security programs at institutions.

*Significant Issues*

* Whether or not there should be research security standards or just recommendations to the S&E Community – some think standards would be helpful and others too directive.
* Addressing differing opinions within the community about whether research security is truly a risk will be difficult. If some in the community do not think research security is truly a risk for them, they may not subscribe to the curated information if it’s not required. It is about education and communication.
* Training – Many universities have research security officers but not much training. A false or inaccurate accusation of some wrongdoing in the area of research security could be devastating to a researcher’s career. Keiser reported that NSF does not have the expertise and therefore cannot do the training. She has been speaking with NSF representatives of the GRANTED program to learn where and how the NSF might help with additional capabilities in this area.
* One member asked whether award decisions by NSF might be made based on the information from SECURE, for example not making awards to universities because of past or ongoing incidents. While Keiser assured Members that SECURE would be providing information to the community and not back to the government, she admitted this was a difficult question especially if the research had national security or military implications and could not definitively say that that award decisions would not be influenced by information from SECURE.

NSF Update – Sexual Assault and Harassment Prevention Report

NSF Chief Operating Officer (COO) Karen Marrongelle outlined NSF’s guiding principles including the need for NSF to be a model for teamwork, fairness, and equity. She added that NSF’s investment in science, technology, engineering and education necessitates a safe environment free from harassment and a commitment to creating a safe and inclusive research environment.

*Helpline*

On April 10, 2023, NSF launched its U.S. Antarctic Helpline, a live confidential crisis support line to the U.S. Antarctic Program (USAP) community, available 24/7 and to all stations in Antarctica and on both research vessels. When the helpline first rolled out the delay in response time for text and online chat functions was 10 to 20 minutes. Response time is now down to a couple of minutes.

*Usage – April to June 2023*

From April to June 2023, use of the helpline has increased; there were 100 unique webpage views, about 20 unique text conversations and telephone calls, and almost 40 chats. Focusing on calls to the helpline, in May there were 2 and in June there were 16. In June, NSF received 48 unique outreach instances from USAP community members across all communication channels – telephone, text, and chat.

Since introducing the helpline, NSF has encouraged current and former members of the USAP community to call as needed. Marrongelle could not say how many of the calls were from former or current community members. Members are interested in understanding the breakdown between current and former USAP community members.

*Climate Survey*

This summer NSF will launch its first ever USAP climate survey allowing NSF to establish a baseline of data on incidence of sexual assault and all forms of harassment and to begin monitoring the culture and environment in Antarctica. The survey is currently undergoing a review by the Office of Management and Budget (OMB) and will be launched as soon as NSF receives OMB clearance.

NSF Chief Officer for Research Facilities Linnea Avallone has been working with other major facilities supported by NSF on their policies and procedures around sexual assault and harassment. These facilities are ones not directly operated by NSF like the Antarctic program is and in some cases are multi-user facilities in which NSF is just one of several partners. Within the last few years, each facility has conducted a cultural climate survey and some facilities have conducted multiple surveys and all facilities have reported improvements such as an increased sense of personal safety or increased sense of belonging and inclusion. NSF continues to gather

information about how those surveys were conducted and reviewing results may help NSF identify practices that can be applied to the USAP.

*Federal Partners*

Over the past several months, NSF SAHPR office met with federal partners to introduce the accountability framework and set the tone for the coming season. NSF received helpful feedback on the framework and suggestions for effective prevention and response strategies such as internal complaint processes and types of training. NSF also met with the Equal Employment Opportunity Commission, Office of Federal Contracts Compliance Programs to understand what their administrative authority covers and to standardize the referral process. The Director assured Members that he meets quarterly with other agency counterparts including the Department of Defense, NOAA, and NASA to discuss these issues, is taking the lead, and that other agencies are listening to NSF.

*Academic Partners*

NSF has been working with academic partners one-on-one as reports of sexual assault or harassment complaints come in and have assured NSF that reports of misconduct in the USAP are properly addressed.

*Contractors*

NSF continues to meet with Leidos representatives on a regular basis and the communication and relationship is positive. Marrongelle reported that NSF would be meeting with Leidos again in about a week and could offer an update after that.

*International Partners*

NSF has begun to engage on safety concerns with foreign and other entities who have offices on the ice but are not part of USAP.

*Key Activities this Season*

Marrongelle highlighted new morale initiatives within USAP. They include the availability of Starlink communication services for personal use at both McMurdo and Palmer Stations which NSF plans to expand to the South Pole station in the future. While alcohol is still available for sale at station stores, there is now an alcohol free space at McMurdo Station and drink and snack options in the recreational spaces will be improved. With respect to training, NSF is folding SAHPR-related training into safety activities and includes information for supervisors and

managers about how to respond to and receive disclosures. NSF will also increase the on-ice

presence of the SAHPR program office staff who will visit all three Antarctic sites to introduce the victims’ advocate in the Palmer and South Pole sites. *(Note: See current and future plans for work by the Office of Inspector General (OIG) in the minutes of the OIG session below.)*

*Beyond Antarctica*

NSF recently had productive conversations with the University of New Hampshire’s (UNH) Prevention Innovations Research Center which does work in sexual violence prevention and response strategies in academic settings and shared some of what they have implemented throughout their center. NSF SAHPR program office staff also traveled to Alaska and met with the University of Alaska Fairbanks faculty and students on campus and in the field to learn about experiences and recommendations on issues of enhancing safety and inclusivity of field research. All of this is feeding into what to do beyond contractual terms and conditions to improve the culture and environment of research sites.

Members asked about whether there are updated or new policies for people who work in the headquarters building in Alexandria or other facilities where NSF employees work based on what is being learned in Antarctica. Marrongelle responded that there is already a tapestry of policies and codes of conduct in place to guide behaviors. Another Member asked whether there is any preparatory training for researchers before they get to the Antarctic including self-defense training. Marrongelle offered that there is a suite of trainings, that NSF launched last year on preventative education for all researcher, contractors, and federal partners before they get on the ice, but not specifically self-defense.

NSF Office of Inspector General, Briefing on the OIG’s Engagement in Antarctica

Inspector General (IG) Allison Lerner gave a presentation on the Office of Inspector General’s (OIG) engagement in Antarctica. She provided some background for the investigations of criminal violations in the Antarctic explaining they are covered under special maritime and territorial jurisdiction including but not limited to aggravated sexual abuse, sexual abuse, abusive sexual content, and stalking. The OIG will coordinate its investigative activity in the Antarctic

with the Department of Justice and the FBI, with the Special Deputy U.S. Marshal, and with other law enforcement partners. The OIG is already responding remotely to concerns about incidents on the ice now and anticipates having an onsite presence at McMurdo Station beginning the summer of 2024. The OIG will always have to respond remotely during the winter.

*Actions to Date*

Lerner’s staff is communicating with other OIGs that have investigated sexual assaults to identify best practices and has expanded their research to and communication with agencies that

investigate sexual assaults in remote environments such as DoD, NOAA, and Peace Corps. NSF OIG began responding to allegations of sexual assault in the Antarctic in July 2023 and is currently onboarding a seasoned expert in investigating sexual assault in remote environments.

*Tiger Team*

NSF and the OIG established a Tiger Team which is comprised of OIG Head of Investigations and representatives of NSF’s Office of Polar Programs, Office of Equity and Civil Rights, and Division of Acquisition and Cooperative Support. OIG auditors are also deeply engaged in this area and already have two products in motion – one which deals with the issue of sexual assault.

Members reiterated the question of whether NSF will appoint a base commander to clarify the chain of command. Marrongelle responded that this was something the Tiger Team would explore. The Director added that NSF is also beginning to increase its management presence in the Antarctic which the IG added is critical to taking control of the culture and mitigating the root causes of sexual assault and harassment, among other things.

There being no further business, the meeting was adjourned at 11:09 a.m. EDT.



Andrea Rambow

Executive Secretary to the National Science Board