



National Association of Geoscience Teachers
c/o Carleton College B-SERC
One North College Street
Northfield, MN 55057

Leading geoscience
educators sharing
ideas, techniques,
and tools from
the frontiers of
teaching practice
and research



2008-2009 DISTINGUISHED SPEAKERS PROGRAM Promoting Innovation in Geoscience Education





NAGT's Distinguished Speakers share ideas, innovative techniques, and tools forged at the frontiers of geoscience education and research — in public lectures, workshops, and consultations.

Invite an NAGT expert to your campus this year to inspire and inform your faculty and staff.

COMPLETE DETAILS AND HANDY ONLINE APPLICATIONS AT www.nagt.org/nagt/programs/dsp.html

To learn more about the program, these speakers, and their leading-edge topics, visit this site:

Follow the link to the online application.

Funding to offset speakers' travel expenses may be requested on the same form.

The National Association of Geoscience Teachers fosters improvement in the teaching of the earth sciences at all levels, emphasizes the cultural significance of the earth sciences, and disseminates geoscience knowledge to the general public.

NAGT counts among its members K-12 teachers and college and university faculty as well as educators working with the general public through outlets such as museums and science centers.

This year's speakers are cosponsored by the Consortium for Ocean Leadership.



2008–2009 DISTINGUISHED SPEAKERS PROGRAM

Promoting Innovation in Geoscience Education



ROBERT BUTLER

- Engaging secondary school students and non-science undergraduate majors in the National Science Foundation's EarthScope program

Professor of Science, Dept. of Physics, University of Portland, Oregon; former director of the Teachers on the Leading Edge collaborative, a K-12 Earth science teacher professional development program



LUANN DAHLMAN

- Promoting a revolution in Earth and space science education: Strategies for increasing the rigor and perception of Earth science courses in high schools
- Adventures of an ANDRILLian: Geoscience research in Antarctica

Project Director, the Earth Exploration Toolkit and the National Model Earth Science Lab Course, Center for Earth and Space Science Education, TERC



SUSAN DEBARI

- Developing an introductory geology curriculum that models the key findings of "How People Learn"
- Modeling effective teaching strategies for pre-service teachers
- Teaching undergraduate petrology as a writing-intensive field course

Associate Professor, Depts. of Geology and Science Education, Western Washington University



TRACY GREGG

- Incorporating research in undergraduate and graduate classrooms
- Improving the undergraduate laboratory experience
- Including planetary data in core geoscience courses

Associate Professor, Dept. of Geology, College of Arts and Sciences, University of Buffalo, State University of New York



ERIC GROSFILS

- Computational science: An emerging tool for undergraduate exploration of complex geoscience problems
- Why one planet isn't enough: Engaging students in an introductory geology course
- Techniques for integrating student research in an undergraduate geology curriculum

Associate Professor, Dept. of Geology, Pomona College, California



BRUCE HERBERT

- Developing student understanding of complex Earth systems
- Seeking synergy: Programs that integrate research and education
- Understanding student learning: Views from the learning and cognitive sciences

Associate Professor of Biogeochemistry; Associate Director of Geosciences, Information Technology in Science, Center for Learning and Teaching, Texas A&M University



PATRICIA KELLEY

- Evolution and creation: Conflicting or compatible? (public lecture)
- Teaching evolution with integrity and sensitivity (workshop)
- The arms race from a snail's perspective: Evolution of the naticid gastropod predator-prey system (research talk)

Professor of Geology, Dept. of Geography and Geology, University of North Carolina, Wilmington



STEPHEN POMPEA

- GLOBE at night: Starting and maintaining a Worldwide Citizen Science Project
- Starting an effective science outreach program: Is there an easy way?
- Sonification: How scientific data can become music — and teach!

Manager of Science Education, National Optical Astronomy Observatory, Tucson, Arizona



WAYNE POWELL

- City-as-lab: A model for civically engaged geoscience education in an urban environment
- Pickled priapulids: A brine-seep origin for fossil beds of the Burgess Shale

Associate Professor and Chair, Dept. of Geology, Brooklyn College of the City University of New York, NY



ERIC PYLE

- Pre-college Earth science as a "laboratory" experience
- A framework for designing geoscience instructional materials
- The Wilson Cycle as a guiding theory for designing instruction in the geosciences (after 12/08)

Associate Professor, Dept. of Geology and Environmental Science, James Madison University; President-Elect of the Virginia Association of Science Teachers; 2nd Vice Chair, Geoscience Education Division, GSA



MICHAEL WYSESSION

- Working toward an Earth science-literate public
- The future of Earth science textbooks

Associate Professor, Dept. of Earth and Planetary Sciences, Washington University in St. Louis; lecturer, "How the Earth Works" video series, The Teaching Company; and author/writer of textbooks at the middle school, high school, undergraduate, and graduate levels

Additional speakers will be named to the program in weeks to come.

For the most up-to-date speakers list, visit:

<http://nagt.org/nagt/programs/dsp0809.html>