MISSOURI NSF ESTABLISHED PROGRAM TO STIMULATE COMPETITIVE RESEARCH (EPSCoR)

REQUEST FOR PROPOSALS

The Missouri Transect Seed Funding: Data Integration

Submission Deadlines:

Date of Announcement: April 19, 2017
Revised RFP Announcement: May 3, 2017
Intent to Submit Form: May 17, 2017
Final Proposal: June 21, 2017

Anticipated Period of Performance:

August 1, 2017 – July 31, 2018

Program Name

The Missouri Transect Seed Funding: Data Integration

Project Director

Missouri EPSCoR Office
Dr. John C. Walker
Tucker Hall, Room 105
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Columbia, MO 65211

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https://missouriepscor.org/

INTRODUCTION

Data Integration

The Missouri Transect is a five-year project building research and education infrastructure, knowledge, and collaborations across Missouri. The research and education activities from the effort are generating large data sets spanning plant sciences, remote sensing and imaging, atmospheric and environmental sciences, and the social sciences. Knowledge dissemination resulting from these activities is a central goal of the Missouri Transect mission. While each data set on its own may address a specific topic, we are presented with the opportunity to ask novel questions by integrating the data. However, new ideas, approaches and tools are needed to integrate these diverse data sets to generate new knowledge that can be used to make informed decisions in the face of an increasingly variable climate. The Strategic Plan for the Missouri Transect can be found at https://missouriepscor.org/about/strategic-plan.

This RFP seeks to address the questions: What new knowledge can be gleaned by integrating the diverse data sets that are being generated by the scientists involved in the Missouri Transect, and given that opportunity, what are the best approaches to integrate and analyze the data? The proposer should provide at least one question that can be addressed by integrating the data, and lay out a clear plan for efficient integration, interpretation and presentation of the data to address the problem. Seed funds are available for innovative projects addressing these questions. Preference will be given to projects that have a high level of involvement of researchers that are not currently part of the Missouri Transect. Seed fund awardees are expected to participate in the activities of the Missouri Transect and to strongly integrate with current project team members.

The Missouri Transect Data Portal

Data collected for Missouri Transect research can be found on the Data Portal:
https://data.missouriepscor.org

By selecting "Datasets" under Missouri EPSCoR Data, all data submitted to the portal by Transect researchers can be viewed. Some data is protected as private. A data request can be submitted to data produces by selecting the "Data Requests" tab. For help in accessing data, please contact Justin Le Tourneau, Missouri Transect Research Analyst, LeTourneauJJ@umsystem.edu.

Source of Funds

The Missouri Transect Seed Funding is part of the NSF EPSCoR Track 1 Research Infrastructure Improvement grant *The Missouri Transect: Climate, Plants and Community* (IIA-1355406).

Eligibility

Individuals, independent researchers, and educators at accredited academic institutions and research institutions in Missouri are eligible to apply.

Award Amount and Duration

The total project budget should be no more than $50,000 in direct costs over a span of 12 months. A justification for all direct costs is required.

Application Procedure

Letters of intent and proposals must adhere to the following guidelines or risk being returned without review:

1. **The Intent to Submit Form is due by 5:00 PM Friday, May 17, 2017,** to the Missouri EPSCoR Project Director. The Intent to Submit Form can be found at the end of this RFP. Please include:
   - The planned title of the proposal;
   - A brief description (less than 250 words) of the research/education that will be proposed for funding, including its relationship the Missouri Transect and significance/impact.
   - Name and contact information for the PI and co-PIs.
   - Three potential reviewers with expertise in the area of the proposed project. Reviewers should not include Ph.D. or postdoctoral advisors, current or past collaborators, and individuals from your institution/organization.

<u>The Intent to Submit Form should be submitted as a single PDF.</u>

To be considered for Seed Funding, the PDF (prepared as described above) should be attached to a single email message sent to epscor@missouri.edu by the due date. The Missouri EPSCoR Project Director will notify proposers whose projects do not the goals of this seed funding project.

2. **Submit a Full Proposal by June 21, 2017**. Prepare the proposal in accordance with the guidelines below.

   a. Summary.
   b. Goals, objectives and outcomes that can be accomplished in the time requested.
   c. The Research Plan must be no more than 5 single-spaced pages at <u>12 pt Arial or Times New Roman font with one inch margins</u> throughout. The research plan should include Specific Aims, Background and Significance, Preliminary studies (if any), and Approach.
   d. A graphical or text timeline with milestones (specific outcomes, date for completion) that will constitute the scope of work you are proposing.
   e. References cited.
   f. Institutional resources available to support completion of the project must be described.
   g. Budget using the Missouri Transect Budget Form that appears at the end of this document.

   The Seed Funding budget **should**:
   - Support activities and outcomes that can be accomplished in the time requested.
   - Only include items that directly support the PI or Co-PIs proposed project.
   - Be followed by a budget justification of up to 2 pages in length.
   - A letter of commitment for the NSF EPSCoR required cost share of 20%

   The Seed Funding budget **should NOT**:
   - Exceed $50,000 in direct costs.
   - Include any indirect costs. (F&A will be added when a proposal is awarded.)
   - Include more than 1 month of salary for the PI or Co-PIs.
   - Include foreign travel

h. The proposal should be accompanied by a statement from the Principal Investigator that explains his/her current and pending support and if there is significant overlap between the proposed Seed Funding request and any current or pending support.

i. Signature page to include the signatures of the PI, co-PIs and the Office of Sponsored Programs

Proposal Submission

The proposal must be prepared as described in number 2 above and be submitted as a single PDF. A signature from the PI's sponsored programs office is required. ***Proposals not signed by the PI's sponsored programs office will NOT be accepted.*** The PDF should be submitted electronically as an email attachment sent by the PI's institutional research office. This email should be sent to epscor@missouri.edu by **June 21, 2017**.

Review Criteria

The Missouri Transect's Leadership Team will solicit reviews of proposals from peers with expertise in the area of the proposed project. In reviewing proposals, the Missouri Transect will use the general merit review criteria established by the National Science Board. These are discussed in the *Proposal and Award Policies and Procedures Guide*, part 1: *Grant Proposals Guide (GPG)*, *NSF 17-1* and listed below. In responding to the **Broader Impacts** criterion, reviewers will be asked to place special emphasis on the likelihood that the proposed project will enhance the research competitiveness of the PI/co-PIs and how it contributes to the Missouri Transect's major initiative to model and predict (1) short- and long-term trends in temperature and precipitation at the regional and local levels; (2) the effects of these trends on the productivity of Missouri's native flora and agricultural crops; and (3) how different stakeholder communities are likely to respond to these changes.

When evaluating proposals, reviewers will be asked to consider what the proposers want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful. These issues apply both to the technical aspects of the proposal and the way in which the project may make broader contributions. To that end, reviewers will be asked to evaluate all proposals against two criteria:

- **Intellectual Merit**: The Intellectual Merit criterion encompasses the potential to advance knowledge; and
- **Broader Impacts**: The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

The following elements should be considered in the review for both criteria:

1. What is the potential for the proposed activity to:
   a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
   b. Benefit society or advance desired societal outcomes (Broader Impacts)?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. Is the plan for carrying out proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success? Does the plan deliver a product compatible with use by the public? Does the product have a high degree of usability?
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

General Conditions of the Award

If a proposal is selected for funding, the Missouri EPSCoR Project Director reserves the right to negotiate the budget and the term of the award.

During the term of the award and for five years after the end date, the Principal Investigator must inform the Missouri EPSCoR Project Director of:
- Any proposals submitted and any awards received as a result of the award. Information provided should include the title of the proposal or award, the funding agency, the amount of the proposal or award, and its duration.
- Changes to the Principal Investigator's contact information.

Missouri EPSCoR must comply with NSF EPSCoR reporting requirements (NSF 08-587). Therefore, each Principal Investigator awarded Missouri Transect Seed Funding and their students, faculty and staff should create an individual reporting account on the Missouri EPSCoR Reporting site (https://reporting.missouriepscor.org/missouri/). Information to be reported will include demographics on all project participants, proposals submitted and funded, publications, presentations, patents, degrees granted, and research outcomes. Missouri EPSCoR will request information from award recipients with compliance expected within 30 days of the request.

Any publication resulting from the award must include the following statement of acknowledgment: *This research is based upon work supported by the National Science Foundation under award no.* IIA-1355406.

Contact Information

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Template for Letter of Intent

See page 8.

Budget Form

See Excel Form.

Missouri EPSCoR Seed Funding Intent to Submit Form

Proposal Title:

Project Summary (250 word limit)

Principal Investigator Contact Information

Name:	
Title:	
Department:	
Institution:	
Address:	
Telephone:	
Fax:	
Email:	

Co-Principal Investigator Contact Information

Name:	
Title:	
Department:	
Institution:	
Address:	
Telephone:	
Fax:	
Email:	

Co-Principal Investigator Contact Information

Name:	
Title:	
Department:	
Institution:	
Address:	
Telephone:	
Fax:	
Email:	

Suggested Reviewer 1

Name:	
Title:	
Department:	
Institution:	
Address:	
Telephone:	
Fax:	
Email:	

Suggested Reviewer 2

Name:	
Title:	
Department:	
Institution:	
Address:	
Telephone:	
Fax:	
Email:	

Suggested Reviewer 3

Name:	
Title:	
Department:	
Institution:	
Address:	
Telephone:	
Fax:	
Email:	