Biographical Sketches

Panel Session IV

Mark Benthien is Director for Communication, Education and Outreach (CEO) for the Southern California Earthquake Center (SCEC), headquartered at the University of Southern California (USC). Mr. Benthien received a Bachelor of Science degree in Geophysics from the University of California Los Angeles in 1995, and a Master of Public Policy degree from the USC in 2003. As director for SCEC's CEO program, Mr. Benthien communicates earthquake knowledge to end-users and the general public in order to increase earthquake awareness, reduce economic losses, and save lives. To do this he 1) coordinates productive interactions among SCEC scientists and with partners in science, engineering, risk management, government, business, and education; 2) manages activities that increase earthquake knowledge and science literacy at all educational levels; 3) leads efforts to improve earthquake hazard and risk assessments; and 4) promotes earthquake preparedness, mitigation, and planning for response and recovery.

Bob de Groot is the K-12 and Informal Education Program Manager for the Southern California Earthquake Center an NSF+USGS Center headquartered at the University of Southern California in Los Angeles. He is also the Educational Outreach Director for the Center for the Science and Engineering of Materials (CSEM) an NSF Materials Research Science and Engineering Center (MRSEC) at the California Institute of Technology. Robert has nine years of classroom experience as a chemistry educator at the secondary and university levels and has worked as an informal educator at the California Science Center and Lowell Observatory in Flagstaff, Arizona. As a researcher, his work has taken him into the lab and the field to study stratospheric ice clouds, river ecology, the active earthquake faults of California, and enzyme biochemistry. Robert holds an M.A. with an emphasis in chemistry and earth science education from Northern Arizona University and a Ph.D. in science education from the University of Southern California. His doctoral research investigated the use of analogy in science communication. As a science education researcher Robert is currently investigating the role of models and model building in science. This interest stems from a desire to understand and characterize how models function within the process of the "doing" of science. In addition, he is interested in understanding how models used by specialists are applied in media and educational settings.

Eric Marshall is Director of the global science museum website TryScience.org and the project to support partnerships between science museums and scientists & engineers, VolTS (Volunteers TryScience) at the New York Hall of Science. His expertise lies in the study of interfaces. While pursuing his PhD in Applied Physics at UC San Diego, he received the MRS Graduate Student Award. The bulk of his publications deal with correlation of micro- and nano-structure with electrical properties of intermetallic contacts and epitaxial thin films on compound semiconductors. Recently, he has shifted his attention towards the interface between informal science educators and scientists & engineers. After completing graduate work in Education at Columbia Teachers College, starting an education research group within the Physical Science Department of the IBM Research TJ Watson Research Laboratory, and serving as Curator of the Creative World at the California Science Center, he now directs TryScience.org and VolTS (Volunteers TryScience) at the New York Hall of Science. His goal is to support effective relationships between science & engineering education outreach efforts (in professional

associations, universities, corporations, and government labs) and informal science education institutions (science centers/museums).

Daniel Steinberg is Education and Outreach Director, Princeton Center for Complex Materials (PCCM). He received his PhD in Geophysics from Binghamton University in 1992. During his graduate career, he was a NASA Graduate Student Research Fellow. Following his PhD Dan continued his science research career as a National Research Council Fellow at NASA's Goddard Space Flight Center with the Geodynamics group. At Goddard, Dan spent as much time as he could spare conducting NASA outreach activities. He then accepted a position as an Operations Astronomer for the Hubble Space Telescope (HST) at the Space Telescope Science Institute in Baltimore. There, in addition to his duties in operations and research with HST, Dan was able to participate many education outreach activities. These included working with teachers each summer in the Amazing Space curriculum development project, and talks for students and the public at schools, libraries, museums etc. In 1998, Dan was awarded the Space Telescope Science Institute's Star of Public Outreach award.

In 2000, Dan came to Princeton University as the Education Outreach Manager for the Princeton Earth Physics Project, a program that placed many research quality seismometers in schools across the country that allows students to learn science by doing it. In November 2001, Dan became the Director of Education and Outreach for the Princeton Center for Complex Materials (PCCM). PCCM's outreach program has a thriving REU and RET program. Each summer during our Princeton University Materials Academy (created by Dan), up to 60 traditionally underrepresented high school students learn the latest science and engineering concepts in Materials science. He also directs the Materials Camp for teachers at Princeton University in partnership with ASM. During the school year Dan runs a multitude of programs including programs with Liberty Science Center. He co-developed the Princeton University's Science and Engineering Expo, where over 1000 middle school students come to spend one day each year and learn about science and engineering from Princeton University professors and students. Dan also directs k-12 outreach programs for MIRTHE (an NSF funded ERC), the US-Africa Materials Institute, and Princeton University's NIRTs.

Shannon Swilley is Education Outreach Assistant, Princeton Center for Complex Materials (PCCM). She received her bachelor's degree from the University of Arizona in 2001. After frivolously traveling the world, she settled at Princeton University in 2003 to work with Prof. Winston Soboyejo, a mechanical engineer working to form a collaboration now known as the US-Africa Materials Institute, funded by the NSF. Shannon worked with representatives from the NSF DMR, Princeton University faculty and African government representatives in 20 different countries to bring them all together for a USAMI Implementation Meeting at NSF headquarters in Alexandria. In 2003, she also began working with Dr. Daniel Steinberg, the Education Outreach Director for the Princeton Center for Complex Materials (PCCM), an NSF MRSEC. Shannon now has nearly 4 years experience working as an Education Outreach professional. Shannon works with Dr. Steinberg to develop press relations and communications to promote awareness of science and engineering and promote their education programs. She has coordinated many education programs for the MRSEC. Shannon is the coordinator for the very large PRIMS/PCCM Research Experience for Undergraduates program. Ms. Swilley also manages the website - both for the Education Outreach office and the center as a whole.