Grant Title: ADVANCING INFORMAL STEM LEARNING (AISL)

Funding Opportunity Number: NSF 14-555.


Area of Research: Research and development of STEM learning and emerging STEM learning environments.

Release and Expiration: Not listed.


Amount: $115,000 to $3,000,000.

Length of Support: (1) Pathways projects: up to $300,000/ up to two years; (2) Research in Service to Practice projects: $300,000 to $2,000,000/ two to five years; (3) Innovations in Development projects: up to $3,000,000/ up to five years; (4) Broad Implementation projects from up to $3,000,000/ two to five years; (5) Conferences, Symposia, and Workshops projects up to $250,000/ up to two years; and (6) Science Learning+ Planning projects up to $115,000/ one year in 2015, and Partnership projects up to $2.4 million/ up to five years in 2016.

Eligible Applicants: Universities and Colleges.

Summary: The Advancing Informal STEM Learning (AISL) program seeks to advance new approaches to and evidence-based understanding of the design and development of STEM learning in informal environments for public and professional audiences; provide multiple pathways for broadening access to and engagement in STEM learning experiences; advance innovative research on and assessment of STEM learning in informal environments; and develop understandings of deeper learning by participants. (1) Pathways projects allow practitioners and researchers an opportunity to undertake exploratory work or feasibility studies that have the potential to lead to the submission of innovative, field-advancing proposals of other project types. This type of project should produce evidence, findings, and/or deliverables that form the basis of further innovative research and development work. The proposal must explicitly state how the project informs future work and how it contributes to the advancement of STEM learning. (2) Research in Service to Practice specifically focuses on research that advances knowledge and the evidence base for practices, assumptions, broadening participation, and emerging educational arrangements in STEM learning. Research in Service to Practice proposal have knowledge generating questions. (3) The Innovations in Development project type is specifically expected to result in innovative models, programs, technologies, assessments, resources, and/or systems for any area of STEM learning. Projects should build on evidence from prior development and research efforts in the field. An explicit theoretical framework as well as either a logic model or theory of action should guide projects. Proposals must articulate a plan and process for the design, development, implementation, and evidence-building components (based on research and/or evaluation) of the proposed work. Iterative, design-based research approaches are encouraged, if appropriate. (4) The Broad Implementation project type specifically supports the expansion of models, programs, technologies, assessments, resources, research, and/or systems that have a documented record of success, innovation, and/or evidence-based knowledge building. Proposals must articulate a plan and process for the design, development, implementation, and evidence-building components of the proposed work. Project design may address innovative integration, incremental improvements, adaptations, or trials under typical conditions. (5) Conferences and workshops should be well focused, relate to the goals of the AISL program, and generate products usable by practitioners and researchers. (6) The vision of the Science Learning + program is to make steps to improve the knowledge bases and practices of informal STEM experiences to better understand, strengthen and coordinate their vital role in STEM engagement and learning.