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 (NRT), (NSF 21-536)

Date: June 23, 2022

Dear UNM Researchers,

The NRT program seeks proposals that explore ways for graduate students in research-based master's & PhD programs to develop the skills and competencies needed to pursue a range of STEM careers. The goals of the NRT program are to: 1) Catalyze and advance cutting-edge interdisciplinary or convergent research in high priority areas; 2) Increase the capacity of U.S. graduate programs to produce diverse cohorts of interdisciplinary STEM professionals with technical and transferable professional skills for a range of research and research-related careers within and outside academia; and 3) Develop innovative approaches and knowledge that will promote transformative improvements in graduate education. The program emphasizes broadening participation & institutional capacity-building in graduate education and especially welcomes proposals that include partnership with NSF INCLUDES projects. Collaborations between NRT proposals and existing INCLUDES projects should strengthen both projects.

For FY2021 and FY2022, proposals are encouraged in the research areas of Artificial Intelligence (AI), Quantum Information Science and Engineering (QISE) and the six research areas in NSF's 10 Big Ideas.

Proposals are submitted under either of two tracks, **but UNM is only eligible to apply to Track 1 because UNM is an R1 IHE. (**Eligibility to apply to Track 2 is limited to non-R1 Institutions of Higher Education.) Track 1 proposals may request a total budget up to $3 million for projects (up to 5 years) with a focus on STEM graduate students in research-based PhD and/or master's degree programs. Details can be found at https://www.nsf.gov/pubs/2021/nsf21536/nsf21536.htm. The deadline for submitting full proposals to the agency is Tuesday, September 6th, 2022 by 5:00pm MDT.

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 **Wednesday, July 13, 2022**, please submit a *required* statement of Interest via UNM's **InfoReady Review portal** 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 22, 2022**, please submit a **required 4-page preliminary proposal** (plus budget and CV for PI and Co-PIs; 11 point font) via UNM's **InfoReady Review portal** 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.

If you are affiliated with HSC, please contact HSC Limited Competition at HSC-LimitedComps@salud.unm.edu for more information.