

To: Distribution List

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

Subject: Limited Competition: DOE, Advancements in Artificial Intelligence for Science, (DE-FOA-0003264)

Date: 2/22/2024

Dear UNM Researchers,

The DOE SC program in Advanced Scientific Computing Research (ASCR) hereby announces its interest in basic computer science and applied mathematics research in the fundamentals of Artificial Intelligence (AI) for science. Specifically, advancements in this area are sought that can enable the development of:

- Foundation models for computational science;
- Automated scientific workflows and laboratories;
- Scientific programming and scientific-knowledge-management systems;
- Federated and privacy-preserving training for foundation and other AI models for science; and
- Energy-efficient AI algorithms and hardware for science.

Each pre-application and application must identify one primary research area:

- Research Area 1: Extreme-Scale Foundation Models for Computational Science
- Research Area 2: AI Innovations for Scientific Knowledge Synthesis and Software Development
- Research Area 3: AI Innovations for Computational Decision Support of Complex Systems
- Research Area 4: Federated and Privacy-Preserving Machine Learning and Synthetic Data Creation
- Research Area 5: The Co-Design of Energy-Efficient AI Algorithms and Hardware Architectures

Because the nature and scope of the proposed research program will vary from application to application, it is anticipated that the size and duration of each award will also vary. The award ceiling is \$350,000 per year and the floor is \$100,000 per year. More details can be found in the program solicitation: grants.gov/search-results-detail/352320. The deadline for submitting required pre-proposals to the DOE is March 19, 2024. Full proposals are due May 21, 2024.

This is a limited competition. Each institution is limited to THREE (3) 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 <u>NOON on February 27, 2024</u> via UNM's <u>InfoReady Review</u> <u>portal</u>. **Because there is not time for a committee review, if we receive more SOIs than submission slots available, we will randomly select which will be allowed to move forward. Only SOIs received by the deadline will be included in the drawing.** No late applications will be considered.

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 <u>HSC-LimitedComps@salud.unm.edu</u> for more information.