Graduate Student Profile

In Geoscience Newsletters throughout the year, we will profile of one of our geoscience graduate students, so that we can learn more about them!

Dan Ferreira is one of our ‘new’ geoscience graduate students who comes to us from the professional field of Environmental Risk Assessment to obtain an advanced degree in geosciences.

Dan received his BS in Environmental and Resource Sciences in 2001 from UC Davis. It was here that he received awards for literary excellence, excellence as an undergraduate, and was named an outstanding senior.

Since then, Dan has worked in a varied of fields all related to the research he is pursuing here at UConn with his major advisor, Allison MacKay (CEE). From a RA for a soil chemistry lab, working with computers, to working as an environmental monitor for construction sites, Dan has a solid professional background to help him with his studies.

In 2002, Dan spent time working for Fuss and O’Neill in Manchester as a Field Geologist doing environmental fieldwork sampling groundwater, soil, and sediments. He also worked for EAS Laboratories in Watertown which included assisting and performing sample preparation for PAH, BNA, PCBs, Herbicides and many other analyses.

Most recently, Dan worked as an Environmental Risk Specialist for the Falcigno Group in North Haven, CT. Here he prepared technical reports and applications and specialized in Transfer Act risk management for contaminated properties.

In his spare time, Dan is an avid camper, a voracious reader, and has recently discovered the wondrous and exciting world of singing karaoke. We may have to start a Beach Hall competition!!! He is also working on planning his wedding with his fiancé for next fall.

Dr. Thorson’s Websites in DLESE

Dr. Robert Thorson is well known for the work he does on Stone Walls. Recently, DLESE (The Digital Library for Earth System Education) recognized his websites by including them in their collection - among the list are lesson plans, information about Stone Walls, and much more.

DLESE is a collaborative effort to provide support and leadership in addressing the national reform agenda for science education, scientific literacy, and scientific discovery. They serve a broad audience of scientists, educators and learners working together to improve the quality, and efficiency of teaching and learning about the Earth system at all levels.

DLESE resources include electronic materials for scientists, teachers and learners, such as lesson plans, maps, images, data sets, visualizations, assessment activities, curriculum, online courses, and much more. Sponsored by the National Science Foundation, DLESE is being designed, built, and governed by community members from around the country.

For a listing of Thorson’s websites that have been included in this resource, please visit:

http://www.dlese.org/jsp/cas/index.jsp?qc=emailPrimary:robert.thorson@uconn.edu
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.


Meeting Presentations:

Vischer, P.T. Keynote Speaker: Microbes and minerals through time and space: A complex interplay of populations, microbes and minerals through time and space. 17th Internat. Sedimentology Congress, Fukuoka, Japan, 29 August 2006.

Cardon, ZG, Herron, PM, Arango-Pinedo, C, and Gage, DJ. Live reports from the soil grain -- the promise and challenge of microbiosensors. Invited speaker in special session “Towards a Predictive Understanding of Belowground Ecosystem Responses to Global Change”. Soil Science Society of America meetings, November 2006.

IMPORTANT ANNOUNCEMENTS!
Going to GSA? Check out these GSA Annual Meeting Events:
Meetings for Students: Don't Miss These Events at the Annual Meeting! *FREE Grant Proposal-Writing Workshop— Improve your chances of receiving a GSA student research grant and learn to write better proposals for all future funding! Aed specifically at graduate students. Tue., 24 Oct. No registration necessary — just show up with your lunch and questions!

http://www.geosociety.org/GSA_Connectio n/0609/mgPhillyStuGrants.asp

*Mentor Programs—Careers Roundtable Discussions bring together a broad range of geoscience professionals with fellow GSA members seeking employment, networking opportunities, and job-market perspectives. Free; registration not required. Sun., 22 Oct.

*Geology in Government Mentors Luncheon provides an opportunity to meet with mentors who can answer your questions about job opportunities with government agencies. Free; registration not required. Come early—free lunch is first-come, first-served. Mon., 23 Oct.

http://www.geosociety.org/GSA_Connectio n/0609/mgPhillyStuMentors.asp

Northeastern GSA Call for Papers: The Call for Papers is out for the 2007 Northeastern Section Meeting. Abstracts deadline: December 5.

http://www.geosociety.org/GSA_Connectio n/0609/secMtgNE.asp

Northeast GSA will be held at the University of New Hampshire this spring -March 12-14th. Find out more about this professional meeting here:

http://www.geosociety.org/sectdiv/northe/07/mentg.htm

In May, Zoe Cardon was appointed Adjunct Associate Scientist at the Ecosystems Center, Marine Biological Laboratory at Woods Hole, MA. She also recently agreed to serve as a Program Leader for the SAMS (Statistical and Applied Mathematical Sciences Institute) Program on Environmental Sensor Networks in Research Triangle Park, NC:

http://www.samsi.info/programs/2007s ensonetprogram.shtml

Dr. Allison MacKay’s Research was highlighted in the Fall 2006 edition of OnEarth, published by the NRDC. The article covered pharmaceuticals and how they enter the environment and harm rivers in Connecticut. Copies of the article are here in the main office, 207 Beach Hall!

EPA Hard Rock Conference

Tuesday, November 14 through Thursday, November 16, 2006 at Doubletree Tucson Reid Park Tucson, Arizona

Conference Purpose & Goals - This conference will provide a forum for the exchange of scientific information on current and future environmental issues which provide sustainable opportunities for efficient extraction and maximum utilization of resources in mining. This information exchange will not only serve to enhance the legacy of remediation and cleanup, but will also contribute to the sustainability of efficient extractive activities.

Who Should Attend—This conference is aimed at mining remediation researchers and practitioners; federal, state, local, and tribal decision makers; the mining industry; and others interested in mining remediation and sustainability.

Preliminary Agenda—The preliminary conference agenda is now available at www.epa.gov/hardrockmining/. The conference will include sessions on characterization of mine waste, innovative technology applications, mine closure, monitoring, reclamation and bonding, restoration, stakeholder collaborations, and air and water quality management. On the evening of November 14th, a poster session will be held where attendees will have the opportunity to discuss projects one-on-one with poster presenters.

Registration—To register to attend the Hard Rock 2006 Conference, go to www.epa.gov/hardrockmining. There is no registration fee to attend this conference. The pre-registration deadline is November 3, 2006. Inquiries can be directed to Alina Martin of SAIC at tcs-events@saic.com or 703-318-4678.
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!

- Illustrated Glossary of Alpine Glacial Landforms: A site that shows photos of glacier features side by side with topo maps:
  
  http://www.uwsp.edu/geo/faculty/lemke/alpine_glacial_glossary/glossary.html

- Learning about Astrogeology from Mars Rovers: Two USGS astrogeologists lead a team that developed and analyzed data from the Microscopic Imagers installed on the two rovers, and report on their findings in the most recent edition of the journal Science. More information about the Mars Mission and other work of USGS Astrogeology scientists can be found at
  
  http://astrogeology.usgs.gov

- Geomart Classified Ads from GSA—Did you know the IL Geological survey is hiring? How about becoming a field hydrologist? View ads for these jobs and more!
  
  http://www.geosociety.org/classiads/classads.htm

- World Stress Map: The World Stress Map (WSM) is a global repository for contemporary tectonic stress data from the Earth's crust. This open-access database for earth science researchers includes everything from tectonic modeling to seismic risk assessment.
  
  http://www.world-stress-map.org/

More to come in the next edition!

Upcoming Events

- October 8-14th—Earth Science Week!

- Tuesday October 17—Geoscience Seminar Series presents graduate student Denise Burchsted, ‘Defining Baseline Conditions in Connecticut Streams Prior to European Settlement’ 3:30pm Beach Hall 233 (Reading Room) Refreshments served!

- 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.

- Tuesday October 24th—Geoscience Seminar: Timothy Dixon (UMiami), AAPG Distinguished Lecturer. "Hurricane Katrina and New Orleans: Subsidence Measurements from Space". 4:00pm Beach Hall 233 (Reading Room) Refreshments served!


- Friday October 30-31: Woods Hole Oceanographic Institution is hosting a tsunami workshop and is offering an invitation to all interested US and international researchers and graduate students in broad disciplines of geology, geophysics, oceanography, and ocean and coastal engineering. For additional information and registration, please visit http://www.whoi.edu/sites/tsunami_Wkshop

- Wednesday November 1—NRME Seminar: Carl Zimmerman “A Preliminary Investigation Into Using High-resolution Imagery and Data Fusion to find Connected Impervious Cover for Hydrologic Modeling”. 4:00pm Young 305.

- Friday November 3—CEE Seminar, Dr. Terri A. Camesano, WHOI ‘Quantifying the Interactions between Bacteria and Natural Organic Matter’. 12 Noon CAST 212.

- Wednesday November 15—NRME Seminar: Meredith Metcalf “Deciphering Bedrock Yield and Water Quality Through Spatial Analysis” 4:00pm Young 305.
EPOD from 9/25/2006: This photo of a sculpted sand dune was taken in the Namib Desert in Namibia, Africa on July 23, 2006. The Namib's dunes are considered to be the highest on our planet -- some exceed 340 m or 1,115 ft. The dune shown above is perhaps 7.5 m or 25 ft in height. In addition, the Namib is one of the oldest and driest deserts in the World. In fact, the area is so dry that much of the reddish sand still contains nearly pure iron particles, which can be pulled out with a magnet. Photo by Powell Jones
The Center for Integrative Geosciences Presents:

Dr. Timothy Dixon
University of Miami, Florida
Distinguished Lecturer

‘Hurricane Katrina and New Orleans: Subsidence Measurements from Space’

It has long been recognized that New Orleans is subsiding, potentially leading to catastrophic flooding. A new subsidence map for New Orleans based on space-based Synthetic Aperture Radar (SAR) shows high subsidence rates in parts of New Orleans, including levees adjacent to the MRGO canal that failed during Hurricane Katrina. This gives clues to the failure process: these levees may have been overtopped during peak storm surge due to subsidence of - 1 meter or more since levee construction, or high subsidence rates may indicate a weak substrate beneath the levees.

Date: Tuesday, October 24th
Time: 4:00pm
Location: Beach Hall 233 (Library)
Reception to follow.
Geosciences T-Shirt Contest!

Students—design a T-shirt for the Center for Integrative Geosciences and win a free shirt! We are looking for a design with a small front logo and a full back design for T-shirts to represent our group at UConn. Submissions can be made to the main office (207 Beach Hall) or via email to geology@uconn.edu any time in October or November! The winner will be announced in the December newsletter, and T-shirts will be made in the spring.

So Get Creative!!!

Environmental Expressions Student Contest

The office of Environmental Policy (OEP) is holding an ‘Environmental Expressions’ contest! Entries must promote the theme of environmental sustainability and relate to a topic featured on the Eco-Husky website—www.ecohusky.uconn.edu. For entry information and categories for submissions, visit the contest website:
http://www.ecohusky.uconn.edu/enviroexprss.htm

Cash prizes as well as merchandise from area businesses will be awarded!

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 came out!

⇒ October 11th: Happy Birthday! Thomas Dibblee, US Geologist and Pioneering Cartographer was born in 1911.
⇒ October 17th: Did you know? San Francisco’s 1989 earthquake (Estimated Magnitude 6.9) rocks northern California.
⇒ October 23rd: Did you know? Fossil Butte National Monument containing nearly perfectly preserved fossils was established in 1972.

Fan fern fossil from Fossil Butte National Monument. Photo by Albert Copley.

⇒ November 1st: Happy Birthday! Alfred Wegner, German Meteorologist and framer of Continental Drift Theory was born in 1880.
⇒ November 7th: Happy Birthday! Marie Curie, Polish Chemist and Physicist whose work on radioactive minerals led to modern science of geochronology was born in 1867.

Amine adit in Montana.

GeoTrivia!

Fun with Geoscience Trivia

1. What geological feature is involved in the forming of a coulee lake?
2. What is the name of the process used to split complex hydrocarbons making up crude oil into smaller hydrocarbons?

Check your answers:
http://www.geosociety.org/GSA_Collection/0609/trivia.htm

3. What term is given to the opening of an adit? (hint: view photo!)
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!*

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**Nielsen Environmental Field School Fall Classes**

**LAST OPPORTUNITY TO REGISTER FOR THESE FALL COURSES!**

Want to Learn How to Lower Your Sampling Costs AND Improve Data Quality?

Want to Learn the Best Methods for Sampling Low-Yield Wells?

Want to Learn About the Results of the Latest Research on Ground-Water Sampling?

THEN YOU MUST ATTEND THESE COURSES!!

*The Ground-Water Sampling Field Course*
- October 10 - 11, 2006 - Kansas City, MO
- November 1 - 2, 2006 - Hartford, CT

*The No-Purge Sampling Field Course*
- October 12, 2006 - Kansas City, MO
- November 3, 2006 - Hartford, CT
- November 13, 2006 - Long Beach, CA

These Courses are Specifically Designed to Meet the Environmental Training Needs of:

* Environmental Consultants, Contractors & Laboratory Staff
* Government Agency Environmental Staff: Federal, State, Regional, County, City, Tribal
* Industry Environmental Staff: Petrochemical, Utility, Landfill, Manufacturing, Mining and Others
* DOD/DOE Environmental Staff & Contractors

These Courses Meet the Continuing Education Requirements of the State Certification Programs for:

* Massachusetts Licensed Site Professionals
* Connecticut Licensed Environmental Professionals
* Oklahoma Remediation Consultants
* TCEQ Corrective Action Project Managers
* Iowa Landfill Operators
* Iowa Water Well Contractors
* Nebraska Water Well Monitoring Technicians
* Nebraska Water Well Contractors
* Credits earned by attending any of our field courses are also recognized by the Texas Board of Professional Geoscientists And Many Other Programs Across the Country -- Visit our Web Site for Details and Course Outlines [http://www.envirofieldschool.com/](http://www.envirofieldschool.com/)