NATIONAL SCIENCE FOUNDATION
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NSF 16-081

Dear Colleague Letter: Call for Submission of Conference Proposals to Inform the Design and Success of the Alliances and National Network for NSF INCLUDES

May 10, 2016

Dear Colleagues:

INTRODUCTION

Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES) is a comprehensive national initiative designed to enhance U.S. leadership in science, technology, engineering and mathematics (STEM) discoveries and innovations. The long-term goal of NSF INCLUDES is to support, over the next ten years, innovative models, networks, partnerships, and research that enable the U.S. science and engineering workforce to thrive by ensuring that women, members of racial and ethnic groups that have been historically underrepresented in STEM (African Americans/Blacks, Hispanic Americans, American Indians, Alaska Natives, Native Hawaiians, Native Pacific Islanders), persons of low socio-economic status, and people with disabilities are represented in percentages comparable to their representation in the U.S. population.

The grand challenge of broadening participation in STEM is to transform the overall ecosystem at all levels in order to fully engage the nation's talent for the ultimate improvement of the nation's STEM capacity. Viewing this challenge as a social innovation problem, the objective is to develop networks that involve organizations and consortia from different sectors that are committed to a common agenda to solve a specific STEM inclusion problem at scale. The multi-year goals of NSF INCLUDES are to:

- Synthesize and build the research base for broadening participation and foster the spread and adaptation of proven effective practices.
- Support the identification, development and attainment of a set of shared goals and objectives developed by stakeholders, including those from specific STEM disciplines, which are essential for achieving inclusion in the nation's scientific workforce and in high quality STEM learning opportunities.
- Support local/regional and discipline-specific or crosscutting multi-stakeholder partnerships and networks (NSF INCLUDES Alliances) and support an NSF INCLUDES National Network.

As part of NSF INCLUDES, collaborative alliances spanning education levels and public and private sectors, and including new partners, will be developed, expanded, organized and built by leveraging state-of-the-art knowledge on scaling of social innovations (Bryk, Gomez, & Grunow, 2011; Waitzer & Paul, 2011). For example, the collective impact approaches that incorporate key success determinants of common agenda, shared measurements, mutually reinforcing activities, continuous communications, and backbone support organizations have the potential to yield large-scale progress towards NSF INCLUDES' goals (Kania & Kramer, 2011). The latest knowledge from the science of broadening participation provides a strong foundation and novel systems approaches and designs for achieving

scale are critical for advancing diversity and inclusion in STEM.

Earlier in FY 2016, Program Solicitation NSF 16-544 delineated a process of mandatory preliminary proposals, invited full proposals, and award decisions that will lead to NSF INCLUDES Design and Development Launch Pilots to be funded in 2016. The Launch Pilots will serve as the foundation for NSF-funded INCLUDES Alliances in FY 2017 and beyond. Over the coming years, NSF anticipates that a number of NSF INCLUDES Alliances will be established and connected together to create the NSF INCLUDES National Network. NSF expects that many of its existing broadening participation programs and funded projects will collaborate with the NSF INCLUDES National Network for increased impact and success.[1] The NSF INCLUDES National Network will be created so that organizations and programs, not necessarily funded by NSF, will also be able to collaborate with Network members for mutual benefit and systemic impact through well-designed "on-ramps."

At the level of an **individual** Alliance, a "backbone organization" will be required to maximize the probability of success. NSF currently refers to this component of the Alliance as a "mini-backbone" or "vertebrae." Some of its goals might include:

- guide vision and strategy for the Alliance;
- support aligned activities of the partners;
- establish shared measurement practices among the partners;
- build toward the goal and activities among the larger community where the Alliance members operate;
- support implementation research;
- advance policy, operating practices, and relationships among the partners and identify need for mid-course adjustment; and
- mobilize support with partners for the common good.

At the level of the **NSF INCLUDES National Network**, the activities of all of the Alliances will be coordinated and leveraged for national level progress on broadening participation through the totality of mini-backbones interoperating with a **national backbone organization.** The backbone of the National Network will need to be designed and structured so as to serve many functions, such as:

- share data, knowledge and best practices among Alliances;
- offer approaches for new organizations to join the NSF INCLUDES National Network;
- provide technical assistance to NSF INCLUDES Alliances;
- monitor progress in broadening participation at the aggregated national level; and
- support the effective use of collective impact-style activities as well as implementation research.

CALL FOR SUBMISSION OF CONFERENCE PROPOSALS TO INFORM THE DESIGN AND SUCCESS OF THE ALLIANCES AND NATIONAL NETWORK

With this DCL, NSF is calling for submission of conference proposals to inform the design of the communications and support structures for how individual NSF INCLUDES Alliances will work together with the NSF INCLUDES National Network. NSF seeks community input and participation in identifying and specifying the most critical design features of both Alliances and the National Network so that they can effectively work together to achieve mutual goals. As such, NSF invites those who have ideas and experiences in building successful large-scale Alliances and Networks (or Networks of Networks) to propose conferences, both face-to-face and virtual, that will bring together various stakeholders who can provide insight on models and designs. In particular, it is expected that representatives of the (soon to be funded) NSF INCLUDES Design and Development Launch Pilots will participate in the conferences, thereby influencing future Alliance proposals and formations. These conference activities will help inform the design and implementation of the NSF INCLUDES National Network as well as how it can function across communities.

In this call for conference proposals, NSF seeks new ideas for leveraging research, effective practices, and emerging technologies to manage the multi-site complexities of Design and Development Launch Pilots, the Alliances, and the NSF INCLUDES National Network. Those ideas would be about how to support vision development, alignment, shared measurement practices, implementation research, evaluation, public support and engagement, policy change and implementation, leveraging of funding, and communication. Each conference proposal should focus on exemplary and/or innovative ideas supported by research for designing an infrastructure that helps to *mobilize, coordinate, facilitate and achieve a continuous state of planning, execution and evaluation* among the NSF INCLUDES participants. Ideas should build on proven mechanisms of success with technical assistance support structures, resource networks and centers, and other related efforts to create communities of practice.

NSF expects to fund 10-12 conferences, up to $250,000 each, to inform the design of the NSF INCLUDES backbone organization(s) at both the level of Alliances and the National Network. The conferences should be inclusive in terms of presenters and participants, engaging a range of stakeholders and organizations (e.g., representatives from K-12, 2-year and 4-year postsecondary institutions, philanthropic and community-based organizations, and the business sector). The conferences are expected to be equivalent to two to three days of meetings to focus on possible roles and responsibilities of the **mini-backbones** and **national backbone organization** in each of the key phases of NSF INCLUDES. Conference activities may include contrasting the collective impact model to other models associated with scaling and sustaining innovations designed to address grand challenges in broadening participation in STEM. NSF is open to creative approaches to convening these events, such as virtual meetings, crowd sourcing, social networking, and Wikis.

It is expected that competitive proposals will address how the alliances and the network can incorporate novel, innovative features that leverage various kinds of technology resources to advance the NSF INCLUDES initiative. Proposals are expected to address the goals and objectives for the conference activity and the expertise of the investigator(s) and members of the organizing committee especially as their qualifications relate to issues of organizational change, broadening participation, collective impact or similar frameworks. Proposers are also asked to address essential components of the backbone infrastructure for addressing both the short-term and longer-term aspects of NSF INCLUDES at the level of Alliances and/or the National Network (please specify). The conference proposal should also discuss suggested presenters/invitees; proposed topics/sessions/draft agenda, including approaches for assessing feedback from the attendees; strategies for engaging with participant communities; timeline and potential venue; and the framework/outline for the conference report. **It is anticipated that all conferences will be completed by the spring of 2017 and the conference summary reports will be publicly available by early summer of 2017.**

SPECIAL INSTRUCTIONS

- Conference proposals must be prepared and submitted in accordance with the preparation instructions identified in **Chapter II.D.9** of the NSF Proposal and Award Policies and Procedures Guide, Part I: **Grant Proposal Guide (GPG)**.

- When starting the proposal in FastLane, PIs should select "NSF 16-1, Grant Proposal Guide - GPG" on the Cover Sheet from the list of available programs. They should then select "HRD-Division of Human Resource Development" under the "Directorate: EHR-Directorate for Education and Human Resources" for the Division on the Unit Selection, and then select the "Alliances-Minority Participant" Program. Select "Conference" as the Funding Mechanism on the Remainder of the Cover Sheet.

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

- For more information, please submit questions to: NSFINCLUDES@nsf.gov. Please do **not** contact

the signatories of this DCL directly.

FUNDING LEVEL AND AWARD DURATION

The budget for each conference proposal may be up to $250,000 and may be no longer than one year in duration.

Submission Deadline: July 11, 2016

For more information on NSF INCLUDES, visit the following websites:

- NSF INCLUDES homepage: https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505289
- NSF INCLUDES Special Report with a special message from NSF Director, Dr. France Córdova and FAQs: https://www.nsf.gov/news/special_reports/nsfincludes/index.jsp.

Sincerely,

James L. Olds, Assistant Director
Directorate for Biological Sciences (BIO)

Joan Ferrini-Mundy, Assistant Director
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Roger Wakimoto, Assistant Director
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References

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Kania, J. & Kramer, M. (2011, Winter). *Collective impact. Stanford Social Innovation Review*. Retrieved from http://ssir.org/articles/entry/collective_impact.

Waitzer, J. P. & Paul, P. (2011). *Scaling social impact, when everybody contributes, everybody wins. Innovations*. (2011). Retrieved from http://www.ashokaglobalizer.org/sites/www.ashokaglobalizer.org/files/INNOVATIONS_Mcphedran-Waitzer-Paul.pdf.

1 See NSF Broadening Participation Portfolio: https://www.nsf.gov/od/broadeningparticipation/bp_portfolio_dynamic.jsp.