GRADUATE RESEARCH INTERNSHIP PROGRAM
FEDERAL PARTNERS MEETING

NATIONAL SCIENCE FOUNDATION
FEDERAL INTERNSHIPS FOR FUTURE SCIENTISTS IN STEM

A REPORT FROM THE JUNE 2016 WORKSHOP

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Other Photos provided by GRIP interns.
EXECUTIVE SUMMARY:

The Graduate Research Internship Program, a professional development opportunity for graduate students in the NSF Graduate Research Fellowship Program, Division of Graduate Education, Directorate for Education and Human Resources at the National Science Foundation (NSF) held a half day summit on Tuesday, June 14th, 2016 at the NSF in Arlington, VA. The eight partner federal agencies [Department of Homeland Security (DHS), Environmental Protection Agency (EPA), Federal Bureau of Investigation (FBI), National Oceanic and Atmospheric Administration (NOAA), Office of Naval Research (ONR), Smithsonian Institute (SI), United States Census Bureau, and United States Geological Survey (USGS)] were represented at this workshop as well as other potential federal agency stakeholders. The content of the workshop focused on our current state of knowledge on assessing graduate research internship experiences and provided a forum to develop a set of recommendations for program administrators to use in evaluating the effectiveness of these activities.

The purpose of holding this summit at this critical stage reflects a need from funding agencies to justify the investment in graduate research internship activities that send graduate students to partnered federal agencies for a professional scientific experience. In addition, there was a desire to better understand the impact graduate student internships have on individual careers and STEM workforce development. The summit structure highlighted both program and participant assessment and evaluation.
KEY FINDINGS:

Current Practices and Opportunities

• Cross-promotion
  Partner agencies should consider expanding their use of social media to promote internship opportunities at each other's agencies. This includes using short video testimonials from GRIP interns as well as utilizing the federal portal for graduate opportunities (stemgradstudents.science.gov) to cross-promote agency-specific GRIP opportunities and other opportunities for students.

• Expansion
  Partner agencies are interested in possibly expanding GRIP to include other NSF funded (non-GRFP fellow) graduate students and undergraduate students.

• Broad Thinking
  As the federal agencies consider more effective recruitment methods for these internships, they may want to focus on the broader appeal of the science to a general audience.

• STEM Education Ecosystem
  Agencies are interested in building connections between K-12, undergraduate, and graduate education and in bridging the broader goals of the agencies.

Recommendations

• Increase outreach efforts to graduate student advisors and university faculty. Emphasize the benefits of federal internships to support non-academic workforce pathways for talented scientists.

• Organize a workshop to discuss graduate internships and planned partnerships with stakeholders.

• Expand partnerships to industry.

• Provide internship opportunities to other U.S. students on NSF grants (non-GRFP), mirroring such programs as those between GEO-USGS and GEO-NOAA.

• Re-examine the funding model that supports the GRIP interns, especially with respect to the time and length of internship.

• Adopt Individual Development Plans (IDPs) for GRIP interns.

Issues and Challenges

• Deadline Dates and Background Checks
  Many agencies face challenges due to the long process of background checks. GRIP deadlines may cause issues for the recruitment and onboarding process.

• University and Department Buy-In
  Several GRIP interns commented that GRIP and similar experiences are viewed by some institutions as distractions to Ph.D. completion. Finding ways to promote the merits of the GRIP internship to the home institution would be valuable.

Main points from GRIP Interns

Attending the Summit

• Recruitment
  Interns felt that the program is well advertised and thought that the number of applications would increase as more graduate students became aware of these opportunities.

• Onboarding Paperwork Challenges
  Interns felt challenged by the paperwork needed during onboarding.

• Strong Advisor Relationships
  The interns felt supported by their GRIP advisors and remain in regular contact with their Ph.D. advisors at their home institutions.

• Unique Access to Resources and Skills
  The internships provided the fellows with unique opportunities to develop new skills (project management, working with specific resources) and to gain access to resources (physical materials or networks) that they felt would have been difficult to gain otherwise.
The National Academies describe the future of U.S. competitiveness as fostering a workforce with strong skills in STEM that is increasingly interconnected with the global economy. As detailed in “Rising above the Gathering Storm” (NRC, 2007), the vitality of the U.S. economy critically depends on the ability of well-trained people to produce scientific and technical innovations.

The National Science Foundation (NSF) holds the primary responsibility for overseeing the federal government’s efforts to foster the creation of a STEM-capable workforce. The Division of Graduate Education (DGE) in the NSF’s Directorate for Education and Human Resources (EHR) supports the Graduate Research Internship Program (GRIP) in the Graduate Research Fellowship Program (GRFP) that seeks to cultivate a STEM-capable workforce by providing opportunities for graduate internships with U.S. Federal Agencies. GRIP enables talented graduate students to collaborate with scientists outside of academia, to access specialized equipment, and to gain scientific field experiences outside of the classroom and laboratory. Given the importance and uniqueness of this type of program, an understanding of the possible impacts of this program was needed. Though the program is relatively new, a result of a federal partnership think tank with the Federal Coordination in STEM Education (FC-STEM) Graduate Education Interagency Working Group and the Division of Graduate Education at NSF, we believed it was timely to review some of the current challenges and opportunities through a summit. Thus, the GRIP Summit was held on June 14th, 2016.
GRIP SUMMIT THEMES:

OVERARCHING THEMES AND RELATED QUESTIONS EXPLORED DURING THE WORKSHOP

1. Exploring new, innovative, and dynamic experiences for U.S. graduate students at U.S. Federal Agencies

Questions
- How might what you are doing at your agency in terms of graduate education interface with the goals of the FC-STEM Graduate Education Interagency Working Group?
- Can we find commonalities, build collaborations/partnerships, and share ideas?
- How do these goals/activities relate to GRIP and to internships more broadly?

Expected Outcomes
- Increased awareness/understanding of graduate education activities at different agencies.
- Identification of opportunities for collaborations and partnerships.

2. Understanding and appreciating the U.S. Federal Agencies’ needs, challenges, and expectations from graduate internships

Questions
- How can we improve GRIP?
- How can we improve outreach to increase the number of participants? What strategies have been successful at your agency?

Expected Outcomes
- Share successful examples of outreach to GRFP fellows.
- Share successful examples of outreach between Federal Agencies.
Questions
• Can the outreach methods used by some agencies be employed by other agencies? What are the limitations at your agencies that might prevent this from happening?
• Are there differences in the process of acceptance among the different agencies? What can we learn from each other?
• What are the challenges/successes of your onboarding process from the agency standpoint? Are there lessons to be learned in project management?

Expected Outcomes
• Share best practices with each other (Website design/webinars for agency outreach and recruitment).
• Learn methods by which to overcome challenges to the onboarding process and project management process.

Questions
• Which disciplines are in high demand?
• Are agencies interested in recruiting non-GRFP fellow and/or undergraduate interns?
• Would non-GRFP fellow and/or undergraduate interns require a change in Letters of Agreement (LOAs) or Memorandums of Understanding (MOUs)? How much time investment and administrative buy-in would be required for this change?

Expected Outcomes
• Gain awareness of whether agencies are interested in sponsoring non-GRFP fellow or undergraduate interns.
• Understand agency burden if these individuals were considered for internships.
Erick C. Jones, Program Director in the Division of Graduate Education (DGE) at the National Science Foundation (NSF), welcomed the federal agencies, reviewed the agenda and reemphasized the objectives of the summit, stressing the importance of having an open concept meeting to ensure productive feedback. He introduced Barbara Natalizio, AAAS Science and Technology Policy Fellow at the National Science Foundation (NSF), as the co-facilitator.

Dean Evasius, Division Director of the Division of Graduate Education (DGE) at the National Science Foundation (NSF), provided a perspective from the FC-STEM Graduate Education Interagency Working Group. He provided an overview for the need of employing doctoral scientists in the U.S. in non-academic positions. (Figure 1)

Next, he described the coordination of efforts by the federal agencies to meet the need for STEM scientists, specifically the Committee on STEM Education (CoSTEM) Implementation Roadmap between agencies. (Figure 2)

Furthermore, he provided an overview of some of the graduate education programs across different agencies. Members of the CoSTEM are shown in Figure 3. Following his presentation, a discussion about GRIP as well as other partnering efforts across agencies took place. This discussion stressed the graduate student internships as an effective means to meet STEM workforce needs by partnering between federal agencies. (Figure 3)

Ellen D. Montgomery, Program Coordinator at the Air Force Research Laboratory, gave a presentation describing the fellowships and internships offered through the Air Force Office of Scientific Research (AFOSR) and how they fit into the broader context of graduate student professional development. These include the National Defense Science and Engineering Graduate (NDSEG) Program and the Science and Technology Fellowship Program (STFP).
History of the Graduate Research Internship Program (GRIP)

Gisele Muller-Parker, Program Director in DGE and Senior Program Officer for the Graduate Research Fellowship Program (GRFP), provided a history of GRIP. She described the origins of the program, as naturally developing from several other NSF programs that sponsored professional development opportunities for fellows. GRIP was preceded by the Graduate Research Opportunities Worldwide (GROW) Program, with partners in seventeen countries as of 2016. Building upon this model for international partnerships, the GRIP program was envisioned by an informal interagency working group on STEM graduate fellowships, as a sponsored graduate student opportunity to work at a partnered federal agency. (Figure 4)

GRIP began as an idea in an informal working group and was spurred on by the desire to examine the unique nature of fellowships at federal agencies. When the 5-year Strategic Plan on STEM Education was released in May 2013, the goal centered on graduate education focused on professional development for graduate students. This goal was a foundational charge for action to build a domestic effort to parallel the existing international efforts, such as the Graduate Research Opportunities Worldwide (GROW) and Nordic Research Opportunity (NRO). The partnerships and collaboration evolved organically through conversations with interested parties at various agencies.

Status of the Graduate Research Internship Program (GRIP)

Erick C. Jones, Program Director for GRIP, provided details about the current status of GRIP. Information was shared about the latest competition and outreach activities to current GRFP fellows. Topics covered included outreach via social media and webinars and targeted outreach conducted by the agencies. (Figure 5)
THEME 2:
UNDERSTANDING AND APPRECIATING THE U.S. FEDERAL AGENCIES’ NEEDS, CHALLENGES, AND EXPECTATIONS FROM GRADUATE INTERNSHIPS

SHARING BEST PRACTICES

The conversation transitioned to a discussion about current best practices used by the GRIP partner agencies with respect to graduate student outreach, graduate student selection and internship project management. Examples of best practices with respect to outreach to NSF GRFP Fellows were shared by the Smithsonian and USGS.

**BEST PRACTICES FOR STUDENT OUTREACH**

**Smithsonian Website Outreach**

Pamela Hudson Veenbaas, Program Manager at the Smithsonian Institution, discussed how the Smithsonian GRIP website [http://www.smithsonianofi.com/grip-si/] is leveraged for outreach to interested students. She described the benefits of the interactive website and how its engaging design and strong visual elements maximize relevant content to identify Smithsonian programs, scientists and GRIP projects. Specifically, the Smithsonian staff are encouraged to have their own webpages with information that allows interested potential applicants to see what kinds of research questions they could potentially pursue. Applicants are asked to contact research staff to develop internships that are tailored to their interests. The Smithsonian’s focus is the learning experience for the intern, and the website reflects the emphasis on experiential education and supporting the growth of the intern’s professional network. (Figure 6)

**USGS Lightning Talks**

Eleanour Snow, Manager of Youth and Education at the United States Geological Survey (USGS) discussed the USGS webinars for potential applicants and highlighted how the lightning talks by USGS scientists provided important content for future applicants. This strategy embodies how USGS communicates science to the public and allows for scientists to think about their science in a way that inspires students to do science. Of note, approximately fifty USGS researchers submitted opportunities for GRIP interns in the last cycle. This high interest inspired the concept of the lightning talks (one minute to describe one slide) which were used to highlight these opportunities. Interestingly, the lightning talks are also viewed as an opportunity for other scientists to get some insight into what happens at the USGS internally. (Figure 7)
Open Discussion for Best Practices

An open discussion about best practices for GRIP outreach, selection and project management was facilitated by Barbara Natalizio. Specifically, this conversation focused on two main questions.

• How can NSF help the agencies recruit fellows and/or improve outreach to fellows?
• How can we, collectively, improve the GRIP internship experience?

There was an extensive dialogue about the effective use of social media as the primary means to promote GRIP. Another important topic discussed focused on the opportunities and challenges surrounding cross-promotion of agency-specific GRIP opportunities. These included the following: the following: leveraging the science.gov portals developed by the graduate education and undergraduate education interagency working groups [stemgradstudents.science.gov and stemundergrads.science.gov]; recruiting higher numbers of students with specific skill sets (i.e. statisticians and mathematicians); and recognizing that the U.S. citizenship requirements are an important challenge.

“How can we, collectively, improve graduate internships?”
DISCUSSING BEST PRACTICES

Student Outreach

Current NSF-hosted outreach efforts, such as webinars and conference presentations, were described in detail by Erick C. Jones, NSF Program Director for GRIP. A facilitated discussion followed where ideas about opportunities for federal outreach and marketing were shared, during which the innovative approaches from USGS and Smithsonian were highlighted as examples of best practices.

Selection Process for GRIP Interns

Erick C. Jones (NSF) presented an overview on how the NSF internal compliance and merit review process occurs. Once the students’ applications have completed this process they are then sent to the partnered federal agencies for review. He categorized the two general types of federal agency review processes as “open” and “closed.” In the open process, the graduate student can contact the agency scientist to discuss an existing project or create a new opportunity for a GRIP internship. In the closed process, the student reviews the opportunities that have been previously approved by the agency and then requests funds for a GRIP internship. It is strongly encouraged that the student contact the research scientist affiliated with the opportunity to learn more details and logistics about the internship. This was followed by a facilitated discussion about best practices for intern selection.

Pamela Hudson Veenbaas (Smithsonian Institution) described the open process at Smithsonian where there is no vetting process in place for researchers to recruit interns. Smithsonian has an existing culture and policies around how internships are conducted. Notably, all internships have a mentorship forum during which the learning objectives for the intern are reviewed. This comes naturally because of the Smithsonian’s emphasis that the intern be the primary beneficiary of the experience. As a result of these practices and activities, the values have become embedded at the Smithsonian Institution over time.

Eleanour Snow (USGS) discussed the merits of the closed system where proposals outlining the scientific problem, methods, and engagement strategy for the intern are solicited from the scientists. The participants also spoke about the average duration of the internships which ranged from 2-12 months, typically 6 months at a time with a 6 month extension.

Partner Agency Project Management

There was a continued open discussion about how partner agencies managed the students during the internships. Topics such as onboarding at a federal agency, working with agency scientists, and communicating with graduate student advisors were covered. Existing mechanisms to ensure adequate professional development for interns, similar to individual development plans, were reviewed.
PERSPECTIVES FROM GRIP Awardees

GRIP Awardees Roundtable

Erick C. Jones and Barbara Natalizio moderated a roundtable discussion for the GRIP interns who shared their perspectives on the program. Experiences and topics discussed focused the following: opinions on outreach, marketing, and recruiting efforts; the onboarding process; and project management, including mentorship and individual development plans.

GRIP Awardees

Robert Dunn, San Diego State University, GRIP Intern at Smithsonian Institution
Andrew Moore, George Washington University, GRIP Intern at Smithsonian Institution
Elizabeth Murphy, University of Virginia, GRIP Intern at Office of Naval Research
Stephanie Rosales, Oregon State University, GRIP Intern at Smithsonian Institution
Alanna Warner, Syracuse University, GRIP Intern at Smithsonian Institution

Outreach, Marketing and Recruiting Efforts

The GRIP interns discussed several ways in which they became interested in the program including receiving direct emails and participating in informational webinars. Overall, there was excitement about expansion of the program and adding more interns. Recommendations, such as targeting university faculty and graduate student advisors directly, were made which led to an in-depth discussion about the reality of some tenure-track faculty viewing GRIP as a “distraction” and that some individuals are actively discouraged by their advisors from applying to GRIP.

Onboarding Process

Overall, the GRIP interns were positive about their onboarding experiences. However, some awardees described being challenged by federal agency paperwork. There was also a suggestion to streamline the project descriptions so that they would be more easily searchable with keywords.

Project Management

All the GRIP interns described supportive environments with active mentoring. Some awardees specifically commented on the strong focus on education and building collaborative relationships. Other interns equated their experiences to a small dissertation improvement grant, providing them with invaluable opportunities to manage research projects and budgets, to build an unparalleled professional network, and to access resources unavailable at their home institutions.

Communicating the Value of the GRIP Experience

Each GRIP intern spoke of communicating with his/her graduate faculty advisor on a regular basis. Indeed, the GRIP interns commented on the exceptional relationships that they have with their advisors, which they felt was an integral part of their success as GRIP interns. The GRIP interns all shared a strong awareness of gaining a tremendously valuable set of transferrable skills through GRIP. Several have been approached to discuss future careers at their GRIP partner agencies.
THEME 4: IDENTIFYING INNOVATIVE AND EFFECTIVE WAYS FOR INTERNSHIPS TO ENHANCE U.S. COMPETITIVENESS THROUGH EFFECTIVE FEDERAL INVESTMENT

The T-Shaped Scientist/Engineer

<table>
<thead>
<tr>
<th>Teamwork</th>
<th>Communication</th>
<th>Teaching</th>
<th>Leadership</th>
<th>Entrepreneurship</th>
</tr>
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<tr>
<td><strong>Interdisciplinary</strong></td>
<td><strong>Specialty</strong></td>
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The T-shape model supports NSF’s goal of producing scientists and engineers with disciplinary expertise and broad transferrable skills.

Figure 8: T-shape model for Scientists (Kannankutty, 2016)

OPPORTUNITIES FOR EXPANSION

Nimmi Kannankutty, Deputy Division Director in the Division of Graduate Education at the National Science Foundation, presented ideas about expanding GRIP to all NSF-supported graduate students. She described the T-shape model for scientists and engineers that supports NSF’s goal of producing scientists and engineers with broad transferable skills for the workforce. She addressed the GRIP program as one way in which we can support multiple parts of this model, emphasizing how this model can help students build their disciplinary expertise (the vertical bar of the T). Students may have the opportunity to build additional competencies such as teamwork or communication skills (the horizontal bar of the T). Internships may also provide students with the opportunity to understand the skills needed in the government sector, the roles they may play, and potential career paths available to them in the government. Furthermore, she provided additional information and a rationale for the NSF’s Graduate Student Preparedness for Entering the Workforce Opportunities for Supplemental Support Initiative. (https://www.nsf.gov/pubs/2016/nsf16067/nsf16067.jsp)

Susan Singer, Division Director in the Division of Undergraduate Education at the National Science Foundation, presented ideas for expanding the program to include undergraduate students. (Figure 9)

Discussion on Opportunities for Expanding GRIP

Agency participants were highly enthusiastic about the possibility of expanding GRIP and giving the opportunity to more students from diverse backgrounds. There are several criteria that need additional consideration if the program were to be opened to a wider audience. Some agencies commented on how the lengthy clearance process for employment can be a barrier to recruitment and others mentioned that potential partnerships and collaborations with the K-12 community may provide an even longer-term investment for the future workforce.
WRAP-UP AND FINAL FEEDBACK

The attendees from federal agencies who participated in the workshop felt supported by others in their community who were also navigating the GRIP process. Topics for consideration in the future included: agency onboarding and relocation for GRIP awardees, targeting interns with specific skill sets, optimizing timelines to accommodate clearance processes, addressing academic institutions’ concerns that GRIP (and similar opportunities) are a “distraction,” developing promotional materials with GRIP interns that emphasize impact, extending the conversation from STEM graduate education to students who are “STEM-thinkers,” transitioning GRIP from a pilot to a permanent program, and addressing issues regarding intellectual property. Dean Evasius closed the program, thanking all the participants.

RECOMMENDATIONS:

1. Increase outreach efforts to graduate student advisors and university faculty. Emphasize the benefits of federal internships to support non-academic workforce pathways for talented scientists.

2. Organize a workshop to discuss graduate internships and planned partnerships with stakeholders.

3. Expand partnerships to industry.

4. Provide internship opportunities to other U.S. students on NSF grants (non-GRFP), mirroring such programs as those between GEO-USGS and GEO-NOAA.

5. Re-examine the funding model that supports the GRIP interns, especially with respect to the time and length of the internship.

6. Adopt Individual Development Plans (IDPs) for GRIP interns.
Graduate Research Internship Program (GRIP) Federal Partners Meeting

AGENDA

Meeting Goal:
The goal of the meeting is for NSF and the Partner Federal Agencies to review the current state of and provide recommendations for the Graduate Research Internship Program (GRIP). A second goal is to introduce GRIP to potential new federal agency partners and to other interested parties.

Meeting Objectives:
• Review and evaluate current GRIP processes, NSF and GRIP Partner Agencies’ roles, and GRIP outreach activities
• Identify best practices that can be shared by GRIP Partner Agencies
• Identify opportunities to enhance future collaborations and increase the number of GRIP applicants

Schedule:

8:00 AM
Welcome and Partner Agency Introductions

Erick C. Jones, Program Director, Division of Graduate Education, NSF
Dean Evasius, Division Director, Division of Graduate Education, NSF

8:15 AM
FC-STEM Interagency Working Group Perspective

I. Overview of Graduate Education Programs across different agencies
Dean Evasius, Division Director, Division of Graduate Education, NSF
Ellen D. Montgomery, Program Coordinator at the Air Force Research Laboratory

II. Interactive discussion
   a. Future of Graduate Education/Opportunities for future collaborations
   b. Informing and providing context for internships in the Graduate Education environment
8:45 AM
NSF GRIP Program Overview with Partner Federal Agencies

I. History of GRIP
Gisele Muller-Parker, Program Director, DGE and Senior Program Officer for Graduate Research Fellowship Program (GRFP) and GRIP
II. GRIP Program Current Status
Erick C. Jones, Program Director, Division of Graduate Education, NSF
   a. Latest competition information
   b. Overview of current NSF GRIP outreach

9:30 AM
NSF GRIP Current Practices Discussion
Outreach, NSF and Partner Agency Review Process
I. NSF Fellows Outreach
Pamela Hudson Veenbaas, Program Manager, Smithsonian Institution
Eleanour Snow, Manager of Youth and Education, United States Geological Survey (USGS)
   a. Website Design – Smithsonian
   b. Agency Webinars – USGS
II. Selection of GRIP Interns
   a. NSF (Compliance, Merit)
   b. NSF Partner Agencies Internship Opportunities Descriptions (Process of Acceptance)
III. Onboarding and Partner Agency Project Management (Current successes/challenges)

10:30 AM
GRIP Awardees Roundtable
A perspective from GRIP Awardees
Robert Dunn, GRIP Intern, Smithsonian Institution
Andrew Moore, GRIP Intern, Smithsonian Institution
Elizabeth Murphy, GRIP Intern, Office of Naval Research
Stephanie Rosales, GRIP Intern, Smithsonian Institution
Alanna Warner, GRIP Intern, Smithsonian Institution

11:15 AM
Opportunities for Expanding GRIP
I. NSF Expansion for students from other Directorate/Divisions
Nirmala Kannankutty, Deputy Division Director in the Division of Graduate Education at NSF
   a. Improving Graduate Student Preparedness for Entering the Workforce,
      Opportunities for Supplemental Support  DCL – NSF 16-067
II. S-STEM opportunities for Undergraduates
Susan Singer, Division Director in the Division of Undergraduate Education at NSF

12:15 PM
Wrap Up: Open Discussion and Next Steps
Erick C. Jones, Program Director, Division of Graduate Education, NSF
Dean Evasius, Division Director, Division of Graduate Education, NSF
APPENDIX B: ATTENDEE LIST

NSF Graduate Research Internship Program (GRIP) Federal Partners Meeting
Tuesday, June 14, 2016

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FC-STEM Working Group for Graduate Education FY 2016

SPECIAL THANKS:
M. Brandon Jones, Ryan Bixenmann, Nadeene Riddick
GRIP INTERNS:

1. **Stephanie Rosales**, Oregon State University, Smithsonian Institution Intern, standing with elephant in Nepal.

2. **Alanna Warner**, Syracuse University, Smithsonian Institution Intern, analyzing skeletons.

3. **Andrew Moore**, George Washington University, Smithsonian Institution Intern, curating small bone specimens.

4. **Elizabeth Murphy**, University of Virginia, Office of Naval Research Intern, using state-of-the-art research equipment.

5. **Robert Dunn**, San Diego State University, Smithsonian Institution Intern, exploring deep sea life.

**NSF GRIP Summit Photo Credits:**

1. **Stephanie Rosales**, Oregon State University, Smithsonian Institution Intern
2. **Alanna Warner**, Syracuse University, Smithsonian Institution Intern
3. **Andrew Moore**, George Washington University, Smithsonian Institution Intern
4. **Elizabeth Murphy**, University of Virginia, Office of Naval Research Intern
5. **Robert Dunn**, San Diego State University, Smithsonian Institution Intern

Source: NSF GRIP Summit Report, Photos for the Smithsonian Institution provided by Kate D. Sherwood. Other Photos provided by GRIP interns.