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 the Earth, Ocean, Polar and Atmospheric & Geospace Sciences (IUSE:GEOPAths) NSF 20-516
Date:	November 15, 2019

IUSE: GEOPAths is a Foundation-wide effort to accelerate improvements in the quality and effectiveness of undergraduate education in all STEM fields, including the learning, social, behavioral, and economic sciences. IUSE investments support a variety of activities, including the inclusion of inquiry-based and active learning approaches in undergraduate STEM instruction, efforts to increase undergraduate STEM research experiences and courses, research on the persistence and graduation of students in STEM programs, data science preparation for students in all majors, recruitment and retention of women and of students from underrepresented groups in STEM degree programs, incorporation of undergraduate research in STEM fields for STEM majors and non-majors, and re-envisioning of introductory courses in light of new research findings and theories.

UNM is only eligible for two of the three funding tracks that focus on Geoscience Learning Ecosystems:

1. GEOPAths: Informal Networks (IN). Collaborative projects in this track will support geoscience learning and experiences in informal settings for teachers, pre-college (e.g., upper level high school) students, and early undergraduates in the geosciences.

2. GEOPAths: Graduate Opportunities (GO). Projects in this track will improve research and career-related pathways into the geosciences for undergraduate and graduate students through institutional collaborations with a focus on service learning and workplace skill building.

NSF expects to make 18 awards across three tracks, with the average total award size expected to be in the $300,000 to $350,000 range. The duration of awards for each track will be up to 36 months. More details can be found at https://www.nsf.gov/pubs/2020/nsf20516/nsf20516.htm?WT.mc_id=USNSF_25&WT.mc_ev=click. The deadline for the required letter of intent is December 20, 2019. The deadline for full proposals to the NSF is February 14, 2020.

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

This is a two-phase limited competition. If you are interested in submitting a proposal to this program, please email a ***required* statement of interest** with your name, department, and the track you will submit to by noon on **Friday, November 22, 2019** to limited@unm.edu.

This will be followed by a ***required* 3-page preproposal (plus budget and CV; all documents in a SINGLE PDF file, 11 point font) submitted to limited@unm.edu by noon on Monday, December 2, 2019 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 and should be accompanied by a **draft budget overview** and an **abbreviated PI CV:**

1. GEOPAths: *Informal Networks* (***IN***).
    A.) Identify the track to which the proposal is being submitted to and the name and organizations of the PI, Co-PIs and other key personnel who will be involved with the project. If the project will be leveraging a named research facility or program (e.g., NCAR, LSAMP), this facility/program should be identified.
    B.) Identify which geoscience sub-fields (e.g., oceanography) or employment sectors (e.g., mining) are being addressed, if relevant.
    C.) A brief synopsis of the project design and activities to be undertaken. Demonstrate appropriate relationships and connections with local schools, school districts, other institutions of higher learning, etc.
    D.) Information should be provided about the specific student population being targeted (e.g., demographics, grade level, critical juncture), as well as a justification as to why this particular population was chosen.
    E.) Details on the learning ecosystem model that will be applied during the project.
        1. For further guidance on the development of learning ecosystem models, please reference the following section of the current White House STEM Strategic Plan (Pathways to Success - Develop and Enrich Strategic Partnerships and Foster STEM Ecosystems that Unite Communities).
    F.) discuss the diversity of the mentor pool; strategies for recruiting and selecting additional mentors.
    G.) Student Recruitment/Mentoring Plan should emphasize strategies to ensure inclusive environments, programming and experiences with a focus on retention and movement of participants to the next appropriate level of education and research acumen (including but not limited to sufficient training for faculty and staff to successfully undertake their roles as mentors and supervisors of the student participants).
2. GEOPAths: *Graduate Opportunities* (***GO***).
    A.) Identify the track to which the proposal is being submitted to and the name and organizations of the PI, Co-PIs and other key personnel who will be involved with the project. If the project will be leveraging a named research facility or program (e.g., NCAR, LSAMP), this facility/program should be identified.
    B.) Identify which geoscience sub-fields (e.g., oceanography) or employment sectors (e.g., mining) are being addressed, if relevant.
    C.) A brief synopsis of the project design and activities to be undertaken. It is also important that proposals not only include details on the transition that the project would enhance, but also demonstrate that the proposed learning ecosystem model is also designed to foster the success of students once they transition to the new academic or professional stage.
    D.) Information should be provided about the specific student population being targeted (e.g., demographics, grade level, critical juncture), as well as a justification as to why this particular population was chosen.
    E.) Details on the learning ecosystem model that will be applied during the project.
        1. For further guidance on the development of learning ecosystem models, please reference the following section of the current White House STEM Strategic Plan (Pathways to Success - Develop and Enrich Strategic Partnerships and Foster STEM Ecosystems that Unite Communities).
    F.) Discuss the diversity of the mentor pool; strategies for recruiting and selecting additional mentors.
    G.) Student Recruitment/Mentoring Plan should emphasize strategies to ensure inclusive environments, programming and experiences with a focus on retention and movement of participants to the next appropriate level of education and research acumen (including but not limited to sufficient training for faculty and staff to successfully undertake their roles as mentors and supervisors of the student participants).

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