

This message is intended for faculty contemplating applying to the **Improving Undergraduate STEM Education: Pathways into Geoscience (IUSE: GEOPATHS) program**.

A well-prepared, innovative science, technology, engineering and mathematics (STEM) workforce is crucial to the Nation's health and economy. Indeed, recent policy actions and reports have drawn attention to the opportunities and challenges inherent in increasing the number of highly qualified STEM graduates, including STEM teachers. Priorities include educating students to be leaders and innovators in emerging and rapidly changing STEM fields as well as educating a scientifically literate populace. Both of these priorities depend on the nature and quality of the undergraduate education experience. In addressing these STEM challenges and priorities, the National Science Foundation invests in evidence-based and evidence-generating approaches to understanding STEM learning; to designing, testing, and studying instruction and curricular change; to wide dissemination and implementation of best practices; and to broadening participation of individuals and institutions in STEM fields. The goals of these investments include: increasing the number and diversity of STEM students; preparing students well to participate in science for tomorrow; and improving students' STEM learning outcomes.

NSF's Improving Undergraduate STEM Education (IUSE) initiative, launched in Fiscal Year 2014, supports a coherent set of investments to address immediate challenges and opportunities that are facing undergraduate STEM education, as well as those that anticipate new structures (e.g. organizational changes, new methods for certification or credentialing, course re-conception, cyberlearning, etc.) and new functions of the undergraduate learning and teaching enterprise. The NSF-wide IUSE initiative acknowledges the variety of discipline-specific challenges and opportunities facing STEM faculty as they strive to incorporate results from educational research into classroom practice and work with education research colleagues and social science learning scholars to advance our understanding of effective teaching and learning.

The Directorate for Geosciences (GEO) contributes to the IUSE initiative through the Improving Undergraduate STEM Education: Pathways into Geoscience (IUSE: GEOPATHS) funding opportunity. IUSE: GEOPATHS invites proposals that specifically address the current needs and opportunities related to undergraduate education within the geosciences community. The primary goal of the IUSE: GEOPATHS funding opportunity is to increase the number of undergraduate students interested in pursuing undergraduate degrees and/or post-graduate degrees in geoscience through the design and testing of novel approaches for engaging students in authentic, career-relevant experiences in geoscience. In order to broaden participation in the geosciences, engaging undergraduate students from traditionally underrepresented groups or from non-geoscience degree programs is a priority. The IUSE: GEOPATHS solicitation features two funding tracks: (1) Engaging students in the geosciences through extra-curricular experiences and training activities (GEOPATHS-EXTRA), and (2) Improving pathways into the geosciences through institutional collaborations and transfer (GEOPATHS-IMPACT).

LIMIT ON NUMBER OF PROPOSALS PER ORGANIZATION:

An organization may serve as sole submitting institution or as lead institution of a collaborative project on only one submission per competition, regardless of track, but may serve as the non-lead institution of a collaborative project more than once per competition.

PI LIMIT:

A Principal Investigator may serve in the role of PI or Co-PI on only one proposal per competition if they are at the sole-submitting institution or the lead institution of a collaborative project, but may serve as the Co-PI for a non-lead institution of a collaborative project more than once per competition.

LETTER OF INTENT DEADLINE (REQUIRED) – due by 5 p.m. proposer's local time): August 18, 2017. While more than one LOI may be submitted, only one full proposal can be submitted to the sponsor. Please work with your Pre Award Administrator in Research and Sponsored Programs on the LOI submission.

FULL PROPOSAL DEADLINE (due by 5 p.m. proposer's local time): October 10, 2017.

If you are interested in submitting a proposal to this program, you will need to take the first required step and submit an LOI to the sponsor by the deadline stated above. Because of the above restriction on full proposals, Research and Sponsored Programs is requesting that all those who are interested in applying to the GEOPATHS program and have submitted an LOI to the sponsor submit an abstract for their project to Deborah Lundin by **Friday, September 1**. This will enable us to ensure that the University does not submit more than the allotted amount of proposals for our institution. If the number of abstracts we receive exceeds the number of proposals we are allowed to submit, we will advise the relevant faculty on how a selection will be determined and how to proceed with the submission of the proposal.

You may download the complete program description and application guidelines at https://www.nsf.gov/publications/pub_summ.jsp?WT.z_pims_id=505169&ods_key=nsf17574. If you have any questions about the program or selection procedure, you may contact our office at ext. 2425.