KANSAS NSF EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH (EPSCoR)

October 2014

REQUEST FOR PROPOSALS:

EDUCATION & DIVERSITY GRANTS
In Climate or Energy Research or Atomic/Molecular/Optical Science

Proposals Due: November 3, 2014

Funded by the National Science Foundation and the State of Kansas through the Kansas Board of Regents (KBOR)
Program Name
Kansas NSF EPSCoR (Kansas National Science Foundation Experimental Program to Stimulate Competitive Research) Education & Diversity Grants.

Project Director

Source of Funds
The source of funding for Education & Diversity Grants is Kansas NSF EPSCoR, which receives its funding from the National Science Foundation, the Kansas Board of Regents (KBOR) and the participating universities.

EPSCoR is a program designed to fulfill the National Science Foundation's (NSF) mandate to promote scientific progress nationwide. The EPSCoR program is directed at those jurisdictions that have historically received lesser amounts of NSF Research and Development (R&D) funding. Twenty-eight states, the Commonwealth of Puerto Rico, Guam, and the U. S. Virgin Islands are currently eligible to participate.

The program operates under the premise that universities and their science and engineering faculty and students are valuable resources that have the potential to influence a state’s development in the twenty-first century much the same way that agricultural, industrial, and natural resources did in the twentieth century. Through this program, NSF establishes partnerships with government, higher education and industry that are designed to effect lasting improvements in a state's or region's research infrastructure, R&D capacity and hence, its national R&D competitiveness.

Objectives
In keeping with the overall NSF EPSCoR mission, the specific objectives of Kansas NSF EPSCoR are to:

- add significant and measurable value to the research capability in one or more of the designated focus areas of science, technology, engineering, and mathematics that are funded by the NSF;
- generate sustained non-EPSCoR funding from federal, state, or private sector sources as a result of Kansas NSF EPSCoR funding;
- increase diversity by enabling participation in the project’s activities by women and men, underrepresented minorities, and persons with disabilities to the extent possible within the scope of the project; and
- develop stronger linkages between research and education.
Purpose
Education & Diversity Grants are designed to enhance science, technology, engineering and mathematics (STEM) education in Kansas by supporting activities that will lead to an expanded STEM workforce or prepare a new generation for STEM careers in the areas of climate or energy research or atomic/molecular/optical science. These awards are targeted to leverage the educational strengths of the universities in Kansas. An Education & Diversity Grant proposal may target any level of the student population; the general public; K-12 teachers; community or four-year college faculty; or employees in the Kansas workforce. The initiative may employ formal or informal educational methods. Priority will be given to proposals with a significant component that increases diversity by enabling participation in the EPSCoR project’s activities by women and men, minorities, persons with disabilities and members of other underrepresented groups (such as first generation college students or participants in geographically underserved locales).

Examples of Eligible Activities
Due to the importance of building on existing program strengths, only proposals related to climate or energy research or atomic/molecular/optical science will be considered. These areas are the focus of the current EPSCoR initiatives (see http://www.nsfepscor.ku.edu for more information).

Below are examples of activities consistent with the Kansas NSF EPSCoR program objectives.

- Innovations in education that will expand student career options and facilitate the entry of members of underrepresented groups within the state (i.e., minorities, women and persons with disabilities) into STEM fields.
- Partnerships with other universities, four-year colleges or community colleges in Kansas that provide educational and/or research opportunities for faculty and/or students.
- Development of materials, collections, presentations, or media that extend STEM educational opportunities to targeted segments of the Kansas population.
- Design and implement programs that overcome barriers to existing educational resources in STEM.
- Professional development programs or other initiatives to enhance K-12 education in STEM.
- Programs that introduce K-12 students to STEM fields, such as a math or science summer camp.

Eligibility
Faculty members and principal academic administrators at Kansas State University, University of Kansas, Wichita State University, Emporia State University, Fort Hays State University, Pittsburg State University, Washburn University and Haskell Indian Nations University may submit proposals as Principal Investigators.
Only projects with opportunities in areas that are related to the current Kansas NSF EPSCoR focus of climate or energy (Track 1) or atomic/molecular/optical science (Track 2) ([http://www.nsfepscor.ku.edu](http://www.nsfepscor.ku.edu)) are eligible for Education & Diversity Grants.

**Amount and Duration of Award**
An Education & Diversity Grant may receive up to $20,000 direct costs for up to ten months to be expended between December 1, 2014 and September 30, 2015. This is an abbreviated period due to the fact that these awards are funded as part of the final year of the current Kansas NSF EPSCoR award.

**Matching Funds**
Education & Diversity Grants do not require matching funds.

**Proposal Preparation and Submission Instructions**
Proposals must be prepared as a single PDF including all of the components in the order listed below. Proposals must be submitted by the institution’s research office (or equivalent), which will send the PDF as an email attachment to the Kansas NSF EPSCoR Project Director at [nsfepscor@ku.edu](mailto:nsfepscor@ku.edu) by 5:00 p.m., Monday, November 3, 2014. The Proposal should follow the NSF margin and spacing requirements in the Proposal and Award Policies and Procedures Guide, part 1: Grant Proposal Guide (GPG), NSF 14-1 ([http://www.nsf.gov/pubs/policydocs/pappguide/nsf14001/gpg_index.jsp](http://www.nsf.gov/pubs/policydocs/pappguide/nsf14001/gpg_index.jsp)) and include:

<table>
<thead>
<tr>
<th>Components</th>
<th>Guidelines</th>
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<tbody>
<tr>
<td>Cover Sheet</td>
<td>Prepared using the form in NSF’s forms kit (<a href="http://www.nsf.gov/pubs/2000/nsf002/kit/forms.htm">http://www.nsf.gov/pubs/2000/nsf002/kit/forms.htm</a>) or in FastLane. If the initiative will result in a proposal submission, specify the NSF center or program where the proposal will eventually be targeted.</td>
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<tr>
<td>Project Summary</td>
<td>Prepared in accordance with NSF 14-01. It must clearly address in separate statements: (1) the intellectual merit of the proposed activity; and (2) the broader impacts resulting from the proposed activity.</td>
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<tr>
<td>Project Description</td>
<td>Prepared in accordance with NSF 14-01, except limited to five or fewer pages. The project description should describe:</td>
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<td>• The purpose and rationale for the initiative</td>
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<td>• Specific goals and expected outcomes</td>
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<td>• The proposed activities and how they will achieve the specific project goals and the purpose of Education &amp; Diversity Grants (See “Purpose,” page 3)</td>
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<td>• A method for evaluating project success/student outcomes (as appropriate)</td>
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Biographical Sketch  
For the PI and Co-PI’s, prepared in accordance with NSF 14-01.

Budget  
Prepared on the Kansas NSF EPSCoR Budget Form available on the Kansas NSF EPSCoR web site (http://www.nsfepscor.ku.edu/RFPBudget_020205.xls). Show direct costs only. Do not include any indirect costs (F&A). When awards are made F&A will be added on top of the direct costs requested at the appropriate institutional rate.

Budget Justification  
Prepared in accordance with NSF 14-01.

Project Timeline  
1 page that specifies when the project activities and expenditures will occur during the term of the award.

Current and Pending Support  
Prepared in accordance with NSF 14-01

Facilities  
Prepared in accordance with NSF 14-01

Letter(s) of Support  
From the department chair or research office (or equivalent) for each partnering institution or organization that describes the partnership arrangements, participation commitments, access to facilities, teacher or student time, or other resources required for the success of the initiative.

Review Criteria

Proposals for activities that show the greatest potential for long-term impact on enhancing education and diversity in climate or energy research or atomic/molecular/optical science areas in Kansas will receive priority.

In reviewing proposals, Kansas NSF EPSCoR uses 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 Proposal Guide (GPG), NSF 14-1 and listed below. The criteria include considerations that help define them. These considerations are suggestions and not all will apply to any given proposal. While investigators must address both criteria of Intellectual Merit and Broader Impacts, reviewers will be asked to address only those considerations that are relevant to the proposal being considered and for which he/she is qualified to make judgments.

When evaluating NSF 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 the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
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?

Kansas NSF EPSCoR will give careful consideration to the following in making funding decisions.

**Integration of Research and Education**

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

**Integrating Diversity into NSF Programs, Projects, and Activities**

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.
General Conditions of Award

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

During the term of the award and for two years after the end date, the principal investigator must inform the Project Director of: 1) changes in the principal investigator’s contact information, 2) proposals submitted, and 3) awards received as a result of the Kansas NSF EPSCoR award. Information about proposals and awards should include the title of the proposal or award, the PI and, when applicable, co-PIs, the funding agency, the amount of the proposal or award, and its duration.

During the term of the award the principal investigator and co-principal investigators are encouraged participate in the annual Statewide EPSCoR Conference.

The Principal Investigator of each project will be required to submit a final project report. The PI will receive more information about reporting requirements and deadlines in the award letter.

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 EPS-0903806 and support from the State of Kansas through Kansas Board of Regents.*

The Principal Investigator must obtain from the school board or comparable authority responsible for the schools considering participation in the project, written approval prior to involvement of pre-college students in pre-college education research and development, pilot-testing, evaluation, and revision of experimental and innovative pre-college curriculum.

The Principal Investigator must include in every publication, testing, or distribution agreement involving instructional materials developed under this award (including, but not limited to, teachers' manuals, textbooks, films, tapes, or other supplementary material) a requirement that such material be made available within the school district using it for inspection by parents or guardians of children engaged in educational programs or projects using such material of that school district.