

The ReSTEM Institute Jump Start Funding Program – Spring 2016

The ReSTEM Jump Start Funding Program is designed to provide seed funding for MU faculty to help initiate research projects that 1) are well aligned with the ReSTEM mission and goals; 2) can help build ReSTEM collaborations and partnerships; and 3) have potential to yield fruitful results such as externally funded grants or relationships with foundations and STEM education partners. Proposals may be submitted by individual faculty members or teams; at least one investigator on the team should be a faculty member with an appointment in the MU College of Education. Applicants may request up to \$20,000 through the Jump Start Program, although most grant awards administered through ReSTEM will be smaller than this maximum request value. Jump Start projects should be planned for one year or less.

Proposal Format

Proposals for ReSTEM Jump Start funding should include the following elements.

- Title page with Abstract
- Project Narrative
- References
- Budget request with justification

The title page with abstract should present the project title and names and contact information for the investigators. The abstract should be 300 words or less. The project narrative should address a) objectives and significance of the proposed work, b) methods and approaches planned, c) how ReSTEM support will be used to advance the project, d) anticipated outcomes, and e) results of prior ReSTEM support (if applicable). The narrative should be presented in no more than five single-spaced pages. Full citations for literature referenced in the narrative should be provided in a reference section. A detailed budget should be provided with a justification of the requested resources. The title page with abstract, reference section, and budget request with justification are not part of the five-page limit for the project narrative. Applicants are strongly encouraged to send a draft budget to Marilyn Soucie (souciema@missouri.edu) for review prior to submission of the full proposal. Complete proposals should be submitted as a single pdf document via email to Troy Sadler (sadlert@missouri.edu). Proposals that do not conform to these formatting guidelines will be returned to the investigators without review.

Timeline

- January 27, 2016: Jump Start Funding announcement
- March 25, 2016: Proposal submission deadline
- May 2, 2016: Communication of funding decisions

Review Process

Proposals will be reviewed by scholars with expertise in STEM education research including faculty and staff affiliated with the ReSTEM Institute as well as external

reviewers. Awards will be made based on reviewer feedback and the availability of funds. The following criteria will be used in the review of proposals.

- **Project Focus**
 - To what extent does the proposal articulate important problems or issues (related to mathematics, science, engineering and/or integrated STEM education) to be explored and/or resolved?
 - To what extent are the proposed methods and approaches appropriate for addressing the problems or issues identified?
- **Alignment with ReSTEM Mission and Goals**
 - To what extent will the proposed project support the ReSTEM mission to study and create reforms of STEM education in K-12 schools?
 - How will the proposed project foster school-wide or system-wide reform of STEM education, enhance STEM teacher professional development, develop and disseminate research-based STEM education materials, and/or empower students to learn and engage in STEM practices?
- **Expected Outcomes**
 - What outcomes will the project likely yield in terms of new knowledge, new partnerships, and/or publications?
 - To what extent will the proposed work help to position the investigators for external funding?
- **Track Record (for applicants who have received prior ReSTEM support)**
 - What were the applicants able to accomplish with prior ReSTEM support?
 - In what ways have the applicants been able to contribute to the ReSTEM mission and activities?

Award Administration

Faculty who receive ReSTEM Jump Start funding will need to work with ReSTEM fiscal staff for administration of the award. Awardees will be expected to submit a final report within three months of conclusion of the project. The final report should include a complete description of activities pursued through the project, project outcomes, and a detailed accounting of all expenses.

General Expectations associated with ReSTEM Support

Faculty members who receive ReSTEM support, including Jump Start funding, are expected to request designation as a ReSTEM Faculty Affiliate (if they do not already have Affiliate status). Faculty receiving ReSTEM support are expected to contribute to ReSTEM sponsored events including the ReSTEM Research Series, which is a venue for sharing STEM education research. In most cases, ReSTEM support should be leveraged for the pursuit of external funding. It is expected that faculty who have received ReSTEM support for early phases of research will explore ways in which to collaborate with ReSTEM for the submission of external funding opportunities.

Information about the ReSTEM Institute

The ReSTEM Institute is a research center based at the University of Missouri College of Education. ReSTEM catalyzes and studies innovation and reform of K-12 STEM education.

The **ReSTEM mission** is to study and create reforms of STEM education in K–12 schools. Engaging *all* learners in mathematical, scientific and engineering practices is the guiding principle for these reforms.

The Institute recognizes that reform of STEM education in K–12 schools is a complex and dynamic process that necessitates the coordination of multifaceted transformations to school and classroom environments. The ultimate goal of these efforts is the improvement of teaching and learning such that *all* students can engage substantively in mathematical, scientific and engineering practices.

ReSTEM achieves this mission through pursuit of the following **goals**:

1. Foster school-wide reform of STEM education.
2. Enhance STEM teacher development for the support of student learning and achievement.
3. Develop and disseminate research-based STEM education materials for K-12 classrooms.
4. Empower all students to use mathematical, scientific and engineering practices such that they are prepared to succeed in school, careers and life.