

NISE Net: Nanoscale Informal Science Education Network (0940143)

Larry Bell – Tuesday, 3:25 PM Session: Education Networks and Programs

The NISE Net is a community of informal science educational professionals, and scientists and outreach professionals from nanoscale research centers, working together to raise public awareness, understanding, and engagement with nanoscale science, engineering, and technology. The NISE Net has three overarching goals:

- To create a sustainable service-oriented infrastructure that supports long-term efforts to educate the public about nanoscale science, engineering, and technology, as well as builds capacity in the field and within participating institutions.
- To strategically plan, develop, implement, and disseminate educational deliverables of all kinds that foster greater engagement with and understanding of nanoscale science, engineering and technology in a comprehensive way by the general public, as well as K-12 school groups.
- To stimulate educational research and evaluation that add to the nanoscale informal science education knowledge base, inform continuous improvement of both products and processes, and guide the development of future deliverables.

Originally launched in 2005 by the Museum of Science (Boston), the Science Museum of Minnesota (St. Paul), and the Exploratorium (San Francisco), the NISE Net has grown to include over 200 organizations across the U.S. that participate in NanoDays each year.

While NISE Net intellectual resources are freely available to everyone at www.nisenet.org, the focus for years 6-10 of the network is to develop the capacity of existing NISE Net members to build informal nano education sustainably into their ongoing educational efforts. Several current initiatives are aimed at doing that and provide opportunities for the research community to benefit from opportunities to communicate with the public about its research. The NISE Net online catalog includes new programs designed to build the science communication skills of undergraduate and graduate students and early-career scientists interested in connecting with the public. A *Science Communication Workshop* designed for use as part of REU programs, a *Sharing Science Workshop and Practicum*, designed for use in connection with NanoDays, and *Mastering Science and Public Presentations*, use in connection with professional conferences, are three activities available online that help to build science communication skills. While these skills are useful in working with interdisciplinary teams, as often is the case with nanoscale science and engineering, enhanced communication skills can help build bridges between science and the public. Science museums provide a number of opportunity to practice and enhance those skills on the floor of the museum.

NanoDays continues to be a great vehicle for launching collaborative efforts between science museums and research centers and for building students' science communication skills. NanoDays 2012 is March 24 – April 1 and applications for physical kits are due this Thursday, Dec. 8 (www.nisenet.org). NISE Net has also developed a mini-exhibition that will be replicated and installed in 50 locations nationwide. Museums can always use knowledgeable science interpreters to help the public understand scientific concepts and the research underway. NISE Net awarded 27 mini-grants in 2010 and 40 in 2011. These awards are made to NISE Net members with good ideas about how to engage new partners, serve under-represented audiences, and embed nano educational activities into ongoing programs. NISE

Net this year has also begun the development of team-based inquiry – and approach to improving the quality of educational activities developed throughout the network.

A current total of 215 items in the NISE Net catalog provide programs, exhibits, media, tools and guides for implementing a wide range of educational activities, along with 115 evaluation reports that describe their impacts. NISE Net materials are freely available to all.