

Physics At Work

Dr. Linda Shore

**Director of the Teacher Institute at the Exploratorium;
San Francisco, CA**

Dr. Linda Shore was intrigued by science growing up, and thought that one day she could turn her intrigue into a career. “I grew up watching Carl Sagan’s television show, *Cosmos: A Personal Voyage*, and remember being fascinated by his ability to translate science and make it exciting,” said Shore.

She earned her masters degree in physics from San Francisco State University and her doctorate in Science Education at Boston University. When she returned to San Francisco in 1993, she joined the Exploratorium, an interactive science and art museum, founded in 1969 by famed physicist and educator Dr. Frank Oppenheimer.

Dr. Shore wants to dispel the myth that the Exploratorium is merely a science museum. “That is just the tip of the iceberg.” The museum houses teacher-education programs, exhibits for sale and for rent, along with over 700 hands-on exhibits.

As the director of the Teacher Institute, Dr. Shore fills her days helping science teachers teach better, assisting with a Web cast or the design of an exhibit, and traveling to other museums to design teacher programs. “Every day is a little bit of a surprise,” she said.

But Dr. Shore said that the biggest surprise about her job is how much it still teaches her about science. “My job is to translate science to the public, teachers, and students, which is similar to receiving interesting homework assignments; I never know what the questions are going to be.”



Roger Barrett

**Exhibit Designer; Science
Museum of Minnesota,
Minneapolis, MN**

Roger Barrett has been an exhibit designer for five years at the Science Museum of Minnesota, known for its traveling

exhibit program, its innovative interactive exhibits, and their Exhibits-for-Sale program.

Recent exhibits that Barrett has been involved in are Robots, Race, BioMusic, Water, the Science of Fear, and Nanotechnology. During the fabrication portion of the project, Barrett will work with a scientist or Curator to develop exhibit content. Barrett also is involved in choosing building materials, which is not an easy decision. “Durability is a factor, as well as aesthetics, cost, ease of construction and green materials,” said Barrett.

Patricia Rayner

**Physical Science Teacher
and Inventor of the
All American Atom;
Bethel, CT**

Patricia Rayner has been teaching science for over 25 years, but it was early on in her career

when she discovered that students learn better through hands-on activities. It was then that she developed the “All American Atom” that allows students to learn about the atom by making a model of it.

“Model-making is very important,” says Patricia. “You can feel it, touch it, and see it to understand it, and it uses the creative part of the brain.” Her students use the kit she developed, which involves building a plastic, three-dimensional nucleus with atoms spinning inside.

