

NSF 17-111

Dear Colleague Letter: Announcement of an Effort to Expand the NSF INCLUDES National Network

July 14, 2017

Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES) is a comprehensive effort to enhance U.S. leadership in science and engineering discovery and innovation by proactively seeking and effectively developing science, technology, engineering and mathematics (STEM) talent from all sectors and groups in our society. As one element of its multi-faceted approach to NSF INCLUDES, NSF is currently focusing on and identifying novel ways in which new and currently-funded NSF projects from across all NSF directorates can engage with the NSF INCLUDES National Network. We have called this process building "on-ramps" to the NSF INCLUDES National Network. To do this, we encourage the submission of funding requests for i) Early-concept Grants for Exploratory Research (EAGER), ii) Conferences and Workshops, and iii) Supplements to existing NSF-funded grants.

NSF INCLUDES is one of the 10 "Big Ideas" for Future NSF Investment. These "Big Ideas" are meant to capitalize on what NSF does best: catalyze interest and investment in fundamental research, which is the basis for discovery, invention and innovation, as well as education and research infrastructure.

A key objective of the NSF INCLUDES initiative is to engage current NSF awardees working on broadening participation as well as the broader STEM community in the creation and development of the NSF INCLUDES National Network. To help provide connections to this community, NSF is supporting efforts that: create, analyze and aggregate knowledge and assessments; implement, expand and sustain effective practices; contribute to fundamental research in the science of broadening participation; and foster connections to the entire NSF portfolio that can lead to a change in the culture of STEM by placing inclusion and equity at the core. By building the infrastructure for partnerships, communication and collaboration, NSF aims to advance and scale up what works in broadening participation programs to reach underserved populations nationwide.^[1]

NSF is interested in applying the best approaches, activities, and strategies to increasing diversity in STEM. These include, but are not limited to: increasing the percentage of women participating in fields where they are currently underrepresented (e.g., Engineering, Computer Science, Physics); developing and expanding proven strategies that result in student persistence among underrepresented minority groups across all degree areas; increasing the representation of NSF-funded principal investigators in the NSF directorates' research portfolios who come from minority-serving institutions (e.g., Historically Black Colleges and Universities, Predominantly Black Institutions, Hispanic Serving Institutions [2], Tribal

Colleges and Universities) and community colleges; increasing the number of faculty from underrepresented groups in stable, long-term faculty positions that support research and education; and furthering the evidence-based research (e.g., the science of broadening participation) that illustrates the efficacy of the various approaches, especially collective impact-style approaches.

NSF welcomes three types of proposals:

EAGER Proposals should produce findings and results that will generate new insights for the NSF INCLUDES National Network, suggest potential strategies for engaging NSF's existing broadening participation activities in the Network and/or highlight lessons learned that could inform the NSF INCLUDES Launch Pilots and Alliances as they develop. EAGERs are encouraged that:

- a. Conduct research on the implementation and impact of strategies to improve specific problems of diversity and inclusion in STEM, especially strategies focused on expanding networks and scaling effective innovations. Studies should be grounded in the relevant social science, behavioral science, economic, or education research theories or frameworks, apply appropriate methods, and further the evidence-based research (e.g., the science of broadening participation) that illustrates the efficacy of the various approaches, especially collective impact-style approaches; or
- b. Examine strategies being used in projects in the existing NSF broadening participation portfolio. For example, research could examine the implementation, impact, network expansion, and scaling of change strategies used in NSF-funded projects within the NSF INCLUDES portfolio of Design and Development Launch Pilots, or projects funded through such programs as ADVANCE, the Broadening Participation in Computing Alliances, the Louis Stokes Alliances for Minority Participation (LSAMP), Established Program to Stimulate Competitive Research (EPSCoR), and Math and Science Partnership, or the outreach activities of NSF research centers and large facilities aimed at broadening participation. Research could explore how strategies such as collective impact or networked improvement communities are being used to address the challenge of broadening participation in STEM.

Conference proposals to:

- a. Link to the NSF INCLUDES National Network the knowledge and results from the NSF broadening participation portfolio of programs and projects, and from NSF center-scale activities (e.g., Science and Technology Centers and Engineering Research Centers, among others), or other major Foundation investments, and encourage new opportunities for collaboration across the network;
- b. Generate novel ideas for how new and existing collaborations and organizations can help shape opportunities for connecting to the NSF INCLUDES National Network;
- c. Communicate research findings from the science of broadening participation research community to the NSF INCLUDES National Network, especially as these pertain to new efforts to translate basic research into practice: or
- d. Provide a platform for new collaborations within the NSF INCLUDES National Network to discuss the development of shared goals, common metrics, and mutually reinforcing activities.

Supplemental funding requests to:

- a. Create opportunities among currently-funded NSF projects, including NSF broadening participation projects, with the goal to build a collaborative infrastructure for broadening participation in NSFfunded research activities:
- b. Provide seed money for experiments in using effective strategies to further broadening

- participation goals through collaborative change;
- c. Develop linkages between current activities and NSF INCLUDES-funded Design and Development Launch Pilots, including adoption of common goals, shared measures, and mutually reinforcing activities; or
- d. Generate new ideas for bringing a community of NSF-funded projects into the NSF INCLUDES National Network.

Submission Deadlines and Special Instructions

There are two submission deadlines for funding requests in response to this Dear Colleague Letter. Before submitting EAGER or Conference proposals, eligible Principal Investigator(s) should email nsfincludes@nsf.gov with a one-page description of their project to determine suitability for this NSF INCLUDES Dear Colleague Letter and the appropriate deadline for the proposals. Any of the types of requests encouraged in this Dear Colleague Letter can be submitted to either deadline.

- November 13, 2017
- April 16, 2018

Funding requests for EAGERs and Conferences should be prepared and submitted in accordance with the guidance in the NSF Proposal & Award Policies & Procedures Guide (PAPPG): https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg. EAGERs may request up to \$300,000 for two years. Conference proposals may be up to \$250,000 for up to two years. EAGERs and Conference proposals should be submitted to NSF INCLUDES in the Human Resource Development (HRD) division.

Supplements from PIs of existing grants, other than current NSF INCLUDES Design and Development Launch Pilots, in any directorate are welcome. Eligible supplements must have the potential to enhance both the Intellectual Merit and Broader Impacts of the existing project. Projects must have an end date beyond September 30, 2018. Eligible Principal Investigator(s) **contact their cognizant Program Director(s) and an NSF INCLUDES team member** to discuss their request for supplemental support prior to submitting to NSF. The amount requested for supplemental support must be less than 20% of the original award amount, with direct costs not to exceed \$200,000. Funding is dependent on the availability of funds. Supplemental funding requests should be prepared and submitted in accordance with the guidance in the NSF PAPPG, Part II: Award and Administration Guide, Chapter I.E.4: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg.

To ensure proper processing, please begin the proposal title with: **DCL: NSF INCLUDES**.

Review Information

Requests for funding submitted in response to this Dear Colleague Letter will be reviewed externally by expert reviewers and/or internally by NSF Program Directors. All funding requests are subject to the availability of funds, and quality of the proposals received as determined by review.

Sincerely,

Jim Lewis, Assistant Director (Acting)
Directorate for Education and Human Resources

Participating NSF Directorates and Offices

Directorate for Biological Sciences

Directorate for Computer and Information Science and Engineering

Directorate for Education and Human Resources

Directorate for Engineering

Directorate for Geosciences

Directorate for Mathematical and Physical Sciences

Directorate for Social, Behavioral, and Economic Sciences

Office of Integrative Activities

- The currently-funded set of NSF INCLUDES Design and Development Launch Pilots (see list here)
 provide an important base of activity for effective expansion of the NSF INCLUDES National
 Network.
- 2. For the purposes of this Dear Colleague Letter, a Hispanic Serving Institution will be defined as any institution that has 25 percent or more undergraduate full-time equivalent Hispanic enrollment.