

NATIONAL SCIENCE FOUNDATION

Request:

- We join the larger science community – including the Association of Science-Technology Centers, Association of Science Museum Directors and National Science Collections Alliance – in urging Members of Congress to continue to recognize the value of informal STEM education and research by:
 - Restoring the proposed reduction for the Informal Science Education (ISE)/Advancing Informal STEM Learning (AISL) program at the National Science Foundation (NSF) to \$61.4 million – the FY 2012 funding level.
 - Supporting funding for the NSF Directorates for Biological Sciences; Education and Human Resources; Geosciences; and Social, Behavioral, and Economic Sciences to ensure funding for museum research and collections, which underpin and enrich STEM education.

Introduction:

The National Science Foundation (NSF) is an independent federal agency created by Congress in 1950 "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..." With an annual budget of \$7.03 billion (estimated) for FY 2012, NSF is the funding source for approximately 20 percent of all federally supported basic research conducted by America's colleges and universities. In many fields such as mathematics, computer science, and the social sciences, NSF is the major source of federal backing. NSF also is the primary funder for fundamental biological, geological, and anthropological research responsible for about two-thirds of federal funding for university research and research conducted at academic and non-academic natural history museums and science centers. The agency is also charged with promoting the vitality of the nation's science, technology, engineering, and mathematics (STEM) research and education enterprises.

The mission of NSF's Directorate for Education and Human Resources (EHR) is to achieve excellence in U.S. STEM education at all levels and in all settings (both formal and informal) in order to support the development of a diverse and well-prepared workforce of scientists, technicians, engineers, mathematicians and educators and a well-informed citizenry that have access to the ideas and tools of science and engineering. The purpose of these activities is to enhance the quality of life of all citizens and the health, prosperity, welfare and security of the nation.

EHR's Informal Science Education (ISE) program – funded at \$61.4 million in FY12 – supports innovation anywhere, anytime, lifelong learning, through investments in research, development, infrastructure, and capacity-building for STEM learning outside formal school settings. Like all NSF programs, ISE invests in Conferences, Symposia, and Workshops; the ISE program also invests in five types of projects that are specific to the program: Research; Connecting Researchers and Public Audiences; Pathways; Full-Scale Development; and Broad Implementation.

It is worth noting that, in addition to Informal Science Education, the Directorates for Biological Sciences, Education and Human Resources, Geosciences, and Social, Behavioral & Economic Sciences have all supported museums in the areas of field and collections-based research, collections improvements and digitization, database development, and educational programming. Museum exhibitions and educational programs and resources are built on a firm foundation of research, and museum researchers are making major original contributions to the understanding of important issues such as changes in climate, environments, biodiversity, and human culture.

Talking Points:

Millions of Americans of all ages and backgrounds learn about STEM each year by visiting museums, science centers, public gardens, zoos, and aquariums.

In 2009, the National Research Council of the National Academies released a report entitled *Learning Science in Informal Environments: People, Places, and Pursuits*, which found:

- “Each year, tens of millions of Americans, young and old, explore and learn about science by visiting informal learning institutions, participating in programs, and using media to pursue their interests.”
- “Do people learn science in nonschool settings? This is a critical question for policy makers, practitioners, and researchers alike – and the answer is yes.”
- “Designed spaces – including museums, science centers, zoos, aquariums, and environmental centers – can support science learning. Rich with real-world phenomena, these are places where people can pursue and develop science interests, engage in science inquiry, and reflect on their experiences through sense-making conversations.”
- “Virtually all people of all ages and backgrounds engage in informal science learning in the course of daily life. Informal environments can stimulate science interest, build learners’ scientific knowledge and skill, and – perhaps most importantly – help people learn to be more comfortable and confident in their relationship with science.”
- “Informal environments can have a significant impact on science learning outcomes for individuals from non-dominant groups who are historically underrepresented in science.”

Status:

- Informal Science Education funding is determined annually in the Commerce, Justice, Science, and Related Agencies Appropriations bill. The President’s budget request includes only \$47.82 million for FY13, a significant, \$13.58 million (22%) reduction from the FY12 level.
- The request also proposes a name change for the program, from “Informal Science Education” to “Advancing Informal STEM Learning.”

NSF ISE/AISL Funding History:

	FY08 enacted	FY09 enacted	FY10 enacted	FY11 enacted	FY12 enacted	FY13 proposed
Appropriation (in millions)	\$64.5	\$65.7	\$66.0	\$64.2	\$61.4	\$47.8

For more information, please contact American Association of Museums’ Government Relations at 202-289-1818 or visit us online at www.speakupformuseums.org.