

Advancing Informal STEM Learning (AISL)
Solicitation NSF 15-593
<http://www.nsf.gov/pubs/2015/nsf15593/nsf15593.pdf>

Full Proposal Deadline(s): November 8, 2016, (due by 5 p.m. proposer's local time)

Award: \$28 - \$38M in FY2016. (est. 49 to 71 awards with a duration up to 5 years)

Purpose: To advance new approaches that provide multiple pathways for broadening access, engagement and innovative research in STEM learning in informal environments in developing a deeper learning by participants.

Particular Interest: AISL wants the advancement of informal STEM learning field beyond individual project impact. To be achieved by making funding decisions of programs and place emphasis on the ability a project can demonstrate knowledge-building, innovation, strategic impact and collaboration. Audiences for AISL projects must engage in participants from both public and professional audiences:

- **Public Audiences:** learners of any age, educational level, geographic or cultural background, geographic regions and economically challenged communities and underrepresented individuals and groups
- **Professional Audiences:** any aspect of research or development of STEM learning in informal environments which can include STEM educators, evaluators, education and learning researchers, technologists, media professionals doing outreach in informal settings. Focus on public audiences, professional audiences should be clear to how the project design and STEM learning component is relevant and appropriate to targeted audience and age levels.

Long-Term Goals: Supports seven types of projects that are available to serve different functions and support varied strategies for guiding proposed work.

- **Collaborative Planning:** provide groups the support necessary to increase partnerships, understanding, and influence development of ideas and strategies of complex issues in the field.
- **Exploratory Pathways:** Investigate issues and approaches in informal STEM learning to establish the basis for future research, design, and development of innovations or approaches.
- **Research in Service to Practice:** focuses on research that advances knowledge and the evidence base for practices, assumptions, broadening participation or emerging educational arrangement in STEM learning in informal environment
- **Broad Implementation:** supports the expansion or reach of models, programs, technologies, assessments, resources, research, and systems that have a documented record of success, innovation or evidence-based knowledge building.
- **Conferences:** Must be used for conferences, symposia, or workshops that are well-focused related to the goals of AISL programs.
- **Informal STEM Learning Resource Center:** (one center will be funded), Advance R&D activities and findings that have potential to improve innovation, knowledge building and networking. Consider the broad domain of research, practice, and professional community building. Encourage participation by professionals in informal STEM learning and science communications workforce.

Successful Project Will: address the priorities of knowledge-building, innovation, strategic impact, and collaboration.

- **Knowledge-building:** must describe and make a strong case for how a project advances the knowledge base through research, evaluation or a combination of both that describe measures of learning outcomes of targeted audiences. Consider building from relevant research agendas develop in recent years. <http://www.informalscience.org>.
- **Innovation:** Addresses important areas for development and advances of the informal STEM learning field. Overall intent or focus that addresses the question of what changes offer advances in the field.
- **Collaboration:** Project should leverage resource partners to achieve more significant outcomes. Extend project impacts with synergies generated by competencies and resources of partners. Practitioners should be an integral component of all projects encouraging collaborators that are not involved in informal STEM learning. PIs must demonstrate and understand the challenges of collaboration and propose for addressing them.