



**NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230**

NSF 17-110

Dear Colleague Letter: Pursuing Meaningful Actions in Support of Broadening Participation in Computing (BPC)

July 3, 2017

Dear Colleague:

The National Science Foundation's (NSF) Directorate for Computer and Information Science and Engineering (CISE) is committed to broadening the participation of underrepresented populations in computing and closely-related disciplines. Indeed, CISE supports meaningful actions that address the longstanding underrepresentation of various populations including women, minorities (African Americans/Blacks, Hispanic Americans, American Indians, Alaska Natives, Native Hawaiians, Native Pacific Islanders, and persons from economically disadvantaged backgrounds), and persons with disabilities, in the computing field.

With this Dear Colleague Letter (DCL), CISE announces a pilot effort to enhance the community's awareness of and barriers to broadening participation in computing (BPC), as well as to provide information and resources to principal investigators (PIs) so that they can develop interest, skills, and activities in support of BPC at all levels (K-12, undergraduate, graduate, and postgraduate). This effort builds on CISE's long history of support for BPC. For example, the BPC Alliances are national and regional collaborations of academic institutions, educators, professional societies, community organizations, and industrial partners that serve to create the best practices, educational resources, advocacy networks, and forums needed to broadly address issues of engagement and education across the K-20 academic pipeline. It also aligns with the recommendations of the CISE Advisory Committee contained in a [Strategic Plan for Broadening Participation](#).

CISE recognizes that BPC will require an array of long-term, sustained efforts and that efforts to broaden participation must be innovative, varied, and welcoming of multiple pathways that eliminate or overcome barriers. BPC depends on many factors, including larger institutional programs and activities, and involves changing the culture throughout academia, including within departments, classrooms, and research groups. This culture change begins with enhanced exposure to broadening participation issues and remedies throughout the CISE community. CISE expects to support this enhanced exposure through a range of outreach activities, resource creation, research, and active community engagement in proposals, awards, and review panels.

Towards this end, CISE is pursuing a pilot BPC effort:

- Beginning this fall, CISE will enhance support for the foundations of BPC through dedicated outreach to the community and support for PIs to learn about BPC. In addition, all CISE PIs will be strongly encouraged to include meaningful BPC plans in the Broader Impacts section of submitted proposals, starting with deadlines in fall 2017 (refer to program-specific solicitations for details), and/or to begin preparing to include such plans in future proposal submissions.
- Building on NSF's experience with center-scale activities such as the Engineering Research Centers (ERC) and Science and Technology Centers (STC) programs, CISE will also pilot a requirement for meaningful BPC plans in all proposals submitted to the Expeditions in Computing program, and to the Frontier competitions of the Cyber-Physical Systems (CPS) and Secure and Trustworthy Cyberspace (SaTC) programs.
- CISE will continue with outreach and education efforts throughout the community and will expand the BPC pilot requirement to additional CISE programs calling for multi-investigator, team-oriented science in fall 2018.
- During this period, CISE will conduct an evaluation of the pilot to assess the effectiveness of the approach and determine appropriate next steps, including potential further expansion of this effort in 2019 and beyond.

More information about this BPC effort can be found on the CISE BPC webpage (<https://www.nsf.gov/cise/bpc>). The BPC webpage offers examples of meaningful BPC activities and metrics, ranging from participation in professional development activities aimed at providing more inclusive environments to helping develop departmental Diversity Plans that build awareness and engagement among faculty, as well as upcoming outreach activities.

If you have questions, please contact the CISE BPC Working Group at CISE_BPC@NSF.gov. Members of this Working Group include:

- Nina Amla, Program Director, CISE/CCF;
- Anindya Banerjee, Program Director, CISE/CCF;
- Kamau Bobb, Program Director, CISE/CNS;
- Jan Cuny, Program Director, CISE/CNS;
- Thyaga Nandagopal, Program Director, CISE/CNS; and
- Wendy Nilsen, Program Director, CISE/IIS.

Sincerely,

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