Welcome Back!

Welcome to the new academic year! Welcome to Daniel Ferreira, David Hoover, Chandi Witharana, Geethika Wijewardena and Yongping Chen, our new graduate students. We look forward to this year with you!

Welcome also to Susan Nagel, our new adjunct faculty member who will be teaching Earth and Life Through Time for us this semester. Susan has many years of experience as an adjunct, and we are pleased to have her helping us with our flagship course.

Welcome to the old guard - I hope you had a relaxing and productive summer (hopefully both). Welcome back to Jean Crespi, returning from a sabbatical leave. We are looking forward to an exciting year, with another symposium, a seminar series and growth of our program.

This message come to you from Fukuoka, Japan, where the 17th International Sedimentological Congress is being held. By itself not special, but as many other national and international gatherings, this meeting demonstrates the interdisciplinary character of earth sciences so well. From the impact of tsunamis, typhoons and earthquakes on economy and ecology, to the interactions between biology and physics on long-term geological processes, novel uses of global information systems, etc. - future earth sciences research is expanding in many exciting, transdisciplinary directions. Excitement I hope you share with me that will make our Center grow. Best wishes for a successful academic year!

PV

Summer Fun!

Some notes from students and faculty about what they did this summer.

Kristen Myshrrall: I spent the beginning of the summer continuing to work on my research design and getting ready for field work. For the last month of the summer I was in Highborne Cay, a private island in the Bahamas, running experiments and collecting samples of the modern thrombolites growing there. I was able to collect some initial data and hope to return soon to continue my work on these fascinating structures. I also made a trip up to my second field site, Green Lake up in Fayetteville, NY, to begin planning for my research on the thrombolites there.

Denise Burchsted: My research this summer took me to many far and exotic locations, one of which actually involved travel away from my computer and the library!

Thanks to generous support from the Center, I was able to attend a short course in Montreal early this summer to learn some methods of microfossil analysis. Most of my summer research time was spent continuing a literature review of paleohydrology, recent fluvial geomorphology of southern New England, and relevant methods.

Cont. on pg. 2

Inside this issue:

| Faculty News etc. | 2 |
| Upcoming Events | 3 |
| Websites of Interest | 3 |
| Earth Science Picture of the Day | 4 |
| GSA Annual Meeting Information | 8 |

In the News for Geosciences:

- For the first time, scientists have recovered direct evidence of what life in the Arctic has been like for the past 56 million years. A new 400-meter-long sediment core is revealing that all in the Arctic has not always been as it seems, with times in the past far warmer and ice buildup beginning earlier than previously surmised. Such a varied history may have implications for Earth’s future as the climate changes, the researchers say.
Faculty Contributions on Publications:

As a reminder, copies of these pubs are located in the 207 office, in a blue binder on the front counter, for anyone who would like to take a look or make copies.

#9 Chemical, Grain size, and SEM Characterization of Sinai White Sands, Egypt, and Assessment of their Economic Potential Magda M. Abou El Safa*, Raymond Joesten** and Rifai I. Rifai* - Seventh International Conference on Geochemistry, September 6-7, 2007.

Meeting Presentations:

Melinda Daniels presented at the International Conference on Riverine Hydroecology: Advances in Research and Applications, August 2006, in Stirling, Scotland, UK. Title: “Perceptions Of Wood by River Managers: Challenges For Stream Restoration In The United States”.

Zoe Cardon presented an invited symposium paper "Water flux in the rhizosphere: Structuring cycling of C and N’’ the the Ecological Society of America meetings in Memphis, Tennessee. Her co-authors were graduate student Patrick Herron (from EEB), Daniel Gage and Catalina Arango Pinedo (from MCB), and John Stark (from Utah State University).

IMPORTANT ANNOUNCEMENTS!

Call for Specialty Meeting Proposals

Would you like to be involved in organizing and presenting a GSA Specialty Meeting on your favorite geo-topic? We are particularly interested in expanding our scientific scope to include related disciplines, emerging fields, and cross-cutting issues. For more information, e-mail Deborah Nelson at dnelson@geosociety.org, and include GSA Specialty Meeting in the subject line.

Congratulations! Loretta Dickson successfully defended her PhD on August 18th. Her title was ‘A detailed textural analysis of the Palisades Sill, New Jersey’.

Tom Meyer will be doing workshops this fall: Orthometric Heighting with GPS. To be given in Providence RI and Orono, ME in September and October, respectively. Details upon request—tomthomas.meyer@uconn.edu

Congratulations to Melinda Daniels, who received the following grants!

~(Solo PI) National Science Foundation: Fluvial Dynamics of Large River Secondary Channels: Channel Morphology, Hydraulic Habitat, and Potential for Restoration, ~$57,000

~(Solo PI) National Park Service/Farmington River Alliance: Habitat and Flushing Flow Evaluation of the Farmington River Wild and Scenic Reach, CT, $12,000

~(CO-PI with Jason Vokoun in NRME) CT Institute for Water Resources: Development and evaluation of a multi-dimensional spatially and temporally dynamic mesohabitat classification model for stream management and water flow allocation planning in southern New England streams, $24,996

~(Solo PI) NOAA (through The Nature Conservancy): Monitoring the Effects of Dam Removal, $4,500

Grad Students, take a break from your hectic schedule and join us for a coffee break! Graduate Student Coffee Hours in the Graduate Lounge, SU 110, from 3-5PM. Tuesdays: September 5th, October 3rd, November 7th, and December 5th!

Upcoming Festival September 15-17th. Mansfield’s Festival on the Green—Music, food, art and entertainment for all ages!


Announcements, Awards, Publications, etc.

Summer cont.

I also spent some time preparing an abstract which was accepted for the October GSA conference. I will be speaking about baselines for use in river restoration, and look forward to gathering comments that will help shape my dissertation research.

Greg McHone—adjunct professor: I hosted several geologists for a week in July on Grand Manan Island, which is in a Mesozoic Basin of the southern Bay of Fundy, off the coast of Maine near the border with New Brunswick, Canada. My visitors included Tony and Doreen Philpotts (retired) from our program, as well as petrologists from New Jersey, New Hampshire, and Nova Scotia. We toured some spectacular shoreline outcrops of the North Mountain Basalt, which is the Canadian equivalent of Connecticut’s Talcott Basalt (a 201 Ma lava flow that marks the beginning of the Jurassic Period). My goal was to advance our (OK, my) understanding of how this giant lava flow formed. It is especially confusing (I should say challenging) because being the largest lava flow on earth, the North Mountain Basalt appears to show structures not like any found elsewhere. While the igneous petrologists were especially helpful with details, my best new insights came from Peter and Thelma Thompson, who are field geologists from New Hampshire. They immediately pointed out fault structures that until then were not obvious to me (or to my igneous colleagues). With that, I can finally establish the map stratigraphy of these rocks, and get something prepared for a new New Brunswick geological survey map of Grand Manan. So, it was a very productive meeting, and of course great fun.
Geoscience Websites of Interest

For each newsletter that comes out, we will try to feature a few great sites related to geosciences that may be of interest to students and faculty associated with the Center. Please feel free to send any sites you find along to Abi, to be included in this section in future editions!

- **Dinosaur Planet**: From Discovery Channel. Meet dinosaurs from around the world! [http://dsc.discovery.com/convergence/dinosaurplanet/dinosaurplanet.html](http://dsc.discovery.com/convergence/dinosaurplanet/dinosaurplanet.html)

- **Deserts**: Geology and Resources from the USGS. Information on types of dunes, eolian features, desertification, and more! [http://pubs.usgs.gov/gip/deserts/contents/](http://pubs.usgs.gov/gip/deserts/contents/)

- **Geocaching**: the official global GPS cache hunt. Geocaching is an entertaining adventure game for gps users. Participating in a cache hunt is a good way to take advantage of the wonderful features and capability of a gps unit. The basic idea is to have individuals and organizations set up caches all over the world and share the locations of these caches on the internet. GPS users can then use the location coordinates to find the caches. Once found, a cache may provide the visitor with a wide variety of rewards. (Our grad student Kristen does this, so she’s a good source of info. too!) [http://www.geocaching.com/](http://www.geocaching.com/)

- **Bad Science**: Debunking popular myths, incorrect teachings, and trying to get the right stories across about a variety of common science misconceptions. [http://www.ems.psu.edu/~fraser/BadScience.html](http://www.ems.psu.edu/~fraser/BadScience.html)

More to come in the next edition!

**Upcoming Events**

- **Friday September 8th**, Physics Colloquium. Professor Kamesh Wali, from Syracuse University, will present, ‘Bose, Einstein, and the Development of Bose-Einstein Statistics’. Noon, Castleman 212

- **Friday September 8th**, Engineering Seminar: Dr. Mekonnen Gebremichael ‘Remotely-Sensed Data Driven Hydrologic Modeling’. Noon, Castleman 212

- **Thursday September 21st**, EEB Seminar. David O. Conover (Stony Brook University) ‘Darwinian fishery science: Do we need to account for evolution in managing fisheries?’ 4:00pm, BSP 130

- **Monday and Tuesday September 25-26th**: SCA (Student Conservation Association) will be on campus and will do a presentation in Beach Hall. Keep your eyes posted for flyers around the hall for meeting times!

- **NEIGC**: September 29th—


- **Thursday October 19** – **TEALE LECTURE**: William Nordhaus, member of the National Academy of Science and a leading expert on the economics of global climate change, "Carbon Taxes to Slow Global Warming." 4pm, Konover Auditorium.

- **October 8-14th**—**Earth Science Week**! See more about this event on page 5.

- **Waterfalls of Iguazu (Iguassu) Falls along the Brazil/Argentina boarder. This area consists of 275 falls with a height of up to 70 meters. Iguazu Falls was declared a World Heritage Area by UNESCO in 1984. Photo by Keri Douglas.**
EPOD from 8/11/2006—The above photo showing star trails of the constellation Orion the Hunter was captured under dark skies in the vicinity of Curitiba, Brazil (in southern Brazil). Total exposure time was 40 minutes. On this late April night, Orion was sinking toward the western horizon. The Great Orion Nebula is responsible for the reddish trail, and the trail of Orion’s Belt (composed of three 2nd magnitude stars) appears close to the upper right border of the picture. The track of the very bright first magnitude star, Rigel, is at upper center.
Every year the American Geological Institute (AGI) sponsors a week dedicated to learning more about Earth Science. This year Earth Science Week is from October 8th to October 14th, and the theme is ‘citizen science’ - involving everyday citizens in building our scientific understanding of the Earth’s systems. The focus is on ways people can conduct real scientific investigations, highlighting the value of Earth science in everyone’s life, raising the profile of geoscientists’ important work, and helping to spread science literacy.

As college professors and students involved in geosciences, Earth Science Week is the perfect opportunity to deepen your own learning, make career connections, and further your goals. Plan an event for UConn, the College of Liberal Arts and Sciences, or within the Geosciences program. Plan an event with local schools to help with outreach efforts in the Earth sciences. Or even do some citizen science yourself!

Don’t forget that everyone is eligible to participate in the photography contest, with a grand prize of $300. More information can be found here: http://www.earthsciweek.org/contests/photography/index.html

For further details about Earth Science Week, ideas on activities or to see what is happening in your area, visit: http://www.earthscienceweek.org

**Did You Know?**

A new feature for our Geoscience Newsletter that reminds us of past Earth events and milestones that occurred around the time our newsletter comes out!

⇒ August 17th, 1969. Hurricane Camille (Category 5) strikes Mississippi, Louisiana, and Virginia.


⇒ August 24, 1992. Hurricane Andrew (Category 5) hits Florida and Louisiana.


⇒ September 2nd, 1935, Unnamed Hurricane (Category 5) batters the Florida Keys.

⇒ September 10th. Happy Birthday! Stephen Jay Gould, U.S. Paleontologist and Evolutionary Biologist was born on this day in 1941.

⇒ August 17th, 1969. Hurricane Camille (Category 5) strikes Mississippi, Louisiana, and Virginia.

⇒ August 24, 1992. Hurricane Andrew (Category 5) hits Florida and Louisiana.


⇒ September 2nd, 1935, Unnamed Hurricane (Category 5) batters the Florida Keys.

⇒ September 10th. Happy Birthday! Stephen Jay Gould, U.S. Paleontologist and Evolutionary Biologist was born on this day in 1941.

**GeoTrivia!**

Fun with Geoscience Trivia

************************************************

1. To what crystal system do azurite crystals belong? (hint, look at picture!)

2. What term is given to a gently sloping shore of a body of water made up of sand or pebbles that is washed by waves or tides?

3. The ore of what metal is extracted from Clinton Ore?

Check your answers: http://www.geosociety.org/GSA_Connection/0608/trivia.htm
Mass Extinctions

2 Credit Seminar (EEB 469, class # 12442, also available for undergrad credit as GEOL 298)

Prof: Andrew Bush

In this course, we'll spend 2 hours a week discussing recent and classic papers on the major mass extinctions in the history of life. General questions that we'll debate include the following: What is a mass extinction? How do we study them from the fossil record? What effects did they have on the biosphere and on the trajectory of life's history, and what was their macroevolutionary significance?

We will also examine the "Big Five" mass extinctions as individual events, with extra time spent on the end-Permian and end-Cretaceous extinctions. Our readings will cover the environmental perturbations that could trigger widespread extinction, including extraterrestrial impacts, volcanism, glaciation, anoxic/sulfidic oceans, global warming, etc. We will close by looking at the "sixth" mass extinction—the one that continues today.

No previous experience in paleontology is needed; this seminar will provide a brief overview.

Please contact: andrew.bush@uconn.edu with any questions or if you would like to sign up!

MyCOE Constellation Grants

MyCOE Constellation Grants

**Deadline: October 20, 2006**

The My Community, Our Earth Partnership will award Six (6) stipends of $1,500 each to support student participation in community-based projects using geographic methods or technologies for sustainable development.

Successful projects will comprise a constellation of undergraduate or graduate students, faculty, and extension personnel in land grant and/or sea grant universities to jointly conduct a set of research/outreach activities during the period between November 2006 and April 2007. Awardees will be invited to present a paper in a featured illustrated paper session at the AAG Annual Meeting in San Francisco, California, April 17-21, 2007. Awardees notified by November 1, 2006. Project activities to occur between November 2006 and April 2007 (minimum of six weeks). Participation in illustrated paper session at AAG Annual Meeting in San Francisco, California, April 17-21, 2007

Eligibility: Faculty, undergraduate, graduate students, and extension specialists at US land or sea grant institutions are eligible to submit applications, although the funds will be used to support student participation in the project. (For a listing of US land or sea grant institutions, see [http://www.csrees.usda.gov/qlinks/partners/state_partners.html](http://www.csrees.usda.gov/qlinks/partners/state_partners.html)).

Criteria: Proposals should be submitted through the Project Form (download from the web page at [http://www.aag.org/GrantsAwards/mycoe_constellation.cfm](http://www.aag.org/GrantsAwards/mycoe_constellation.cfm)).

Applications: Digital submissions are encouraged. Please submit complete application in an email attachment to Dr. Patricia Solis at psolis@aag.org with MyCOE Constellation Grant as the subject line. Alternately, one hard copy application can be sent to: Association of American Geographers, attn: MyCOE Constellation Grant, 1710 Sixteenth Street NW, Washington, DC 20009-3198.

Timeline:

Submission Deadline October 20, 2006
Awardees notified by November 1, 2006
Project activities to occur between November 2006 and April 2007 (minimum of six weeks)

The objective of creating and supporting these nodes of collaboration is to improve linkages among research, education, and extension outreach related to critical sustainability topics and USDA National Emphasis Areas. Program funding and support has been generously provided by the US Department of Agriculture and other MyCOE partners, including the AAG.

The MyCOE partnership will further facilitate the local teams of students, researchers, foresters, and extensionists through providing networking and mentoring support as needed through the MyCOE Network ([http://www.geography.org/sustainable](http://www.geography.org/sustainable)).

Indian dwelling in cliffs of the Verde Formation. The rock units were deposited in a large lake from 8 to 2 million years ago. Photo by Larry Fellows, AZ geological survey.
Welcome Picnic Photos!

Getting things ready to go for grilling.

Chatting away!

After some searching, Pieter and crew finally made it!

View from our picnic site of the Natchaug River.

The spread—mmm, mmmmm good!

Chefs in charge—cooking methods were..... Questionable!

Discussions... possible collaborations?!

Mingling over some food.

Old grads meet new!
The Center for Integrative Geosciences mission is to offer transdisciplinary programs of instruction and research that advance understanding of the interaction of biological, chemical, geological, and physical processes, including feedback mechanisms, at all spatial and temporal scales that have shaped Earth through geologic time, continue to shape the environment today, and which provide the basis for understanding the present and future impact of human activity on this planet.

We will be issuing these newsletters monthly throughout the academic year to keep associated students, staff, alumni, and faculty up-to-date on the Center's activities!

GSA Annual Meeting: October 22-25, 2006

GSA’s annual meeting titled ‘The Pursuit of Science: Building on a Foundation of Discovery’ will be held 22–25 October in Philadelphia, Pennsylvania.

Standard Registration ends the 12 of September. The registration and hotel forms are now linked so you only have to enter your information once to complete both functions. Register on line here: http://www.geosociety.org/GSA_Connecti on/0608/mtgPhillyReg.asp

Book Your Hotel on line here: http://www.geosociety.org/GSA_Connecti on/0608/mtgPhillyLodging.asp

DON’T MISS THESE PARDEE KEY-NOTE SYMPOSIA *P2. Evidence for Long-Term Survival of Microorganisms and Preservation of DNA Frank Pazzaglia, Paul Bieman, Milan Pavich, Dorothy Merritts

http://www.geosociety.org/GSA_Connecti on/0608/mtgPhillyPK2.asp

P3. Geosciences and the Media: How Can We Better Communicate the Imperatives of Sustainability?

Paul H. Reitan, Susan W. Kieffer, E-an Zen, Allison R. Palmer

http://www.geosociety.org/GSA_Connecti on/0608/mtgPhillyPK3.asp

BROWSE THE ENTIRE TECHNI-CAL PROGRAM HERE:

http://www.geosociety.org/GSA_Connecti on/0608/mtgPhillyProg.asp

STUDENT TRAVEL AS-SISTANCE:

Three separate grants are available ... Apply for one, two, or all three.

1. GSA Student Travel Fund
2. Section Travel Grant
3. Minority Student Travel Grant

http://www.geosociety.org/GSA_Connecti on/0608/mtgPhillyTravGrants.asp

PROFESSIONALS: You can help students attend. The need is great — more than 300 applied for these funds last year!

*Donate on your registration form or call the GSA Foundation, 303-357-1054.