

RCN: Broader Impacts and Outreach Network for Institutional Collaboration (BIONIC) Project Summary

Overview. The National Alliance for Broader Impacts (NABI), formerly the Broader Impacts and Outreach Network for Institutional Collaboration, is a nationwide network of individuals and organizations working together to build institutional capacity, advance BI, and demonstrate the societal benefits of research that was established in 2014. This supplement will support a convening to discuss the need for an enhanced national infrastructure for BI support. The ground work laid by the RCN as well as the convening results will be the foundation of the proposed resource center. This convening is directly related to the current scope of work for the RCN in that it builds on the current work of the network and will allow us to scale up services and expand the national BI support infrastructure.

Intellectual Merit. We intend to assemble 50-75 broader impacts stakeholders in Arlington, Virginia to discuss the need for and structure of a national broader impacts resource center. Stakeholders include, but are not limited to, broader impacts (BI) professionals, non-profit and industry partners, IHE administrators—particularly chief research officers, cooperative extension professionals, and NSF personnel. We believe these are the right participants because we posit that the resource center will 1) help build capacity at the individual and institutional levels, 2) provide BI support across the NSF, and 3) provide professional development for BI professionals. We anticipate hosting the two-day meeting in mid-to-late May, and that it will include many small-group break-out sessions with audio recordings and scribes to make sure that all viewpoints are heard. Time will be built into the convening for group reports and sharing of ideas within and across stakeholder groups. We chose Arlington for the convening because of its proximity to NSF, as well as other federal agencies. The convening will allow stakeholders to discuss several critical topic areas, as well as those that arise organically throughout the process, such as:

- What is the current state of broader impacts across all stakeholders?
- What are the current needs/challenges of stakeholders in regards to broader impacts?
- What services would a broader impacts resources center provide?
- What are the specific needs of stakeholders around broadening participation through broader impacts and how could a resource center meet those needs?

Broader Impacts. Broadening participation of underrepresented groups in STEM is a federal priority and clearly a NSF priority as evidenced by the large investment in the NSF INCLUDES initiative. *A critical part of the convening discussion will focus on how we can broaden participation through broader impacts activities.* Research shows that investigators understand NSF's intellectual merit review criterion but have a much harder time understanding how to effectively address NSF's BI criterion in their proposals (NSB, 2012). This is also true about broadening participation (BP). Broadening participation is a key, but not equivalent, component of the broader impacts criterion that is underutilized by researchers (Lawrence and Patino, 2015). It is important to make clear that, while broadening participation is an important part of broader impacts, broader impacts does not always equal broadening participation. There are many other ways to satisfy the BI criterion.

RCN: Broader Impacts and Outreach Network for Institutional Collaboration (BIONIC)
Request for Supplemental Funds

The National Alliance for Broader Impacts

The National Alliance for Broader Impacts (NABI), formerly the Broader Impacts and Outreach Network for Institutional Collaboration, is a nationwide network of individuals and organizations working together to build institutional capacity, advance BI, and demonstrate the societal benefits of research through the achievement of the following four objectives: 1) **Identify and curate** promising models, practices, and evaluation methods for the BI community; 2) **Expand engagement** in and support the development of high-quality BI activities by educating current and future faculty and researchers on effective BI practices; 3) **Develop** the human resources necessary for sustained growth and increased diversity of the BI community; and 4) **Promote** cross-institutional collaboration on and dissemination of BI programs, practices, models, materials, and resources.

NABI has its roots in the 2013 Broader Impacts Infrastructure Summit that also brought together interested BI stakeholders to share resources, engage in professional development, and begin a dialogue on how to form a national BI community of practice. Eighty participants attended the first Summit, and a small group of those participants worked together to write the RCN proposal that, ultimately, funded NABI; and then they became the original steering committee for the new community of practice. In 2014, approximately 125 participants met in Arlington, Virginia for the second Broader Impacts Infrastructure Summit, where it was announced to the community that NSF had funded the proposal to create a national BI network. By the summer of 2014, there were 155 members on the national network list serve. By the end of the first year, there were 181 members. The second year, the number of members had grown to 379, and, currently, there are 535 members of the national BI community representing 210 institutions.

NABI is currently funded as a research coordination network (RCN) through the NSF, and RCNs, by their very nature, are designed to create and support networks. In addition to just building a network of community members, NABI also attempts to stretch beyond just network building into a BI support role. Currently, NABI provides support for BI professionals through professional development opportunities at the annual summit, BI resources, and an active listserv. NABI builds capacity at the individual and institutional levels through PI trainings and institutional consultations. Also, NABI attempts to serve as a clearinghouse for all things BI. These network activities are accomplished through the dedication of NABI members who, almost all, volunteer their time to build capacity throughout the BI community. This current model is not sustainable as it provides enough funds to maintain a virtual network but not enough funds to extend the network out of cyberspace permanently, and soon NABI will need to cut back on services offered, if a sustainable solution is not found. In addition, the current NSF award will end in 2019 and will likely not be renewed.

What do we want to do?

The purpose of this supplemental request is to convene 50-75 broader impacts stakeholders in Arlington, Virginia to discuss the need for and structure of a national broader impacts resource center. Stakeholders include, but are not limited to: broader impacts (BI) professionals, non-profit and industry partners, IHE administrators—particularly chief research officers, cooperative

extension professionals, and NSF personnel. We believe these are the right participants because we posit that the resource center will 1) help build capacity at the individual and institutional levels, 2) provide BI support across the NSF, and 3) provide professional development for BI professionals. We anticipate hosting the convening of a two-day meeting in mid-to-late May that will include many small-group break-out sessions with audio recordings and scribes to make sure that all viewpoints are heard. Time will be built into the convening for group reports and sharing of ideas within and across stakeholder groups. We chose Arlington for the convening because of its proximity to NSF, as well as other federal agencies.

This convening will discuss the lessons learned three years into the network including promising practices and those that did not work out as originally intended. The ground work laid by the RCN will serve as pilot data for the resource center. The convening will allow stakeholders to discuss several critical topic areas, as well as those that arise organically throughout the process:

- What is the current state of broader impacts across all stakeholders?
- What are the current needs/challenges of stakeholders in regards to broader impacts?
- What services would a broader impacts resources center provide?
- What are the specific needs of stakeholders around broadening participation through broader impacts and how could a resource center meet those needs?

The resulting convening report will be shared with all stakeholders and used to plan activities of the National Alliance for Broader Impacts and, ultimately, to plan for a national broader impacts resource center.

Understanding Broader Impacts and Broadening Participation

Broadening participation of underrepresented groups in STEM is a federal priority and clearly a NSF priority as evidenced by the large investment in the NSF INCLUDES initiative. *A critical part of the convening discussion will focus on how we can broaden participation through broader impacts activities.* Research shows that investigators understand NSF’s intellectual merit review criterion but have a much harder time understanding how to effectively address NSF’s BI criterion in their proposals (NSB, 2012). This is also true about broadening participation (BP). Broadening participation is a key, but not equivalent, component of the broader impacts criterion that is underutilized by researchers (Lawrence and Patino, 2015). It is important to make clear that, while broadening participation is an important part of broader impacts, broader impacts does not always equal broadening participation. There are many other ways to satisfy the BI criterion.

Potential Convening Participants

All members of the NABI steering committee and advisory board will be invited to attend, along with interested stakeholders from the above-mentioned groups: broader impacts (BI) professionals, non-profits, industry partners, IHE administrators—

particularly chief research officers, cooperative extension professionals, and NSF personnel. We plan to host the convening in Arlington, Virginia close to NSF to make it easy for NSF personnel, as well as other local stakeholders, to attend. We will invite participants through targeted email correspondence.

Conclusion

Our current national BI infrastructure is at a crossroads. We have reached capacity in what the current network can offer, and it is time to consider our next steps. NABI has demonstrated a need for enhanced BI support nationwide and gives a framework for moving forward; however, in order to fully meet the needs of the all stakeholders, we need to engage them in the planning process. This convening will allow us to begin that discussion.

Work Cited

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