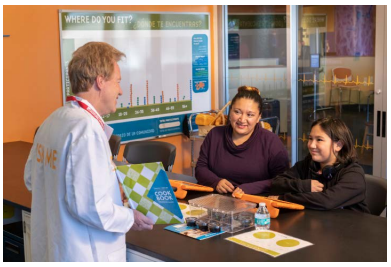
ASTC Association of Science and Technology Centers

Federal Agencies Support a Diversity of Science Center and Museum Programs

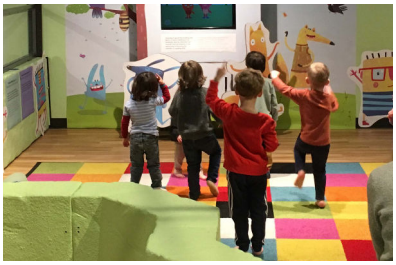
National Institutes of Health



DENVER MUSEUM OF NATURE AND SCIENCE | DENVER, CO

Science Education Partnership Award, National Institute of General Medical Sciences

This project places the power of citizen science in the context of public health: There is an undeniable link between participating in and understanding health research and being an advocate for one's own health outcomes. Participants in More Than Just a Taste of Citizen Science gain greater understanding of the complex nature of health research and its impact on how data is used to drive decision making.

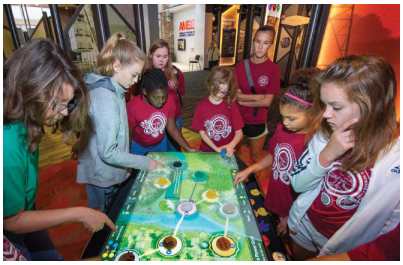


OREGON MUSEUM OF SCIENCE AND INDUSTRY (OMSI) | PORTLAND, OR

Science Education Partnership Award, National Institute of General Medical Sciences

In collaboration with neuroscientists at the Oregon Health and Science University, museum professionals, and community partners, OMSI is creating a bilingual (Spanish/English) traveling exhibition and educational programs to promote public understanding of neuroscience research and its relevance to healthy brain development in early childhood. The exhibition and programs will focus on current research on the developing brain, up to age five, and will reach a national audience of adult caregivers of young children and their families, with a special emphasis on Latino families.

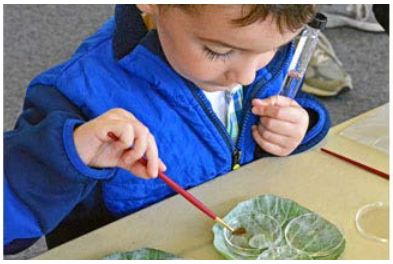
Department of Energy



AMERICAN MUSEUM OF SCIENCE AND ENERGY | OAK RIDGE, TN

AMSE, which is owned by the Department of Energy, tells the story of national and global security, science, research, engineering, technology development, and environmental restoration successes that have occurred in Oak Ridge since the very first days of the Manhattan Project. It recently moved from its beloved but aging, 54,000-square-foot facility into a new, 18,000-square-foot new space, with state-of-the-art new exhibits. To engage its community in the move, the museum worked with an array of partners to develop five new, locally flavored exhibitions and programs that melded a science-rich local history, civic pride, culture, and enthusiasm for STEM engagement into something uniquely Oak Ridge. This new approach has launched the museum on a new course to becoming a hub in a "hub and spoke" heritage and science tourism ecosystem that includes other important science and history sites in the region.

Department of Agriculture



PEORIA RIVERFRONT MUSEUM | PEORIA, IL

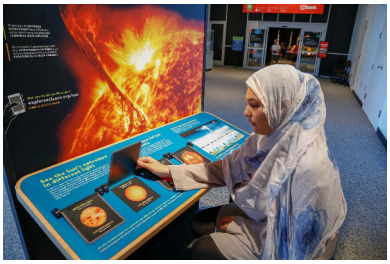
Outreach Committee, National Center for Agricultural Utilization Research, Agricultural Research Service

At Science Rocks!, an annual Saturday event at the museum, parents and kids meet local scientists and explore five hands-on activities and demonstrations relating to the National Center for Agricultural Utilization's (NCAUR's) diverse research projects in agricultural production. NCAUR also supports a bi-annual Educator's Open House at the museum, where local students and teachers have an opportunity to learn about resources and opportunities available.

National Aeronautics and Space Administration

ORLANDO SCIENCE CENTER | ORLANDO, FL
Teams Engaging Affiliated Museums and Informal Institutions (TEAM II), Office of STEM Engagement

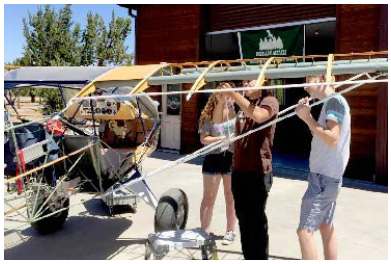
STEM Satellites is a mobile mathematics and science initiative for Orlando metropolitan area children's hospitals. This project engages chronically and critically ill children ages 9–19 who face the greatest educational disparities in NASA-inspired STEM learning mobile exhibits. The Orlando Science Center, in partnership with the University of Central Florida, works with three local hospitals to deliver high-quality STEM education at each hospital. The STEM Satellites project goals include promoting lifelong learning and STEM literacy for chronically and critically ill children, motivating children to pursue STEM learning and understanding of NASA's missions and increase their interest in STEM professions.



NATIONAL INFORMAL STEM EDUCATION NETWORK |
ALL 50 STATES, PUERTO RICO, AMERICAN SAMOA, AND GUAM
Science Activation Program, Science Mission Directorate

The Space and Earth Informal STEM Education (SEISE) project is raising the capacity of museums and informal science educators to engage the public in Heliophysics, Earth Science, Planetary Science, and Astrophysics, and their social dimensions. By utilizing NASA subject matter experts, NASA assets and data, and existing educational products and online portals, NISE Net is creating compelling learning experiences that will be widely used to share the story, science, and adventure of NASA's scientific explorations of planet Earth, the solar system, and the universe beyond. In 2017–2020, the SEISE project will distribute 1,200 hands-on activity toolkits, 52 small footprint exhibitions, and professional development opportunities to hundreds of museums.

National Science Foundation



ARIZONA SCIENCE CENTER & THE CENTER OF SCIENCE AND INDUSTRY |
RURAL ARIZONA
Advancing Informal STEM Learning (AISL), Directorate for Education and Human Resources

The Rural Activation and Innovation Network (RAIN), led by Arizona State University in partnership with ASC and COSI, provides rural and remote communities with informal STEM learning opportunities to four underserved regions in Arizona. In collaboration with community residents, RAIN builds on community assets such as the mining or tourism industries and existing government facilities to study how communities can identify more strongly with the STEM enterprise. STEM organizations and programs across the state look to RAIN as a resource for best practices and a hub for STEM education practitioners. More information about RAIN can be found at *4azrain.org*.

CLEVELAND MUSEUM OF NATURAL HISTORY | CLEVELAND, OH
Integrative Organismal Systems, Directorate for Biological Sciences

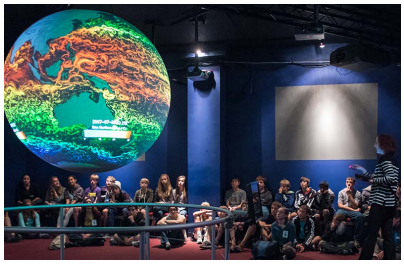
This project brings together laboratories from the Case Western Reserve University Biology Department and the Cleveland Museum of Natural History to examine how hormonal changes affect hunting strategies of praying mantises. The results contribute to our general understanding of how hormonal changes alter animal behavior. Project material will be developed into new teaching modules for teens as part of the Cleveland Museum of Natural History's distance learning program. The award-winning program reaches thousands of students in 48 states and aligns with Ohio's New Learning Standards.

National Oceanic and Atmospheric Administration

NURTURE NATURE CENTER | EASTON, PENNSYLVANIA

Environmental Literacy Grants, Office of Education

CREATE Resilience, which stands for Community Resilience through Education, Art, Technology, and Engagement, is a multi-disciplinary collaboration between youth and community to improve environmental literacy and increase engagement in resiliency actions among youth and adult residents in the Lehigh Valley region of Pennsylvania. CREATE Resilience increases community knowledge about weather and climate science, risks from local hazards, and strategies for hazard mitigation, while co-creating a vision for community resilience.

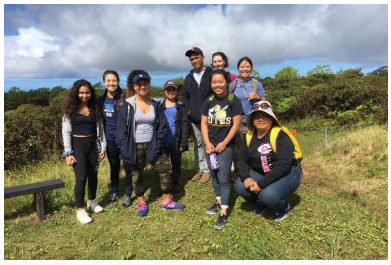


MUSEUM OF SCIENCE AND INDUSTRY| CHICAGO, IL

Environmental Literacy Grants, Office of Education

Ninety Chicago teens helped more than 16,000 museum visitors to improve their awareness, knowledge, and understanding of Chicago's climate and weather challenges. In an out-of-school time program, teens were trained to use the museum's Science On a Sphere® exhibit and communicate science to the public. The students also improved their data literacy with local datasets from the Mid-western Regional Climate Center and Illinois-Indiana NOAA Sea Grant.

Department of Education



BISHOP MUSEUM | HONOLULU, HI

Native Hawaiian Education, Office of Elementary and Secondary Education

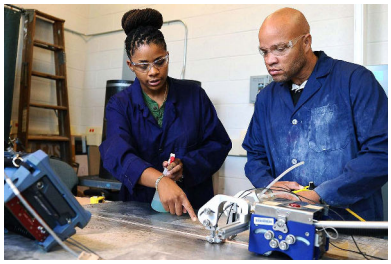
A summer internship with academic-year components for educators and high school students in grades 9–11 provides Native Hawaiian students, teachers, and community members with broad exposure and immersive experience in STEAM (science, technology, engineering, art, and mathematics). Participants engage in STEAM activities through the museum's unique biological and cultural resources. Students and teachers from high schools across the island of O'ahu are invited to participate.

NEW YORK HALL OF SCIENCE | NEW YORK, NY

Investing in Innovation, Office of Elementary and Secondary Education

Design2Learn, led by ExpandED Schools in partnership with NYSCI, paired in-school science teachers and informal educators from community-based organizations in a unique professional development program. Educators participated in a summer training in design-based learning, science content, and science standards. They then returned to their schools and developed hands-on, STEM-rich afterschool activities that created a bridge between students' in-school science classes and after-school enrichment.

Department of Defense



MUSEUM OF SCIENCE, BOSTON | BOSTON, MA

Engineering is Elementary® program in Department of Defense Education Activity's Domestic Dependent Elementary and Secondary School System

The museum was awarded a five-year contract in 2014 to bring its award-winning Engineering is Elementary® (EiE®) education program to teachers and students on military bases across the country. The elementary curriculum focuses on promoting student achievement in STEM subjects and interest in STEM career fields. EiE® integrates engineering and technology with science, language arts, social studies, and math using storybooks and hands-on design activities that engage students in solving real-world problems. The Department of Defense Education Activity's Domestic Dependent Elementary and Secondary School System (DDESS) serves 2,300 education professionals and 28,000 students in seven states and Puerto Rico.