

August 2012 News Notes

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66th Field Geology Course in Ephraim completed

During June-July this year, 21 students, 2 teaching associates and instructors Cristina Millan & Terry Wilson (1st half) and David Elliot & Shelley Judge (2nd half) were resident in Ephraim for field camp. Unlike the unusual wet conditions of 2011, in 2012 it was extremely dry until the end of June, with wild-fires in and around Sanpete Valley – we had days of visible flames, smoke plumes and fabulous sunsets.



New this year was a study of core from the Covenant Field discovery well (oil discovered 2003 in Sevier Valley) as part of our 'South Cross Section' exercise, which examines the stratigraphy and structure across the Sanpete Valley just north of the Providence Field (oil discovered 2008 in Sanpete Valley). The Utah Core Research Center of the Utah Geological Survey was given the Covenant core by Wolverine Oil and Gas Corp., and CRC provided the core display and posters presenting the geology of these fields. The class examined sedimentary and structural features in the Navajo Sandstone (previously seen in outcrop at Capitol Reef National Park) and used the depth data from the boreholes to constrain the subsurface structural interpretation on their cross section.

Regional geology field trips included Capitol Reef National Park, the Marysvale volcanic district, Great Basin National Park - to view the Snake Range metamorphic core complex, Lehmann Caves, a rock glacier and bristle-cone pines, the Blackrock Desert volcanic field near Fillmore, and Little Cottonwood Canyon and the Alta stock.



Capitol Reef slot canyon

The field camp group are pictured below at an outcrop of tufa near Fillmore. From left to right: Jeremy Myers, David Elliot (instructor), Nathan Gress, Natasha Lewis, Wayne Malangone, Cody Trigg, Will Blocher, Chrissy Zerda, Mark Bastawros, Andrew Tenison (undergrad TA), Cara Nadler, Joe Lonsert, Rohan Dasgupta, Shannon Hibbard, Andrew Collins, Abby Crock, Lauren Rosenbeck, Ron Lidderdale, Michael Kellum, Josh Self, Jie Chen, Charlie Diamond, Dan Barr and Joel Main (Grad TA - lying down). Missing: Shelley Judge, Cristina Millan, Terry Wilson (instructors).



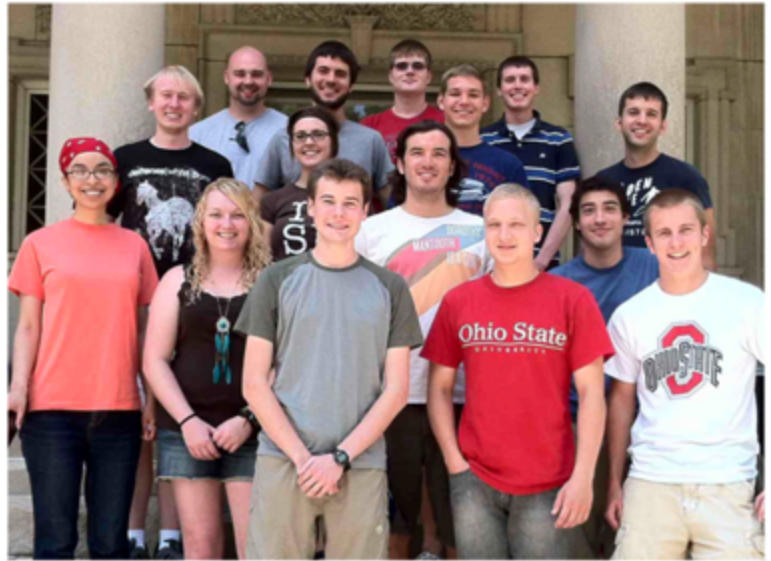
Shell Undergraduate Research Experience (SURE)

Video seminars with Shell in Houston

Among the many professional and technical development workshops that the Shell Undergraduate Research Experience (SURE) provides for the SES undergraduate students participating in the program are 2-way video conferences with Shell in Houston. On July 13 and August 3, 2012, the SURE students heard several presentations on unconventional plays, one on the use of imaging techniques, and one on Miocene-Pliocene potential in the Gulf of Mexico. Presentations by Shell geoscientists were coordinated by SES alumna Kendra Pyke (M.S. 2005) and most presentations were given by SES alumni, including Bill Magee (B.S. 2009, M.S. 2012), Rob Swift (M.S. 2011), Jerome Hall (M.S. 2006), and Mohammad Asgharzadeh (M.S. 2002, Ph.D. 2007).

SURE Poster Session

The culmination of the 8-week Shell Undergraduate Research Experience (SURE) will be a poster session in which the 14 undergraduate students in the School of Earth Sciences who are the 2012 SURE interns present posters on their summer research. The 2012 final poster session will take place on Thursday, August 9, 1–4 p.m. in 291 Mendenhall Laboratory. Shell geoscientists Patrick Jackson and Ted Godo (B.S. 1977, M.S. 1979) will be present for the poster session and to talk to the students about careers in the energy industry. All are welcome to attend and hear about the students' research.



Subsurface Energy Resource Center Announces Daniels as Director

Ron Sega, Vice President and Enterprise Executive for Energy and the Environment, and Joseph Steinmetz, Executive Dean and Vice Provost, College of Arts and Sciences, today announced that Jeffrey Daniels, professor in the School of Earth Sciences, has been named director of the Ohio State Subsurface Energy Resource Center, effective July 1. Daniels had previously served as SERC co-director with Douglas Southgate, professor of Agricultural, Environmental and Development Economics. Southgate has been named associate director of the center.

SERC was established in September 2011 to contribute to the knowledge about underground sources of energy and the environmental and socioeconomic issues that must be resolved as these sources are harnessed. SERC's primary mission is to coordinate all of Ohio State's subsurface expertise to ensure the university is serving as an objective, unbiased source of knowledge to citizens, business interests and policymakers.

Since its establishment, SERC has hosted workshops and discussion forums on the varied topics impacting subsurface energy issues in Ohio, including "Environmental and Public Health Concerns," "Student/Industry Networking," "Pipeline Construction in Ohio," and "Shale Energy Environment and Health Issues Workshop."

In his role as director, Daniels will lead SERC towards its goals to:

- Coordinate communications and collaboration among Ohio State faculty and researchers, and serve as a communications link among public-sector agencies, nongovernmental organizations (NGOs), business and industry, and educational institutions throughout Ohio
- Provide educational resources and serve as a discussion forum for the full range of subsurface energy issues
- In conjunction with the offices of Research and Government Affairs, create opportunities for faculty investigators to attract funding and other support for research, outreach, on-campus instruction, and related activities; and coordinate and facilitate large-scale interdisciplinary research about subsurface energy at the local, state and national levels
- Provide state and national leadership on issues related to subsurface energy
- Coordinate strategies with Ohio State's Career Services offices to enhance subsurface energy job opportunities for our students

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International Geoscience Programme Meeting

Prof. Mark Kleffner (Lima) recently attended and presented at the International Geoscience Programme (IGCP) 591 2nd Annual Meeting and 1st Foerste Symposium, held in Cincinnati, Ohio on July 22-28. IGCP 591 Project Leader and OSU alum Bradley Cramer was one of the conference organizers. Approximately 50 people from North America, South America, Europe, and Asia attended the conference, including another Ohio State alum, Kate Tierney, and current PhD candidate, Alyssa Bancroft. The conference consisted of pre- and post-conference field trips and two days of interesting presentations on topics concerned with the Early to Middle Paleozoic (Early Ordovician to Early Devonian) Revolution. The pre-conference field trip visited Katian (Ordovician)-Wenlock (Silurian) strata in the southern Appalachian Basin of Kentucky and Ohio, and included a three-dimensional digital mapping experience at an outcrop of the Silurian Bisher and Lilley Formations at Measley Ridge in southern Ohio. The post-conference field trip visited Katian-Ludlow (Silurian) strata of the Cincinnati Arch region in Indiana and Kentucky and Illinois Basin in Indiana and Illinois, including a visit to one of the largest quarries in North America, Thornton Quarry, and a luncheon stop at Falls of the Ohio State Park in Clarksville, Indiana. One of the highlights of the IGCP 591 2nd Annual meeting was the conference banquet, a catered dinner held on a riverboat during a three-hour cruise on the Ohio River following the first day of presentations. A photo of all of the conference participants who enjoyed that cruise can be seen below. Prof. Kleffner is seated in the front row, proudly wearing an Ohio State Lima shirt, Kate Tierney is in the second row, located just above my right shoulder, Alyssa Bancroft is in the back row, located above Kate's left shoulder, and Brad Cramer is nearly hidden in the back row on the far left side.



International meeting of the Scientific Committee on Antarctic Research (SCAR), Portland, Oregon

Ohio State faculty and alumni featured prominently in the 32nd SCAR meeting held in Portland. SCAR is charged with the initiation, promotion, and coordination of research in Antarctica. SCAR has 36 full and associate member countries conducting research in the Antarctic and the Southern Ocean. SCAR has not held its biennial meeting in the USA since 1986, and the successful organization of the Portland meeting was in large part due to our alum Christina Hulbe (M.Sc. on glaciological research with Ian Whillans) who was co-chair of the local organizing committee.



Christina
Hulbe

Numerous presentations on Antarctic science were given by faculty, researchers and students of SES and the Byrd Polar Research Center at the SCAR Open Science Conference, held during the meeting. SES and BPRC were also well-represented at workshops and business meetings of the SCAR scientific groups. Berry Lyons and David Bromwich were elected to four-year terms as Chief Officers of the SCAR Standing Groups on Geosciences and Physical Sciences (respectively). The Geosciences and Physical Sciences groups are two of the three standing science groups, with the other being Life Sciences. Terry Wilson stepped up to the position of lead U.S. Delegate to SCAR at the conclusion of the SCAR Delegate's meeting. She will lead the SCAR U.S. team in coming years, and BPRC will host the U.S.-SCAR web site and ANSWER (ANarctic Science WEB Resource).

Brevia

Geology Museum curator Dale Gnidovec has been selected for one of the four Outstanding Staff Awards for the year in the College of Arts and Sciences. Additionally, Dale's "Geo Walk" was featured in the College newsletter: <http://artsandsciences.osu.edu/news/asc-staff-helps-create-geo-walk>. Congratulations, Dale!

SES graduate student Jeff Pigott won the thin-section identification contest. from last month's Alumni News Notes. Jeff correctly identified the photo at right as enstatite, a pyroxene. Congratulations, Jeff! The photo was taken with one of SES' new Leica DM 750P microscopes, which replaced the 30 year old polarizing microscopes used for mineralogy and petrology.

