

Program Overview

STEM Expert Facilitation of Family Learning in Libraries and Museums (STEMeX)

National Leadership Grants for Libraries (NLG - Libraries) and National Leadership Grants for Museums (NLG - Museums), under which this special initiative falls, support projects that address challenges faced by the library and museum fields and that have the potential to advance practice in those fields. Successful projects will generate results such as new tools, research findings, models, services, practices, or alliances that can be widely used, adapted, scaled, or replicated to extend the benefits of federal investment.

STEMeX is a special initiative that invites proposals for research on informal educational approaches that leverage community Science, Technology, Engineering, and Math (STEM) professionals in the broadest sense. Funded research projects will create a foundation for reaching children and families from diverse economic, social, and cultural backgrounds, with different levels of knowledge about STEM.

Successful STEMeX projects must include all of the following elements:

- *Activities that simultaneously address learning in both libraries and museums*
- *Incorporate existing learning sciences theory*
- *Focus upon children ages 6 to 10, and their families*
- *Incorporate inquiry-based STEM programs delivered by scientists, engineers, and related technical practitioners*
- *Address the role of expert oral narratives (e.g., storytelling, personal histories, and analogies) as part of object-based science inquiry*
- *Incorporate how STEM experts can use objects - broadly defined and including specimens collected by researchers, collection materials and their representations, experts' equipment, electronics, books, photographs, models and journals - to scaffold the development of STEM knowledge and skills and promote interest in, and affinity, with STEM among family members*
- *Products should be adoptable and adaptable by museums and libraries of various sizes, disciplines, and resources*