



STEM Faculty Summer Research Professional Development Program

Call for Applications 2014

“Energize New Mexico”

BACKGROUND

The New Mexico Experimental Program to Stimulate Competitive Research (NM EPSCoR) seeks to improve our understanding of how New Mexico can realize its energy development potential in a sustainable manner. The current focus areas include:

- Bioalgal Energy Development
- Geothermal Energy Resources and Sustainability
- Solar Energy Research
- Osmotic Power Development
- Uranium Transport and Site Remediation
- The Social and Natural Science Nexus
- Cyber infrastructure
- Communicating Research to the Public
- Broadening Participation in Science, Technology, Engineering and Mathematics

PROGRAM OBJECTIVES

The STEM Faculty Research Professional Development Program is designed to increase the impact of New Mexico EPSCoR on the undergraduate student population at New Mexico’s non-PhD granting institutions. The intent of the program is to increase the access of undergraduate students, especially women and members of underrepresented groups, to research experiences by increasing non-PhD granting institutions’ capacity to provide research experiences for students in a data intensive research environment.

PROGRAM COMPONENTS

1. EIMI Course

Selected participants will attend the Environmental Information Management Institute (EIMI), June 2 – June 20 2014, at UNM in Albuquerque; see <http://library.unm.edu/services/instruction/eimi.php>. All expenses for the course will be paid. The Institute will give participants the tools necessary to bring research to their campuses without large infrastructure needs. During this Institute, grantees will:

- Work with nationally known experts in the field
- Gain a significant competitive advantage in the job market
- Become familiar with all aspects of the data life cycle
- Learn how to manage data files, create databases and design web portals
- Explore state-of-the-art analysis and visualization techniques
- Learn techniques for managing, analyzing and visualizing geospatial data

2. Research Implementation Plan



Participants will work a minimum of 80 hours, including collaborating with a NM EPSCoR researcher, to learn about EPSCoR research and develop a Research Implementation Plan that connects NM EPSCoR research to the EIMI coursework. The Research Implementation Plan will be completed by August 11, 2014 and will include, but will not be limited to:

- A description of the overall research project to be implemented (the big picture);
- The mechanism by which data set(s) will be determined, shared, manipulated, and transferred to your institution;
- Where data will be stored;
- The infrastructure available at the participant's institution to provide students with research opportunities;
- Any professional development and job descriptions necessary for students and faculty participating in the research;
- Other programs that might be leveraged to entice students and/or other faculty to work on the research;
- The mechanism(s) that will be used to obtain buy-in, explain, and help connect students and faculty with the overall vision of the research project proposed (the big picture);
- The mechanism(s) for recruiting students and faculty to work on the research project;
- Plan for sustainability over the next 4 years including a description of the resources needed and budget required;
- Key milestones, topics, activities, and outcomes.

3. Implementation of Research Plan at Home Institution

Over the course of the 2014-2015 academic year, participants will implement their Research Implementation Plan at their home institution. Participants will provide progress reports quarterly, using a format provided by NM EPSCoR. Participants will also provide evaluation information as requested by the NM EPSCoR office.

ELIGIBILITY

Faculty members at any public (including Bureau of Indian Education) 2 or 4-year New Mexico institution of higher education that does not offer STEM PhD degree programs are eligible to apply. Only one faculty member can be chosen from a single institution but multiple faculty can submit applications from a single institution.

STIPEND

Selected participants will receive a \$5,000 stipend for one calendar year of involvement in the program, including participation in the EIMI course, development of a Research Implementation Plan and implementation of the plan at their home institution. Stipends will be paid in increments upon receipt of program deliverables; the schedule will be provided to selected participants. In addition, tuition, room, and board for the EIMI tuition course will be paid and participants will earn six graduate credits for successfully completing the EIMI.

Selected participants will be notified by May 9, 2014.



STEM Faculty Summer Research Professional Develop Program Application Form

Applicant Information:

Last Name: _____ First Name: _____
Phone #: _____ Email Address: _____
Institution Name: _____ Institution Location: _____
Current Program/Department: _____
Research Interest(s): _____

Teaching Load (Course Names/# credit hours):

Spring 2014:

Summer 2014:

Fall 2014 (anticipated):

Attach a brief statement (maximum one page) explaining your interest in the program and how you think it will benefit you and your institution.

Other Information:

Appendix 1: Attach a current resume or CV.

Appendix 2: Attach a letter from your department chair/dean indicating his/her support of your participation in the program.

APPLICATION SUBMISSION

Applications should be submitted as a single complete document with any graphics embedded in the document. Submit the document by email to: Dr. Dana McArthur (Dana.McArthur@sfcc.edu). Applications must be submitted electronically by 5:00pm May 2, 2014.

For additional information, contact Dr. Dana McArthur at: Dana.McArthur@sfcc.edu or 505-428-1843