

USING MINI-GRANTS TO BUILD CAPACITY

Network mini-grants provide partners with financial support for new projects to engage diverse audiences. Mini-grants support sustainable efforts to infuse nano into ongoing activities.

Mini-grants support sustainable efforts to:

- Integrate nano into existing, ongoing programming.
- Reach new or traditionally underserved audiences with nano programming.
- Develop or build partnerships between museums and nano researchers.

Projects have included out-of-school time learning, K-12 enrichment, and staff and volunteer training.

Mini-Grant Awards 2011-2014



Completed mini-grant projects include: (clockwise from top left) Completing the installation of the University of Wisconsin Carbon Playground at the Discovery Center Museum in Rockford, IL; developing activity carts and providing volunteer training at Port Discovery Children's Museum in Baltimore, MD; exhibits in an existing "Animal Lab" at the Imaginarium Science Center in Fort Myers, FL.

Increasing Professional Capacity

NISE Net has built capacity by engaging our partners in doing work together at an unprecedented scale. We have provided the rationale, resources, and support to transform informal STEM learning in museums.

HOW?

NISE Net integrates our public engagement and professional development resources and opportunities, building capacity through practice. We provide resources to help educators and scientists develop the necessary skills, knowledge, confidence, and comfort to engage public audiences in nano content.

Evaluation Finding:

Partners benefit from NISE Net professional development experiences in various ways, including expanding their nano-related content knowledge and increasing their comfort conveying that knowledge to visitors; gaining new programming ideas and increasing their ability to integrate nano into their education offerings; and building and strengthening relationships with each other and in some cases forming new partnerships.

(A Review of NISE Net Evaluation Findings, Years 1 – 5 Summative Evaluation, 2011)

SUSTAINABILITY:

Applying New Skills to Future Work

NISE Net has provided the rationale, resources, and support for our partners to engage their audiences in nano long after NSF funding ends.

“Combined with ongoing professional development, NISE Net resources, and capped with the Nano exhibition, COSI Team Members across the institution have seized the opportunity to mainstream nanotechnology into their programs.”

— Joshua Sarver, COSI

Partners are already applying concepts, skills, and practices learned in the NISE Net to other topics.



PROFESSIONAL DEVELOPMENT TRAININGS AND RESOURCES

NISE Network provides a variety of resources to help educators and scientists develop the necessary skills, knowledge, and confidence to engage public audiences in nano content. We also develop training tools, guides, workshops, and educational activities around a range of practices that can be applied more broadly than nano, including:

- **Science communication** for researchers, graduate students, and undergraduate students.
- **Nano and Society** – engaging audiences in conversations about the relationship between nanotechnology and society.
- **Team-Based Inquiry** – empowering educators to get the data they need, when they need it, to improve their products and practices.
- Practices to reach diverse audiences such as **Universal Design** and **bilingual translation** and programming.

NEW KNOWLEDGE FOR THE FIELD

Content Map

In consultation with experts in many fields, NISE Net created a content map identifying the content knowledge we determined was most important for engaging the public in learning about nano. The content map and associated resources provide key concepts and examples around four main concepts:

- Nano is small and different
- Nano is studying and making tiny things
- Nano is new technologies
- Nano is part of our society and our future

Research Studies

The NISE Net is funding four research studies to help us better understand museum-scientist partnerships; organizational change; real-world impact through traditional and social media; and public learning and decision-making.

Evaluation Studies

Over the nine years of the NISE Net, over 250 front-end, formative, and summative evaluation studies have been conducted about NISE Net products and practices. Many of these studies focus on understanding the impacts of the Network on public and professional audiences.