

CPN Collaborates with the Exploratorium on NanoScape

NSF NSEC Grant PHY-0425897

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SUMMER 2006: In 2005 the National Science Foundation (NSF) announced a series of initiatives to expand efforts to inform the general public about nanotechnology. The Museum of Science in Boston, the Science Museum of Minnesota and the Exploratorium in San Francisco were selected to lead the Nanoscale Informal Science Education ([NISE](#)) Network, which will also include many other science museums and research institutions.

Through the framework of the NISE Network, the Center for Probing the Nanoscale (CPN) has been serving as a technical and creative resource for Exploratorium educators.



Participants built sheets of carbon graphene using inexpensive materials. These sheets were then rolled into carbon nanotubes underscoring the link between these two forms of carbon.

CPN research focuses on nanoprobe development which uniquely positions our Center to use visualization tools to convey an intuitive sense of nanoscale objects, properties and phenomena. At the inception of the NISE Network, CPN scientists met with representatives from the Exploratorium to discuss current visualization techniques and how information from these techniques could be incorporated into a nanoscale landscape model (i.e., NanoScape).

During three weekends in July and August, 2006, the public was invited to join staff in a scientific “barn-raising,” where more than a hundred thousand parts were used to create a walk-through simulation of the nanoscale world. On July 9th CPN Scientists joined hundreds of participants to construct giant nanotubes and other molecular structures used to create a large-scale landscape filling the Exploratorium’s central space.

The resulting assemblage of thousands of “atoms” is one of the largest model environments of the nanoscale universe you’ll ever see!



CPN scientists were on hand to answer questions about nanoscale structures and the properties of carbon nanotubes.



Hands-on building activities appealed to people of all ages.

