THE UNIVERSITY OF NEW MEXICO

To: Distribution List

From: Faculty Research Development Office (FRDO)
Office of the Vice President for Research

Subject: Limited Competition: NSF Research Traineeship Program (NSF 21-536)

Date: May 24, 2021

UNM Researchers,

The Office of the Vice President for Research is requesting preproposals for the NSF Research Traineeship Program (NRT) funding opportunity. The NSF Research Traineeship (NRT) program seeks proposals that explore ways for graduate students in research-based master's and doctoral degree programs to develop the skills, knowledge, and competencies needed to pursue a range of STEM careers. The program is dedicated to effective training of STEM graduate students in high priority interdisciplinary or convergent research areas, through a comprehensive traineeship model that is innovative, evidence-based, and aligned with changing workforce and research needs. Proposals are requested that address any interdisciplinary or convergent research theme of national priority, as noted above

For FY2021, Artificial Intelligence (AI) and Quantum Information Science and Engineering (QISE) have been added to the national priority areas in which the NRT Program encourages proposals. NSF seeks proposals on any interdisciplinary research theme of national priority, with special emphasis on AI and QISE and the six research areas within NSF's 10 Big Ideas. The NSF research Big Ideas are Harnessing the Data Revolution (HDR), The Future of Work at the Human-Technology Frontier (FW-HTF), Navigating the New Arctic (NNA), Windows on the Universe: The Era of Multi-Messenger Astrophysics (WoU), The Quantum Leap: Leading the Next Quantum Revolution (QL), and Understanding the Rules of Life: Predicting Phenotype (URoL).

A letter of intent is no longer required for this program. The deadline for full proposals is September 6, 2021. Complete program details can be found at: https://www.nsf.gov/pubs/2021/nsf21536/nsf21536.pdf.

Proposals may be submitted under two tracks (i.e., Track 1 and Track 2). Track 1 proposals are expected to be up to five (5) years in duration with a total budget up to $3,000,000 for projects with a focus on STEM graduate students in research-based PhD and/or master's degree programs. **Doctoral Universities: Very High Research Activity (R1) are not eligible for Track 2 consideration.** Therefore, UNM is not eligible for Track 2.

This is a limited competition. **An eligible organization may participate in only two (2) proposals per NRT competition as lead OR collaborative non-lead.**

If you are interested in *submitting a proposal or participating as a sub-awardee on a proposal*, please **follow this required two-step process:**

1. By noon on **Friday, June 18, 2021**, please submit a ***required*** **statement of interest** to limited@unm.edu; **with the subject line indicating: NSF NRT - your name** that contains:

    a) Specify whether UNM will be the lead or a subaward.
    b) name and departmental affiliation of the Principal Investigator (PI);
    c) name(s) and departmental affiliation(s) of the Co-PI(s) and others composing the Core Participants (maximum 10);

d) names(s) of any other participating institutions; and
e) a tentative project title and brief description of 200 words or less that includes the NSF Big Idea that will be addressed.

Only PIs who have submitted a statement of interest by the deadline will be eligible to submit a pre-proposal.

2. By noon on **Friday, July 2, 2021**, please submit a **required 4-page preliminary proposal** (plus budget and CV for PI and Co-PIs; all documents in a SINGLE PDF file, 11 point font) to limited@unm.edu; **with the subject line indicating: NSF NRT - your name**; that begins with:

   a) name and departmental affiliation of the Principal Investigator (PI);
   b) name(s) and departmental affiliation(s) of the Co-PI(s) and others composing the Core Participants (maximum 10 - including the evaluator);
   c) names(s) of any other participating institutions; and
   d) Target Disciplines: List up to 5 primary disciplinary areas contributing to the research focus.

The body of the 4-page pre-proposal must contain the following components:

- **Theme, Vision, and Goals:** Describe the overarching theme, vision, and goals of the proposed NRT. Identify the potential of the NRT project to provide appreciable and meaningful added value to the current degree programs and methods of graduate training at the UNM and the potential for high impact synergies among the disciplines, specifically highlighting the capacity of the program to broaden participation.
- **Education and Training:** Address training needs that are not currently available at UNM and/or in disciplines. Provide clear and compelling connections between the training elements and the interdisciplinary research theme. Describe the adopted traineeship model and its components, and how they are integrated with NRT research activities. Articulate explicit approaches to provide NRT trainees with professional development training for a range of research and research-related career pathways, *both within and outside academia*.
- **Major Research Efforts:** Briefly describe the novel, potentially transformative research that the NRT will catalyze through interdisciplinary synergies emerging from currently funded activities at UNM and/or via separate NRT-funded interdisciplinary initiatives. Explain how the NRT-funded research would substantially advance, inform, and transform research beyond funded initiatives already underway at the UNM. Keep in mind that NRT funding should be used to complement rather than supplant other research funding.
- **Recent Student Training Experiences:** Describe the experience of the PI and Co-PIs with leading or participating in STEM education and training over the past five years. Describe any overlap and/or complementarity between the training and the proposed NRT program.
- **Recruitment, Mentoring, and Retention:** Describe plans for recruitment, mentoring, and retention of trainees with a particular emphasis on broadening participation of groups underrepresented in STEM fields to integrate diversity into NSF programs, projects, and activities.
- **Performance Assessment/Project Evaluation:** Describe plans to evaluate the success of the training keeping in mind that assessment of the project is a high priority for the NRT program.

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

Please distribute this notice to departments and individuals whom you believe would be interested.

If you are affiliated with HSC, please contact Corey Ford (CFord@salud.unm.edu) or Cassandra Misenar (CMisenar@salud.unm.edu) for more information.