Montana University System
Office of the Commissioner of Higher Education

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February 16, 2009

To: All Faculty of the Montana University System
From: The Montana University System Science and Technology Advisory Committee
Re: NSF-EPSCoR RII Track 1: Call for Pre-proposals

The mission of NSF-EPSCoR is to assist the National Science Foundation in its statutory function "to strengthen research and education in science and engineering throughout the United States and to avoid undue concentration of such research and education". EPSCoR goals are:

a) to provide strategic programs and opportunities for EPSCoR participants that stimulate sustainable improvements in their R&D capacity and competitiveness;

b) to advance science and engineering capabilities in EPSCoR jurisdictions for discovery, innovation and overall knowledge-based prosperity.

The EPSCoR program is directed at those jurisdictions that have historically received lesser amounts of NSF Research and Development (R&D) funding. Twenty-five states, the Commonwealth of Puerto Rico and the U. S. Virgin Islands currently participate. 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.

EPSCoR uses three major investment strategies to achieve its goal of improving the R&D competitiveness of researchers and institutions within EPSCoR jurisdictions. These strategies are:

- Research Infrastructure Improvement Program (RII)
- Co-Funding of Disciplinary and Multidisciplinary Research
- Workshops and Outreach

"RII Track-1" awards provide up to $4 million per year for up to five years. They are intended to improve the research competitiveness of jurisdictions by improving their academic research infrastructure in areas of science and engineering, supported by the National Science Foundation and critical to the particular jurisdiction's science and technology initiative or plan. These areas must be identified by the jurisdiction's EPSCoR governing committee as having the best potential to improve the jurisdiction's future R&D competitiveness.

The Montana University System Science and Technology Advisory Committee (MUSSTAC) is the state's "EPSCoR governing committee". The MUSSTAC recently completed the state Science and Technology Plan titled: "Montana Science Serving Montana Citizens," a copy of which is posted at http://www.mus.edu/research/. Five major research areas form the focus of this Plan:

- Energy Sciences and Engineering
- Health and Biomedical Sciences
- Agricultural Science
- Environmental and Ecosystem Science
- Materials Science and Engineering

Announcement for the next RII Track 1 Award Cycle from NSF is expected in July 2009 with the anticipated proposal deadline in October, 2009.

In anticipation of the NSF-EPSCoR RII Track 1 announcement, the MUSSTAC is calling for pre-proprosals from the MUS faculty. The pre-proposals will be the mechanism through which decisions are made as to the focus area(s) for the Montana submission to the EPSCoR competition.

Criteria for Pre-proposal evaluation:

- Outstanding Scientific and Intellectual Merit. It is important to note that, because of the magnitude of the anticipated awards, approval of the next round of RII grants by NSF will require approval not only by the Director's Review Board but also by the National Science Board.
- The proposed research focus must directly address one or more focus areas described in the MUS Science and Technology Plan.
- The proposed research must be consistent with the mission of NSF and reflect work that would be competitive for funding through one of the NSF Directorates if submitted separately.
- There is a documented cadre of faculty that would lend expertise to the selected research theme or themes, and there is clear leadership within the faculty group. Note that it is highly likely that faculty expertise for the theme will not reside entirely within a single institution; inter-institutional collaboration is expected.
- There is clear definition of the infrastructure proposed to be enhanced, e.g. if new faculty hires or expansion of graduate offerings are proposed, then the appropriate administrators must be committed to the continuation of these efforts.
- The proposed research should demonstrate the capability to serve as component or foundation of competitive proposals for significant and large centers in research areas funded by NSF, or that could lead to successfully competing for large center awards from DOE, DOD, or other agencies. Examples include: NEON, ATST, STC, ERC at NSF and Energy Frontier Research Centers or other Energy Centers to be proposed by DOE.

Process and Timeline:

February 16	Announce "Call for Pre-proposals" to all MUS faculty accompanied by the MUS Science and Technology Plan
March 13	Pre-proposals due by close-of-business to UM or MSU Office of Research
March 17	UM and MSU forward proposals to Deputy Commissioner for distribution to MUSSTAC
April 17	Selected Pre-proposals announced by Deputy Commissioner
May 1	Montana EPSCoR leadership determined by MUSSTAC for full submission
May – August	Full proposal development (specific guidelines to be announced in April)
October	Anticipated submission of Montana Track I proposal

Pre-proposal format:

- Page limit: The pre-proposal will be limited to a total of five pages (11-point font), including all material to be considered. Appendices are not allowed.

- Identification information:
  - Title of Project
  - Principal author(s)- names, departments, institutions
  - Participating scientists- names, departments, institutions
  - Signatures: Principal author(s), appropriate Dean, Chief Research Officer of all MUS institutions involved
  - Science and Technology Plan focus area(s) being addressed

- Project Summary: Maximum one-half page that describes the science involved

- Project Narrative:
  - Scientific and infrastructure-building goals and objectives
  - Significance to MUS S&T Plan and to NSF mission
  - Project Description
  - Description of the Team, including proposed leadership. This may be best accomplished in a table format.
  - Major budget elements of proposal (no need to attach amounts at this stage)