



NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

NSF 16-119

Dear Colleague Letter: Support for Engaging Students and the Public in Polar Research

August 3, 2016

Dear Colleagues:

The Geosciences and Education and Human Resources Directorates are partnering to advance and develop understanding of learning environments that build upon the rich interdisciplinary resources emerging from polar investments. To that end, the Division of Polar Programs (PLR), the Division of Undergraduate Education (DUE) and the Division of Research on Learning (DRL) encourage proposals that will leverage the extensive National Science Foundation (NSF) investment in polar sciences and infrastructure, and STEM education research and development, to promote an informed citizenry and the next generation of polar scientists. In order to advance polar science educational opportunities, PLR, DUE and DRL will accept and review proposals for research and development projects **that facilitate access to polar research efforts in (1) undergraduate education, (2) informal science education or (3) formal PK-12 science or math education**. Proposals must be submitted to either the Improving Undergraduate Science Education: Education and Human Resources (IUSE: EHR) deadline of November 2, 2016, the Advancing Informal STEM Learning (AISL) deadline of November 8, 2016, or the Discovery Research PreK-12 (DRK-12) deadline of December 5, 2016.

The integration of research and education is essential to NSF's mission (see the [current NSF Strategic Plan](#)). In addition, NSF strives to broaden participation in science and to make the results of research projects widely accessible to students and the public. Specifically, PLR seeks to meet these objectives by supporting the engagement of students, educators, and the public in polar research projects. While participation of educators and students in both Arctic and Antarctic research projects is encouraged, logistics are often difficult and expensive. Therefore, PLR, DUE, and DRL encourage education research and development proposals that make use of innovative technology for remote communication to give large groups of students, educators and the public access to polar research efforts in the polar regions without requiring all participants to travel there. Proposals that engage audiences with long-term investments in polar research and logistics (e.g. the Arctic or Antarctic science stations), with databases that have extended lifespans, (e.g. data from the Arctic Observing Network), or with public participation in scientific research, such as crowdsourcing or citizen science related to the Arctic, are particularly encouraged.

In addition to addressing polar STEM content, proposals should clearly articulate how they advance understanding of one of the three EHR core research areas: (1) Learning and Learning Environments, (2) Broadening Participation, or (3) Workforce Development. Projects should explain plans for sustaining access to data and resources for a period that extends well beyond the end of any potential award and for evaluating the outcomes of the investment in education research and development. In order to support the goals above, NSF encourages the submission of proposals to any of three solicitations issued by the Directorate for Education and Human Resources:

1. [Improving Undergraduate Science Education: Education and Human Resources \(IUSE:EHR\)](#) solicitation for the November 2, 2016 deadline.
2. [Advancing Informal STEM Learning \(AISL\)](#) deadline of November 8, 2016
3. [Discovery Research K-12 \(DRK-12\)](#) deadline of December 5, 2016.

Proposals must be identified by starting the proposal title with the term: "Polar (DCL- 16-119): (*Insert Project Title Here*)" If travel to the polar regions is included in the project, PIs are strongly encouraged to call the program officer to discuss logistics and related documentation that must be included in the proposal.

Those considering submitting a proposal in response to this opportunity are strongly encouraged to contact Lisa Rom: elrom@nsf.gov; 703-292-7709, the cognizant program officer, who can answer questions and provide further guidance.

Sincerely,

Joan Ferrini-Mundy
Assistant Director, Education and Human Resources

Roger Wakimoto
Assistant Director, Geosciences

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A HIGHLY QUALIFIED STAFF THAT REFLECTS THE DIVERSITY OF OUR NATION.**