



List of Lecturers – FY 2011

Please follow the procedures provided for contacting lecturers and obtaining funding (up to \$800) from the AWG foundation. For more information on the lecture list, and to arrange for approval of a lecturer engagement please contact:

Heather Cunningham
AWG Lecturer Coordinator
cunningham.hs@gmail.com

For more information on AWG and its programs, please see our website (www.awg.org) or email office@awg.org

How to Apply for Funding from the AWG Distinguished Lecturer Program

- All academic institutions, including University and College departments or science clubs/organizations, as well as State Geological Surveys, are invited to apply for funding to host a lecturer from the AWG Lectures List. If in doubt, ask the Lecture Coordinator.
- Organizations may ask for up to \$800 to fund the lecturer's visit and should provide details of the expected costs. Only one award is to be given to any organization in one year. There is no problem if two organizations ask for the same lecturer.
- Funding covers the expenses of hosting an AWG lecturer at the institution. Funds are not to benefit the individual: thus, an honorarium is not included in the expenses. Regular and normal travel expenses (airfare, other transportation, meals, lodging) are all applicable costs that could be funded. It is also helpful if the sponsoring institution is able to provide funding for some of the costs so that the requested amount is in line with the maximum allowable grant amount.
- Funding decisions are the prerogative of the Lecture Coordinator
- Please follow this procedure to apply for a grant:
 - Contact a lecturer from the list. Settle on a tentative date for the talk, and determine the transportation, lodging, and incidental costs of the visit. Write a letter or email to the Lecture Coordinator including all of the pertinent information, and stress your intention to expose your students to the women geoscientists. Plan for sufficient time for processing the request (several weeks) so that a talk will not be scheduled in advance of AWG being able to approve reimbursement to your department.
- We need the following information for our records:
 - The sponsoring department where the talk will be given
 - date of the talk
 - lecturers name – must be from the following list

- title of the talk
- lecturers address
- amount requested with itemized cost breakdown
- After the lecture please provide a report of the event including the following documentation and information to insure prompt reimbursements to the lecture coordinator:
 - the number of people in attendance and % women
 - describe the audience
 - provide copies of flyers or other seminar advertising
 - give a brief description of the quality of the seminar and any other interactions between the lecturer and audience
- Please submit all applicable receipts and request for reimbursement to the AWG Foundation Treasurer.

AWG Distinguished Lecturers

Patricia Lee Manley

Geology Department
 Middlebury College
 Middlebury, VT 05753
 (802) 443-5430
 (802) 443-2072 (fax)
patmanley@middlebury.edu

- Amazon deep-sea fan
- Mudwaves of the North and South Atlantic
- North Atlantic sediment drifts
- Holocene climate variability in Antarctica as recorded in marine cores
- Seiche, furrows, pockmarks and ship wrecks: Dynamics in Lake Champlain
- Glacial Lake Discharges and Abrupt Climate Change: Lake Champlain

Pam Hallock-Muller

College of Marine Science
 University of South Florida
 140 Seventh Ave. S.
 St.Petersburg, FL 33701-5016
 (727) 553-1567
 (727) 553-1189 (fax)
pmuller@marine.usf.edu
<http://www.marine.usf.edu/reefslab>

- Global Change in the 21st Century: Do Coral Reefs Have a Future?
- Goldilocks and the Three Biogenic Carbonate Minerals: What Determines Just Right?
- An Invasive Species Producing Facies Changes: A Case Study from the Mediterranean

Judith A. Schiebout

Louisiana State University
Museum of Natural Science
Baton Rouge, LA 70803
(225) 578-2717
(225) 578-3075 (fax)
jschie@lsu.edu

2001 Association for Women Geoscientists Foundation Outstanding Educator Award
2002 Gulf Coast Association of Geological Societies Outstanding Educator Award
2002 LSU Womens & Gender Studies Award for Outstanding Faculty Contribution
2008 Invited participant in NSF-funded workshop on earth science literacy to identify and articulate the "Big ideas" and supporting concepts defining what all Americans need to know about the geosciences.

- When rhinos, elephants, and camels roamed Louisiana: Miocene vertebrate animals and their paleoenvironments from the Fleming and Pascagoula Formations

AWG Lecturers

Danita Sue Brandt

Department of Geological Sciences
Michigan State University
E Lansing, MI 48824-1115
(517) 355-6595
(517) 353-8787 (fax)
brandt@msu.edu

- The geological record of storms
- The trouble with trilobites (trilobite extinction)

Annmarie Carlton

Department of Environmental Sciences
Rutgers University
14 College Farm Road
New Brunswick, NJ 08901
(732) 932.9800 x6230
carlton@envsci.rutgers.edu

- Atmospheric brown clouds: predicting the vertical profile of particulate carbon
- Are gas phase chemical mechanisms still sufficient to model air quality and climate?
- Controlling biogenic SOA

Marjorie A Chan

Department of Geology & Geophysics

University of Utah, 383 FASB

115 S 1460 E.

Salt Lake City, UT 84112-0111

(801) 581-6551

(801) 581-7065 (fax)

Marjorie.chan@utah.edu

- Geoantiquities and Geoconservation: Are Natural Landscape records of Earth History losing the battle with conservation?
- Red rocks from Earth to Mars
- Women in Earth Science – Past, Present and Future

Barbara L Dutrow

Department of Geology & Geophysics

Louisiana State University

Baton Rouge, LA 70803-4101

(225) 578-2525

(225) 578-2302 (fax)

dutrow@lsu.edu

Mineralogical Society of America President 2007

Distinguished Lecturer 1991-1992

Sigma Xi Distinguished Lecturer 1996-1998

- Gemstones as guides to Earth's evolution
- One hundred mammoths in a hot tub
- Tourmaline: A Geologic DVD
- Mineral textures – ghosts of plutons past

Susan R. Eaton

SR ECO Consultants Inc.

2031-8th Avenue S.E.

Calgary, Alberta

T2G 0N7 CANADA

(403) 508-2512 bus.

(403) 508-5012 fax

(403) 605-0159 cell

susaneaton@shaw.ca

<http://www.susanreaton.com/>

- A Geoscientist in Antarctica: Following in Shackleton's Footsteps One Hundred Years Later
- Geology and geophysics at the forefront of polar exploration, then and now
- Climate change and ocean change in Antarctica and South Georgia
- 2010 Elysium Visual Epic Expedition -- an overview
- 1914-17 Imperial Trans-Antarctic Expedition -- an overview
- Powerful collaboration between scientists, artists, writers and educators

Lisa L. Ely

Department of Geological Sciences
Central Washington University
400 E. University Way
Ellensburg, WA 98926
(509) 963-2177
(509) 963-2821 (fax)
ely@cwu.edu

- Floods and megafloods: Geomorphic and climatic signatures of paleofloods in the US and India
- Impacts of natural dams on river channel evolution: Does the river give a dam?
- Geological and historical evidence of past earthquakes and tsunami in Chile

Joan L. Florsheim

Department of Geology
University of California at Davis
Davis, CA 95616
florsheim@ucdavis.edu

- Geomorphology and restoration in rivers
- Anthropogenic and natural disturbances in riparian systems
- Climate change effects on geomorphic processes

Silvia Gremes Cordero

Applied Marine Physics
RSMAS - University of Miami
4600 Rickenbacker Causeway
Miami, FL 33149
[\(305\)-421-4868](tel:(305)421-4868)
[\(305\)-421-4701](tel:(305)421-4701) (fax)
sgremes@rsmas.miami.edu

- Changes in the arctic ocean: are they related to climate?
- Transfer of properties across the ocean surface: how do we measure them and why do we care?
- Gas fluxes across the ocean: the importance on measuring CO₂ transfer

Stacia M Gordon

Dept of Geological Sciences
University of Nevada, Reno
1664 N. Virginia, MS 0172
Reno, NV 89557
(775) 784-6476
staciag@unr.edu

- Elemental recycling in subduction zones: mass transfer from subducting slab to the crust
- Timescales and consequences of partial melting in orogeny

Karen Harpp

Department of Geology
Colgate University
13 Oak Drive
Hamilton, NY 13346
(315) 228-7211
(315) 228-7187 (fax)
kharpp@colgate.edu

Taking sabbatical Fall 2011
University of Idaho
PO Box 443022
825 West 7th Street
322 Mines Bldg
Moscow, ID 83844-3022

- Monitoring the Sierra Negra Eruption, Galapagos Islands
- The Origin of the Northern Galapagos Islands
- Darwin's Enchanted Islands: Where Geology and Biology Meet
- Evolution of Hekla Volcano, Iceland

Amanda Henck Schmidt

Department of Geology
Oberlin College
52 W. Lorain St.
Oberlin, OH, 44074
(440) 775-8342
(440) 775-8038 (fax)
aschmidt@oberlin.edu

- Quantifying Tibetan land use choices in Jiuzhaigou National Park
- Spatial patterns of erosion in the Three Rivers Region, SW China
- The effects of Chinese land use policies on erosion in western China

Donna M. Jurdy

Department of Earth & Planetary Sciences
1850 Campus Drive
Northwestern University
Evanston, IL 60208-2150
donna@earth.northwestern.edu

1996-7 AAPG Distinguished Lecturer

- Mars Magnetic Mystery
- Active tectonics on Venus: Evidence from Coronae & Chasmata
- Earth hotspots and Venus coronae

Louise Kellogg

Professor, Department of Geology
One Shields Avenue,
University of California, Davis, CA 95616
(530) 752-3690
<http://mygeologypage.ucdavis.edu/kellogg/>
<http://www.keckcaves.org>
kellogg@ucdavis.edu

- New directions in computational geodynamics: exploring the Earth's dynamics with computer models and scientific visualization
- Journey to the center of the Earth: dynamics of the mantle
- Using LIDAR to study earthquakes, especially the Haiti earthquake

Jessica Murray

US Geological Survey
345 Middlefield Rd., MS 977
Menlo Park, CA 94025
(650) 329-4864
(650) 329-5163 (fax)
jrmurray@usgs.gov

*at University of Tokyo Earthquake Research
until 12/11*

- Improving seismic hazard assessment in central and northern California using geodetic data
- Near real-time detection of silent earthquakes and other transient crustal deformation using Global Positioning System data

Rym Msadek

GFDL/NOAA
Princeton University
Forrestal Campus 201 Forrestal Road
Princeton 08542 NJ
(609) 452-6564
Rym.Msadek@noaa.gov

- The challenge of predicting the climate of the coming decades
- -Simulating today's climate and future climate change
- -Understanding the physics of the ocean using numerical models and observations
- -What is the Intergovernmental Panel on Climate Change and what can we learn from it?
- -What is the difference between weather and climate and what can the oceans tell us?

Dianne K. Newman

Howard Hughes Medical Institute
California Institute of Technology
1200 E. California Blvd.
Mail Code 147-75
Pasadena, CA 91125
(626) 395-3543
(626) 395-4135 (fax)
<http://dknlab.caltech.edu/>

- Breathing new life into ancient biomarkers: understanding the biological function of hopanoids

Tina Nielsen

BP America Production Company
501 Westlake Park Boulevard
Houston, TX 77079
(281) 504-0919
tina.nielsen@bp.com

- Making the transition from academics to industry
- Managing a work/life balance
- Getting what you want by asking for what you need

Darcy Ogden

Institute of Geophysics and Planetary Physics
Scripps Institution of Oceanography
<http://sites.google.com/site/darcyogden/>
(858) 534-7386
dogden@ucsd.edu

- Dynamics of Explosive Volcanic Eruptions
- Computational Simulations of Supersonic Volcanic Jets
- Formation of Volcanic Vents and Craters

Adina Paytan

Earth & Planetary Sciences Department
University of California Santa Cruz
Santa Cruz, CA 95064
(831) 459-4089
(831) 459-3074 (fax)
apaytan@ucsc.edu

- Dust storms and red tides
- Ocean acidification the other CO₂ problem
- What can we learn from mud
- Phosphorus - the devils element
- All streams flow into the sea even those we cannot see

Prof. Kimberly Prather

Dept. of Chemistry and Biochemistry
Scripps Institution of Oceanography
University of California, San Diego
La Jolla, CA 92093-0314
(858) 822-5312

<http://www-chem.ucsd.edu/research/profile.cfm?cid=C04185>

kprather@ucsd.edu

Distinguished Chair of Atmospheric Chemistry

Director, NSF Center for Aerosol Impacts on Climate and the Environment (CAICE)

- Measuring particles one by one: How are atmospheric aerosols affecting our climate?
- Flying through the clouds to better understand the role of aerosols in our changing climate
- Chemistry in the clouds: Efforts to improve our understanding of the changing climate
- Dust in the wind: How do atmospheric dust particles change our climate?

Stephanie G. Prejean

Research Geophysicist
USGS Alaska Volcano Observatory
4210 University Dr., Anchorage AK, 99508
(907) 786-746

sprejean@usgs.gov

- Forecasting Eruptions at Alaskan Volcanoes: High-Stakes Science in Real-Time
- Earthquake Triggering at Volcanoes: Geophysical Clues to Magma System Dynamics

Lisa A. Rossbacher

President
Southern Polytechnic State University
1100 South Marietta Parkway
Marietta, GA 30060
(678) 915-7230
(678) 915-7483 (fax)

rossbach@spsu.edu

www.spsu.edu

- Diagenesis and metamorphism: Geological lessons for leadership
- Geology and leadership: Lessons from the field
- Leadership in the Holocene: What women leaders can learn from the geosciences
- Riding ahead of the herd: A cowgirl's guide to leadership

Linda Rowan

American Geological Institute
4220 King St
Alexandria VA 22302
(703) 379-2480 x228
www.agiweb.org/gap
twitter @agigap
rowan@agiweb.org

- The Role of the Geosciences in Policymaking: How to Avoid Being Stuck Between a Rock and a Hard Place
- The Status of the Geosciences in Education, Workforce and Public Policy
- How to Communicate The Value of the Geosciences to the Public and Policymakers

Martine M. Savard

Research Scientist
Natural Resources of Canada
Geological Survey of Canada
490 de la Couronne, Quebec, Qc
GIK 9A9, Canada
(418) 654-2634
(418) 654-2615 (fax)
msavard@nrcan.gc.ca

- Stable isotopes of tree-ring series – monitoring anthropogenic perturbations in the environment
- Multi-tracer chemistry of tree rings as a high resolution biomonitoring tool of atmospheric pollutants from punctual and diffuse sources

Carrie Schweitzer

Department of Geology
221 McGilvrey Hall
Kent State University
Kent, Ohio 44242
(330) 244-3303
(330) 672-7949 (fax)
cschweit@kent.edu

- The role of Decapods (Shrimp, Lobsters, and Crabs) in the Mesozoic Marine Revolution
- A Tale of Three Sites: Insights on the history of life derived from field research
- Explosive radiation of Decapods (Shrimps, Lobsters and Crabs) in the the Late Jurassic: A case study in Field and Museum Paleontology

Barbara L. Sherriff

Department of Geological Sciences

University of Manitoba

Winnipeg, Manitoba

Canada R3T 2N2

(204) 474-9786

(204) 474-7623 (fax)

sherriff@ms.umanitoba.ca

- Arsenic and old waste: geochemistry and mineralogy of gold mine waste
- Solving mineralogical puzzles of Roman pottery
- Remediation of sulphide mine waste
- The development of acid mine drainage

Maud M Walsh

School of Plant, Environmental and Soil Sciences

Louisiana State University

Baton Rouge, LA 70803

(225) 578-1211

(225) 578-1403 (fax)

evwals@lsu.edu

- Early (Archean) life on Earth: the rock record
- Using plants for environmental remediation and restoration
- Increasing student engagement through service-learning in an environmental management curriculum
- Environmentally Persistent Free Radicals (EPFRs): their chemistry, formation and health effects (communicating research findings from the LSU Superfund Research Program)

Christine Wiedinmyer

National Center for Atmospheric Research

1850 Table Mesa Drive

Boulder CO 80305

(303) 497-1414

christin@ucar.edu

- Fires in the Earth System
- Biosphere-Atmosphere Interactions: how vegetation and the atmosphere impact each other
- Biology in the Atmosphere
- Air Quality and Health

Donna L. Whitney

Department of Geology & Geophysics

University of Minnesota

Minneapolis, MN 55455

(612) 626-7582

(612) 625-3819 (fax)

dwhitney@umn.edu

- Gneiss domes, metamorphic core complexes, and mountains: Lateral and vertical flow of continental crust
- Subduction petrofabrics: high-pressure minerals and textures in blueschist and eclogite from an exhumed subduction complex, Turkey (a related talk also discusses the destruction of high-pressure records during later tectonic-thermal events)
- Garnet tectonics: Using garnet microstructure and composition to investigate metamorphic crystallization and the relationship of metamorphism and deformation (a related talk also discusses other minerals in this context)
- Out of Anatolia: the evolution of a tectonic escape system