OVERVIEW

The Office of Academic Affairs and the Office of Research are pleased to offer a new Seed Funding Program focused explicitly on STEM (Science, Technology, Engineering, and Mathematics) activities in underserved K-12 area schools. The Program is designed to support UA faculty who have interests in working in underserved K-12 schools in the West Alabama area to increase students’ exposure to and awareness of STEM activities and careers. The funding is specifically designed to support the subsequent submission of external grants that are significant and sustainable.

This RFP is designed to encourage faculty to be innovative and to take an expansive view of existing definitions of STEM as an interdisciplinary approach to problem-based learning. Faculty are urged to partner with teachers in underserved schools to engage K-12 students in real-world activities in the application of STEM in contexts that make connections among school, community, and workforce needs. The overarching goal is to enhance K-12 students’ STEM literacy by helping them (1) to become more aware of STEM career opportunities and (2) to develop a larger understanding of the role of STEM topics in their daily lives.

AWARD AMOUNT AND SUBMISSION DEADLINE

Ten grants up to $5,000 each will be awarded each of the next three years. For this initial round, proposals must be submitted electronically as a PDF document to Associate Provost B. Joyce Stallworth at jstallwo@ua.edu by 5:00 p.m. on April 29, 2013. Faculty submitting proposals will receive an email confirming whether or not their proposals were received by the deadline.

Funds will be available to award recipients by June 1, 2013. Funds awarded must be spent or encumbered by September 1, 2014. A final report must be presented in early fall, 2014 during a poster showcase of projects.

External grant proposals resulting from a Spring 2013 seed funding award must be submitted to an external agency by May 1, 2015. Priority will be afforded to seed funding proposals which clearly articulate a plan for meeting this external submission deadline.

GUIDELINES

All proposals must include the following sections:

1. Project/research/activity overview and significance;
2. Design and implementation plan;
3. Plan for submission of external grant in 2015;
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4. Research or assessment plan
   a. Literature review
   b. Research questions
   c. Data collection
   d. Data analysis
   e. Findings
   f. Conclusions
5. Timeline of activities;
6. Budget and budget justification;
7. Results of any prior project related to the currently proposed project;
8. PI(s) vita summary (2 page limit);
9. PI signature and date;
10. Department chair signature and date;
11. References; and
12. Optional letter of support from prospective school partner

PROPOSAL NARRATIVE GUIDELINES

1. All funds must be expended and a final report, including a project assessment, must be submitted to the Associate Provost with the Fall 2014 poster showcase of projects/activities. Specific date and time are TBA.

2. Ten proposals will be funded each year. All awards are subject to the availability of funds. Faculty members must serve as the PI. However, faculty are encouraged to include peers, University students, and K-12 teachers as Co-PI(s) and/or as a research team.

3. Institutional Review Board (IRB) approval must be secured for any project involving research with human subjects before the project actually commences.

4. Proposals are limited to new projects or clearly articulated extensions of existing programs/projects/
activities.

5. Proposals should align with effective practices in STEM and national standards and state standards (e.g., Common Core Mathematics Standards, Alabama State Department of Education Course of Study Standards in STEM).

6. Seed grants are not intended for salary support. The only exception is that some of the funds can be allocated for undergraduate or graduate student stipends if students are employed temporarily to complete project tasks.

7. The Associate Provost and the Provost, on recommendation from the Academic Affairs/Office of Research Seed Funding Committee, will make the final decision and will provide feedback on proposals not recommended for funding.

8. Proposals that are designed to involve UA students in ways that extend the classroom experience and maximize their scholarly experiences are encouraged. This may involve, but does not require, a formal service-learning plan.

9. Preference will be given to proposals that build capacity within the target schools (e.g., addressing professional development for teachers so that STEM is consistently integrated into the curriculum) rather than those that merely do or provide something for the schools.

PROPOSAL PAGINATION GUIDELINES

Submit proposals as Word or PDF documents no more than 12 double spaced pages excluding references, CVs, and letters of support. The margins should be one inch on all sides, and the font size should not be smaller than 11pt using modern computer type (e.g., Calibri, Times, Arial). All pages should be numbered, and a cover page should list the PI’s name, department address, email address, and telephone number.

PROPOSAL REVIEW PROCESS

The Seed Funding Committee will use a 5-point rubric based on the six categories below to evaluate each proposal. The ten highest ranked proposals will be selected as award recipients. Those proposals not selected for funding will receive feedback from the Committee.

Below are the review criteria categories.

1. All proposal guidelines effectively addressed.

2. Potential for advancement in the field (Does the proposal reflect scholarship and effective practices in STEM)
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for underserved K-12 students?).

3. Potential positive impact on K-12 students.

4. Commitment to building STEM capacity in underserved schools.

5. External fundability potential.

6. Replicability (Could other researchers replicate the program/project/activity design in similar school settings?).

Selected Resources:

NSF Funding Opportunities: http://www.nsf.gov/funding/index.jsp

NSF I TEST Learning Resource Center: http://itestlrc.edc.org/

Successful K-12 STEM Education: http://successfulstemeducation.org/

Community for Advancing Discovery Research in Education: http://www.cadrek12.org/

The STEM Education Coalition:


Selected Examples of Innovative K-12 STEM projects:

MC2 STEM High School: http://www.edutopia.org/stw-college-career-stem-school

Clark Magnet School: http://www.edutopia.org/blog/clark-magnet-TEAMS-arts-academics-stem