

To: Distribution List

From: Faculty Research Development Office (FRDO)

Office of the Vice President for Research

Subject: Limited Competition: DOE, Quantum Testbed Pathfinder, (DE-FOA-0003005)

Date: 3/13/2023

UNM Researchers,

The specific objective of the **DOE Quantum Testbed Pathfinder** funding opportunity is to improve our understanding of whether, when, and how quantum computing might advance the frontiers of computational science. Specifically, the purpose of this FOA is to invite applications for basic research to address the following questions:

- 1. What can fundamental physical limits on quantum processors tell us about what quantum computers can and cannot do?
- 2. How can we use Noisy Intermediate-Scale Quantum (NISQ) devices to move our understanding of when and how quantum computers might be useful as far forward as possible?
- 3. How can we assess the utility of a given (existing or hypothetical) quantum processor for advancing the frontiers of computational science?

Applications may address any combination of these themes. Submitted applications should clearly identify which of the themes are addressed. Research should be backed by rigorous theory and strive to connect metrics for device performance to low-level physical parameters as well as application performance whenever possible. This program is aimed at assessing current and future quantum computers rather than developing or improving applications and algorithms.

The minimum award will be \$50,000 per year. The maximum award will be \$300,000 for a single institution or \$600,000 for a multi-institutional team with a performance period of four years. There is no cost share requirement for this award. More details can be found in the solicitation: https://www.grants.gov/web/grants/view-opportunity.html?oppId=346496. The deadline for submitting required pre-applications is **March 31, 2023.** Full applications are due **May 3, 2023.**

This is a limited competition. Each institution is limited to 3 (THREE) pre-applications as lead. If you are interested in applying to this program, please submit a statement of interest with a tentative project title and a brief description (200 words) by NOON, March 21, 2023 via UNM's InfoReady Review portal.

Because of the short turnaround time (DOE only announced this competition last week), this limited competition will be conducted on a first-come, first-served basis. This means that the first three SOIs we receive will be given the three UNM slots.

Should you have any questions please feel free to contact us at <u>limited@unm.edu</u>. If you are affiliated with HSC, please contact HSC Limited Competition at <u>HSC-LimitedComps@salud.unm.edu</u> for more information.