

To: Distribution List

From: Faculty Research Development Office Office of the Vice President for Research

Subject: Limited Competition: NSF: EPSCoR Research Infrastructure Improvement Program: Track-2 Focused EPSCoR Collaborations (RII Track-2 FEC), NSF 21-518

Date: October 23, 2020

RII Track-2 FEC builds interjurisdictional collaborative teams of EPSCoR investigators in scientific focus areas consistent with NSF priorities. Projects are investigator-driven and must include researchers from at least two EPSCoR eligible jurisdictions with complementary expertise and resources necessary to address challenges, which neither party could address as well or rapidly independently. The Science, Technology, Engineering, and Mathematics (STEM) research and education activities should seek to broaden participation through the strategic inclusion and integration of diverse individuals, institutions, and sectors throughout the project. Proposals must describe a comprehensive and integrated vision to drive discovery and build sustainable STEM capacity that exemplifies diversity of all types (individual, institutional, geographic, and disciplinary). The development of diverse early-career faculty is a critical component of this sustainable STEM capacity. For FY 2021, RII Track-2 FEC proposals are invited on a single topic: "Advancing research towards Industries of the Future to ensure economic growth for EPSCoR jurisdictions."

According to the 2021 <u>OMB/OSTP Research and Development</u> priorities memo, "Industries of the Future" are a key component to the country's economic and national security. For the National Science Foundation, these industries have been defined across several categories and include: Advanced Manufacturing; Advanced Wireless; Artificial Intelligence; Biotechnology; Quantum Information Science; and Spectrum Innovation Science.

These industries will require new advances in and integration of artificial intelligence and machine learning, new cyber infrastructure, new approaches for mathematical and computational modeling, new dynamics and control methodologies, new ways to integrate systems biology, synthetic biology and bioprocessing, and new ways to contribute to influence the economy, workforce, and society. For this solicitation, research focused in these areas is strongly encouraged, however, in rare cases, additional industries relevant to a Jurisdiction's Science and Technology Plan can be considered for this solicitation.

NSF EPSCoR has stated that one of its driving goals is to enhance research competitiveness by strengthening STEM capacity and capability which "impacts jurisdictional economic development." Therefore, by leveraging current and previous NSF as well as other federal agencies substantial investments in the industries and investments in the research underlying or supporting these industries, this solicitation seeks to create a significant and collective impact at targeted jurisdictions by advancing future investments towards jurisdictions' socio-economic growth. Proposals submitted for the FY21 RII Track-2 FEC competition should leverage already documented outcomes from any project (or projects) related to the industries of the future topics across multiple jurisdictions and collectively bring those together to address new economic opportunities either within those jurisdictions, or in additional EPSCoR jurisdictions. As a result, these projects are expected to create or establish a solid pathway towards impacting the jurisdictions at an economic scale guided by a diverse STEM workforce.

If institutions from two RII-eligible EPSCoR jurisdictions (see <u>table</u>) collaborate on a proposal, the award amount may not exceed \$1 million per year for up to four years. If institutions from three or more RII-eligible EPSCoR jurisdictions collaborate on a proposal, the award amount may not exceed \$1.5 million per year for up to four years. The required letter of intent is due December 18, 2020 and full proposals are due January 25, 2021. You can find more information on the following link: https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505263.

This is a limited competition. Only one RII Track-2 FEC proposal may be submitted in response to this solicitation by an organization in a RII-eligible jurisdiction.

**If you anticipate that you will be submitting a preproposal for this internal competition, please send a statement of interest on the template (see pg. 3) via e-mail to limited@unm.edu by October 30, 2020. Note: The statement of interest is required in order for the preliminary proposal to be reviewed by the limited competitions committee.

Please submit your 5-page pre-proposal plus coversheet, budget overview, NSF formatted biosketches, and references cited; all documents in a SINGLE PDF file, 11 point font) by NOON on Monday, November 16, 2020 to limited@unm.edu with the subject line indicating: FEC track 2 - your name. No late submissions will be considered.

The limited competition pre-proposal to UNM must include:

- A cover sheet that lists the project title and all senior personnel with each person's institution and contact information
- 5-page project description (in NSF allowable format) that includes: •
 - Research: clearly articulated goals and activities with sufficient background information to show the 0 novelty/originality of the approach and intellectual merit;
 - Collaboration: identify the institution(s) with which you will partner. Describe the partners and their 0 contributions and provide the rationale for the partnership (why this collaboration is needed), and describe the management structure that will enable coordination among partners;
 - Workforce Development: focus on junior faculty and include diversity improvement strategies;
 - Labeled paragraphs describing the intellectual merit and broader impacts
- Budget overview (using Table below) and 1-page budget justification
- Biosketches (NSF format) for PI and Co-PIs
- References cited

Budget Overview Table	e (4 year totals)		
	UNM	Institution 2 (Name)	Institution 3 (Name)
Calarian/faine a			
Salaries w/fringe—			
faculty			
Salaries w/fringe—			
students			
Salaries w/fringe—			
staff			
Equipment			
Travel			
Participant Costs			
Other Costs			
F&A			
Total (4 years)			

NSF EPSCoR Track-2 FEC Statement of Interest Template for UNM Return by noon on October 30, 2020 to <u>limited@unm.edu</u>

- 1. Identify the institution(s) with which you will partner:
- 2. List all PI/Co-PI's (must have one per jurisdiction)

Name	Institution	Department	Email	Phone
	UNM			

3. Brief abstract of research and education focus (1-2 paragraphs)