Natalie Stork earned her BS in geology from UC Davis. She started working as a lab assistant in her second year for PhD student Rebekah Shepard and Prof. Dawn Sumner. She studied the morphogenesis of microbial mats, investigating potential morphological biosignatures exhibited by laboratory mats and what the controls on morphogenesis are.

During her time at UCD, she was awarded UCD Geology Durell Funds to attend UCD Geology field camp in Bishop, CA. Natalie was also a finalist in the Astrobiology Science Conference Student Poster Competition. During her senior year Natalie received the UC Davis President’s Undergraduate Fellowship, which provided support for her senior thesis which was an investigation of calcium carbonate precipitation in laboratory cyanobacterial biofilms.

Natalie came to UCon in a round about way. The graduate student who she worked for in her undergraduate years visited UConn in 2005 to work with Pieter for a few months at Avery Point, so her lab group knew Pieter and his work. During her senior thesis, she became very interested in how EPS influences carbonate precipitation, so she learned about Pieter and Christophe’s work with carbonates and EPS. When it came time for graduate school applications, UConn seemed like a great choice. The focus of Natalie’s graduate research hasn’t yet been totally resolved, but she will study EPS and carbonates, and potentially how microbial community dynamics influence carbonates and EPS as well.

Natalie spent 2 semesters abroad in New Zealand in 2006 at the University of Auckland. She returned to New Zealand for a gap year before graduate school. In her spare time, she enjoys kayaking, cooking, and dance classes.

Are you interested in rivers? Do you want to know more about how they form? I am developing, with the assistance of a suite of experts, a class on Evolution of River Form. It will be offered this coming May as an experimental variable topics course in Geoscience.

A May semester course requires paying separate tuition and, for those who live on campus, acquiring housing after the semester has ended. The benefit is that you can immerse in the course, and the weather should be warm enough to spend a lot of class time outside investigating rivers and their geologic setting. Please email Denise Burchsted at denise.burchsted@uconn.edu

If you would like more information on this course and for a draft syllabus.

**In the News for Geosciences:**

- The Mississippi River Delta is arguably the most geologically (and politically) dynamic delta in the United States. Subsidence, sedimentation, sea-level change and human manipulation constantly alter the landscape at the end of North America’s longest river. But now, researchers say, the beloved delta may be irreversibly shrinking, which will have devastating effects on the region.
**Publications:**


Anais E. Espinal1, Lichun Zhang, Chun-Hu Chen, Aimee Morey, Yuefeng Nie, Laura Espinal1, Barrett O.Wells, Raymond Joesten, Mark Aindow and Steven L. Suib (2009) Nanostructured arrays of semiconducting octahedral molecular sieves by pulsed-laser deposition in Nature Materials DOI: 10.1038/NMAT2567

**Presentations:**

Vern Cormier has been appointed to the new International Committee of the Royal Astronomical Society. This committee serves the interests of non-UK members of the RAS and seeks to form alliances with other international geophysical and astronomical societies for meetings, publications, and outreach activities. Congrats!

**Meetings:**


**Coming Soon to Beach Hall…**

Keep your eyes open on Beach Hall next semester.

Geosciences has graciously received funding to purchase and install a 3-D learning system known as “GeoWall 2”.

The belief being that understanding spatial relationships in the Earth Sciences can be heightened by using 3-D visualization. For more information you can check out the GeoWall website: [http://www.geowall.org/intro.html](http://www.geowall.org/intro.html)

And keep your eyes peeled for this system being installed in Beach Hall soon!
Geoscience Holiday Party!
Thursday December 17th all day long study break with goodies in the library, Beach Hall 233. Lunch party at 12:30pm. Come on by and celebrate the season with us!

Schedule of Events
More seminars to come next semester! Have a great break!

Departmental Seminars
- Geoscience Seminars take place on Tuesdays at 4:00pm in Beach 233 (not all weeks, please look for schedule)
- EEB seminars take place on most Thursdays at 4:00pm in BPB 130.
- Physics seminars take place on most Fridays at 4:00pm in Physics building P038.
- Chemistry seminars take place Wednesdays at 4:00pm in Chem A203.
- MCB seminars take place on most Tuesdays at 4:00pm in BPB130.
- ENVE seminars take place on Fridays at 12 noon in CAST 212.
- Marine Science seminars take place on Fridays at 3:00pm at the Avery Point campus in room 103.
  *Seminars students are interested in? We can see about setting up a webcam to cast the seminar here in the Beach Hall library.

Northeast GSA
2010 is a joint meeting between Southeast and Northeast GSA. The meeting will be held in Baltimore, MD from March 14-16. The meeting is proving to be very popular this year and many more than anticipated are signing up to go from the east coast. If you plan to go, do not delay in booking hotels or making reservations! Otherwise you might not find a place to stay. Abstract submittal has ended, but undergrads in particular may be interested in attending this meeting. It’s a great chance to network and find out more about research, grad schools, and careers in geology.

http://www.geosociety.org/sectdiv/northe/2010mtg/

Linking North and South: Exploring the Connections between Continent and Sea
Mica consists of sheets of silicon-oxygen tetrahedra held together by ionic forces of contained potassium, magnesium or iron. The fine specimen above was found in a New Hampshire granite pegmatite intrusion. In the ancient world, sheet micas were used for decorative purposes. In the industrial world, their high temperature tolerance and electrical insulating properties made them valuable in a wide variety of applications such as insulators and capacitors. Newer materials have now replaced mica in high temperature electronics, but mica is still important as an additive to paint and makeup (to provide sheen), and to drywall compounds (so it can be more easily sanded). It’s also used as window "glass" in stoves and furnaces.

Photo by Rob Sheridan

EPOD from 12/07/09

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Photo by Rob Sheridan
Compared to other disci- 

As the semester comes to an end, this concludes the first of GeoClub’s efforts. The enthusiasm of this group to plan and execute trips has been fantastic. Caitlin Arnold is commended for her efforts as club president for the first semester. With Caitlin gradu- ating, spots are opening up with our officers. We have posted a survey online for club officers next semester. We encourage everyone to vote so that we can get a good idea of who should be leading the club as well as to give us information about when to have meetings next semester and other information.

http://www.surveymonkey.com/s/3N7S23F

The most recent outing for the club was a day trip to NYC to visit the Museum of Natural History. A group of 4 students (along with club advisor Abi) made their way to the city and had a great day taking in all the sights the museum had to offer. Not the least of which were some fantastic dinosaur skeletons and wonderful displays about geology and rocks and minerals. Stay tuned next semester for a lot more going on! Have a great holiday!

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**GeoClub News and Events**

Meetings are Wednesdays at 4pm in Beach Hall 233

Geoscience News and Geo-Trivia

Geoscience Currents #27

As the semester comes to an end, we have reviewed the latest data on the percentage of geoscience degrees conferred to women. The percentage of geoscience doctorates conferred to women has increased by 5% since 2007 while the percentage of bachelor’s and master’s degrees conferred to women has remained steady over the same time period. Compared to other disciplines, the geosciences rank consistently ahead of all physical science and engineering degrees.

Additionally, the geosciences had the largest increase in the percentage of degrees conferred to women between 1993 and 2006 for all science and engineering degrees. Read more in Geoscience Currents #27.

http://www.agiweb.org/workforce/Currents/

Currents-027-GenderDegrees.pdf

Fun with Geoscience Trivia.

1. What term is given to the breaking off and floating away of ice-bergs from a glacial front that has reached the ocean?

2. What term is sometimes applied to a black diamond?

3. How many faces does a deltahedron crystal have?

Get answers here: http://www.geosociety.org/GSA_Connection/0911/trivia.htm

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**Geo-Websites**

- **Tree of Life:** Explore the evolutionary links between all living things. On this site you can explore the interactive and watch the video of the Tree of Life that aired on the BBC. Find out more about Darwin and evolution and join the discussion on our blog. There are also plenty of resources for teachers, scientists and animators.

  www.wellcometreeoflife.org

- **Tectonic Plates Quiz:** Can you name 15 tectonic plates in under a minute? Try it at his game site.

  www.spore.com/games/tectonic_plates.php

- **Understanding Science:** Explore an interactive explanation of the process of science.

  http://undsci.berkeley.edu/article/intro_01

More to come next issue!
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!

Pieter T. Visscher—Director
Abigail Hastillo—Program Assistant

http://www.geosciences.uconn.edu

LOOKING FOR A JOB? FUNDING? LOOK HERE!

Latest jobs in environment and renewable energy:

Jobs in the Earth Sciences around the globe:
http://www.earthworks-jobs.com/

Governmental jobs in the US:
http://www.usajobs.gov/

State Geology information and links to each state survey:
http://www.stategeologists.org/

EARTH Magazine Student Opportunities:
http://www.earthmagazine.org/earth/section/studentopportunities/all

NSF Research Experience for Undergrads:

CT DEP Internship Program for Undergrads:

CT DEP Job Vacancies:

SCA Conservation Internships:
http://www.thesca.org/serve/internships

GeoCorps America—paid internships in Parks and National Lands:
http://www.geosociety.org/geocorps/

GSA Classifieds:
http://www.geosociety.org/classads/classads.htm

GSA Grants:
http://www.geosociety.org/grants/

AAAS Career Center:
http://www.aaas.org/