



To: Distribution List

From: Faculty Research Development Office
Office of the Vice President for Research

Subject: Limited Competition: NSF Improving Undergraduate STEM Education: Pathways into Geoscience (IUSE: GEOPATHS) NSF 18-583 (GEOPATHS-IMPACT funding track only)

Date: August 22, 2018

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).

GEOPATHS-IMPACT projects are expected to establish new, or strengthen existing, institutional partnerships and collaborations that provide sustainable pathways and support mechanisms for facilitating transitions of undergraduate students at critical junctions: between high school and undergraduate geoscience programs; between two-year undergraduate institutions and four-year institution geoscience degree programs; between baccalaureate degrees in geoscience and the geoscience workforce; or, between baccalaureate degrees (in any field) and post-baccalaureate geoscience programs. GEOPATHS-IMPACT projects are expected to focus less on the engagement of individual students in the geosciences and focus more on implementing systemic and sustainable approaches that can increase access to geoscience education and research opportunities and open doors to education and career pathways over time. The emphasis is on using NSF funding to establish programs, structures, and collaborations that can have lasting impact. For example, formal articulation agreements, e.g., between four-year and two-year institutions, can ease student transfers into geoscience bachelor's degree programs. Education and research collaborations between institutions may also help first and second year students, who might otherwise not encounter geoscience before deciding on a major, explore the possibilities within the field. Providing reliable and current information about career paths and opportunities, as well as sustained mentoring, networking, and professional development are also important strategies in helping students make the transition from undergraduate to graduate study and beyond.

The NSF expects to make 20 awards across the two tracks, with the average total award size expected to be in the \$300,000 to \$350,000 range. The duration of awards for both tracks will be up to 36 months. More details can be found at <https://www.nsf.gov/pubs/2018/nsf18583/nsf18583.pdf>. The deadline for the required letter of intent is September 21, 2018. The deadline for full proposals to the NSF is November 19, 2018.

This is a limited competition; an organization may serve as sole submitting institution or as lead institution of a collaborative project on only one (1) submission per competition, regardless of track, but may serve as the non-lead institution of a collaborative project more than once per competition. This

limited competition pertains only to the *GEOPATHS-IMPACT* track. As per the eligibility criteria, UNM may *only* submit proposals as the non-lead institution of a collaborative *GEOPATHS-EXTRA* proposal.

Please submit your 3-page preproposal (plus budget and CV; all documents in a SINGLE PDF file, 11 point font) by NOON on Friday, September 7, 2018 to limited@unm.edu with the subject line indicating: GEOPATHS - your name. No late submissions will be considered. The pre-proposal should address the major points that will be included in the proposal narrative (describe the goals and objectives of the proposed project, the intellectual focus, organizational structure, timetable, and any participating organizations' commitment to the activity. Provide information about the specific student population being targeted (e.g., demographics, grade level, critical juncture), a justification as to why this particular population was chosen, and a description of the proposed recruitment and mentoring plans for these students.; Describe the anticipated outcomes of the activities for the participating students, geoscience professionals, and collaborating institutions. Describe proposed efforts to measure qualitatively and quantitatively the success of the project in achieving its goals, particularly with regard to the degree to which students have gained geoscience content knowledge and skills, have changed their perspectives and attitudes toward geoscience education and career paths, and/or have been successfully retained at critical junctures in the pathway. The 3-page narrative should be accompanied by a **draft budget overview** and an **abbreviated PI CV**.

Should you have any questions please feel free to contact is at limited@unm.edu.