

## Biographical Sketches

### Workshops 1C/D and 2C/D

#### **Nancy Blount**

Head, Department of News and Information, American Chemical Society

Nancy Blount is assistant director for communications with the American Chemical Society, the world's largest scientific society. During her more than 20 years in science communication, her responsibilities have included writing about scientific advances for lay audiences, placing those stories in the national media, training scientists to give effective media interviews, oversight for the ACS News Service, Radio and Television Service, member public relations programs, strategic planning, budgeting and measurement. She holds a master's degree in chemistry.

#### **Marvin Coyner**

Marv is manager of Editorial Services for the ACS Office of Communications. His department is responsible for writing and editing research news releases based on papers presented at Society meetings and published in ACS journals, the ACS News Service Weekly PressPac, the ACS Annual Report, and assorted brochures and pamphlets. Prior to joining the Society in 1983, he served nearly 23 years with the U.S. Navy as a journalist, broadcaster, teacher, and communications manager. An ACS member, Marv has a BS degree from the University of the State of New York, did graduate work in Communications Research Theories, Strategy & Tactics at the University of Oklahoma, and is a graduate of the Chemistry for Executives course at Duke University.

#### **Bob de Groot**

Robert 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.

#### **Mary Poats**

National Science Foundation

EEC Program Manager; ERC Program Manager (ERC Pre-College Education)

Mary Poats serves as Program Manager within the National Science Foundation (NSF), Directorate for Engineering, Engineering Education and Centers (EEC) Division for a broad

range of educational programs that impact K-12 and colleges and universities. These include the Research Experiences for Teachers (RET) in Engineering Program, the Nanotechnology Undergraduate Education (NUE) Program, the NIBIB/NIH-NSF Bioengineering and Bioinformatics Summer Institutes (BBSI) Program, the Engineering Research Centers (ERC) supplemental education programs, e.g. REU and RET sites, and the NSF Graduate Teaching Fellows in K-12 Education (GK-12) Program (ENG Directorate representative). She has a BA from Virginia Commonwealth University, Richmond, VA, and a Masters in Public Administration (MPA) from George Washington University, Washington, D.C., and is a graduate of the U. S. Office of Personnel Management (OPM), Executive Potential Program. Mary has been with the NSF since 1972 serving in several analytical and management positions prior to assuming program management responsibilities for the EEC Division engineering education programs in 1995. She is dedicated to improving engineering education at the pre-college and college levels and attracting more students to engineering careers, especially women, underrepresented minorities and the disabled. Throughout her tenure at NSF, Mary has received numerous awards. Most recently she has received the NSF Director's Award for Management Excellence, the NSF Director's Award for Collaborative Integration and the NSF Director's Award for Merit Review Excellence.

### **Daniel Steinberg**

Dan Steinberg is the 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**

Shannon Swilley 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 PRIMIS/PCCM Research Experience for Undergraduates program. Ms. Swilley also manages the website - both for the Education Outreach office and the center as a whole.

### **Rita Tavilla**

Rita Tavilla is Director of Administration and Operations, Harvard University Initiative in Innovative Computing. She is a painter, photographer and glass mosaic artist. As an administrative professional prior to coming to Harvard, Tavilla worked for 15 years with Sun Microsystems Laboratories as a Program Manager. She also worked with the Boston Ballet Company as a fundraiser and with Bolt Beranek and Newman as a system administrator. She served on the advisory board of the New England Museum of Sports and worked with the Boston Museum of Science as an exhibits interpreter. Tavilla's art work has been shown at the DeCordova Museum in Lincoln, MA, the Agora Gallery in Chelsea, NY and the Arthur Griffin Museum of Photography in Winchester, MA. She has curated art installations and juried shows as well. Her publications include New Art International, Best of Photography Annual 1998 and 1999.