

Department of  
**GEOLOGICAL**  
**SCIENCES**

<http://geology.uoregon.edu>

## Greetings from the Department Head

*Ray Weldon is our new Head, and Marli Miller is our new Associate Head.*



It's amazing how much has happened since Marli and I took on these positions a year and a half ago. Among other things, we've promoted several of our assistant and associate professors, gained a new full-time faculty member and several part time researchers and instructors, are interviewing for yet another position, added a variety of new course offerings, and lived through a major space reorganization and renovation over the summer. We're growing! Our current tenure-track faculty now number 19 people, which makes us bigger and more variable than ever before. Still, we function like a small department, in which everybody knows (and

even likes!) everybody else. We've also welcomed two new classes of graduate students and graduated a growing number of graduate and undergraduate students. Now, we're getting ready for a 10-year departmental review this coming winter, something that is spurring a lot of discussion on future directions in research and our curriculum --which means even more faculty meetings!



## Welcome to the Sutherlands --our newest faculty members!

*Two new Oceanographers expand our program.*

We're delighted to welcome David and Kelly Sutherland, our newest faculty members. Both David and Kelly are oceanographers. David mostly studies circulation dynamics in coastal and estuarine environments and is full time in our department. He presently has NSF funding to investigate glacier-ocean dynamics in Greenland's Fjords. Kelly focuses on biological oceanography, especially "jelly animals", and the physics of propulsion and predator-prey relationships. She holds research appointments in the Institute of Ecology and Evolution and Oregon Institute of Marine Biology and will also teach for several different departments.

David and Kelly moved here from Pasadena, CA where they were both doing post-docs (David at NOAA; Kelly at Caltech) --they met as grad students at Woods Hole. Both are excited to be living in the northwest and teaching at UO. Kelly, who learned to SCUBA dive at age 13, looks forward to testing out some Oregon waters.



## Some People News



### Ilya Bindeman

Ilya currently has three proposals funded that deal with isotopic investigation of volcanism of subduction zone magmas. These studies include the southern Andes and Kamchatka as well as one that investigates the “Slushball Earth” glaciation 2.4 Ga. Ilya will be organizing a Winter grad student seminar coupled with Winter Speakers series by inviting leading researchers of the Snowballer Earth hypothesis (he calls them “Snowballers”) to come to Oregon. He spent last year’s sabbatical in University of Geneva and Caltech exploring new analytical frontiers using TIMS and NanoSIMS. He also did three stints of fieldwork last summer in Idaho with a new grad student, Dana Drew, investigating poorly known Picaboo caldera complex, and in Kamchatka with his new grad student Angela Seligman.

Ilya reports that his favorite rocks are now mid-grade metamorphic rocks, along with gem kyanite and ruby corundums (apparently, they are hydrothermally-altered by glacial meltwaters near equatorial latitudes, just before the rise of atmospheric oxygen).

### Emilie Hooft

Emilie continues her research into the movement of magma and its accumulation in the mantle and the crust at mid-ocean ridges and ocean islands. At the large scale, she studies the interaction of two of Earth’s primary magma producing regions: mantle plumes and mid-ocean ridges. After a decade’s work in Iceland and the Galapagos, she is promoting a large multidisciplinary study in the Galapagos.

At mid-ocean ridges she investigates the structure of the magma system from the uppermost mantle to the crust. This work involves seismic imaging at multiple scales and analysis of earthquakes to understand stresses and interactions with the hydrologic system. Additionally, she recently conducted a seismic study of the magma system of Newberry volcano, Oregon, that successfully tested new approaches inspired by her marine seismic work. This work comprised Matt Beachly’s master’s thesis.

In November 2011, she will go to sea with her new grad student Joseph Byrnes, and deploy ocean bottom seismometers to image the Cascadia subduction zone and the downgoing Juan de Fuca plate. This large, multi-year project will allow her to understand plate interactions and subduction zone processes in the Pacific Northwest.



## Some People News



### David Schmidt

David's research efforts are focused on the imaging of crustal deformation using geodetic and seismic data. His primary expertise is the use of satellite radar interferometry in earth science applications. This technique uses reflected radar echoes to measure sub-centimeter surface movements over time periods of weeks to years. His research group is studying a variety of geological processes and natural hazards, including aseismic slip events on strike slip faults and the Cascadia subduction zone, deformation caused by volcanic inflation, and the kinematics of earthflows. Recently, David was on sabbatical at the USGS Hawaiian Volcano Observatory where he studied the subterranean

magma transport beneath Kilauea using satellite data.

### Alexandra (Andie) Rempel

Andie is officially part of the Environmental Studies program, but she is doing some teaching for us in the Honors College right now, in collaboration with her husband, Alan Rempel. This course, "Energy in Transition", explores ways that societies adapt, or avoid adapting, to major changes in their food and fuel sources.

Andie's specialty is in designing low-energy buildings. Her present research involves documenting and modeling passive system performance in existing buildings. As a direct application of her interests, she single-handedly renovated an abandoned space on the third floor of Volcanology as a green office space. Andie holds an M.Arch. from the University of Oregon, a Ph.D. in Biology from MIT, and a B.A. in Biochemistry from Harvard College.



**Max Bezada** Originally from Caracas, Venezuela Max obtained his Bachelor's degree in geophysical engineering in 2005. After a short time working for the Venezuelan Foundation for Seismological Research he went to Rice University to pursue his doctoral degree studying the Caribbean-South American plate boundary. It was during his final year of his doctorate that he visited the University of Oregon to learn teleseismic tomography methods from Gene Humphreys and Brandon Schmandt. At that time Gene invited him to join our department as a postdoctoral researcher.

Max has been here since the summer of 2010. He works on seismic imaging of southern Spain and northern Morocco as well as studying a particular deep-focus earthquake that occurred last year in that region. Additionally, he's interested in genetic algorithms and the development of graphical user interfaces as tools for both research and education. Max taught our fall quarter, 2011 class on Mat lab.

The little boy in the photo is his son Samuel, last year on the Oregon Coast.

## Some People News

### Emily Johnson and Reed Burgette

We're thrilled to welcome back Emily Johnson and Reed Burgette following their postdoctoral fellowships in Australia--and following their wedding in 2009! Since receiving their PhDs from UO in 2008, they both worked at the University of Tasmania. There, Emily worked with Jocelyn McPhie and Dima Kamenetsky studying volatile contents, metal concentrations and the melt evolution of rhyolites in the Taupo Volcanic Zone, NZ. Reed's research with Christopher Watson focused on using geodetic techniques to measure sea level change, tectonic deformation, and ice sheet volume change (which involved two trips to Antarctica!). Now back at UO, Emily will be teaching and beginning experiments in Dana's lab to investigate the behavior of volatiles during magma decompression. Reed will be one of our 2012 Meierjurguen Fellows. He plans to study interseismic deformation of the west coast of the U.S. with Ray Weldon and David Schmidt, as well as teach surveying in the spring and field camp in the summer.



### David Blackwell

After years of teaching at UO, LCC and the Bend Campus, David is finally with us full time, teaching 6 courses per year--that range from intro to upper division majors courses. And... these courses always offer lots of field trips! (Dave says that he typically leads 5 one-day trips and one overnight trip for each of his courses.) Dave also offers a fall FIG (Freshman Interest Group) --with a field trip of course, as well as a variety of undergrad seminars. On top of all that, Dave acts as faculty advisor for Geology Club, which for the past several years has included supervision of their spring break field trip.

## Other Faculty and Staff news --in brief

*We now have 19 full or half-time faculty members, as well as a host of research associates and adjunct instructors, the largest group ever in the department's history. Here are a few highlights.*

**Josh Roering** reports that the paper he co-wrote with Jill Marshall, Adam Booth (both present grad students), Michele Mort (former grad student) and UO DoGS colleague Qusheng Jin received the GK Gilbert Award for Excellence in Geomorphic Research by the American Association of Geographers. He adds that Jill Marshall, in her NSF-funded study, is tracking how erosion rates have changed through major climate fluctuations.

**Greg Retallack** and his wife Diane had a wonderful working vacation in Newfoundland, including time studying the Ediacarian Fossils at Mistaken Point. True to form, Greg discovered paleosols in the supposedly marine section. He describes his current mission as completing a round of research on the oldest known paleosols before revising his textbook for its third edition. **Paul Wallace** was promoted to Full Professor in May, then promptly received a 3 year NSF grant to continue his research on magmatic volatiles in the Cascade Range. He's now preparing for his sabbatical in New Zealand, beginning winter, 2012.

## Other Faculty and Staff News --in brief

**Alan Rempel** and David Schmidt received funding from NSF to fund Rob Skarbek's work on slow slip. Alan was also awarded a fellowship by the Earthquake Research Institute to spend three months in residence next spring at the University of Tokyo studying "the evolution of shear-zone thickness and fault strength during earthquakes." He writes that "The rest is mostly same old same old, my glacier stuff is most recently focussed on understanding how sliding stops



*Annual faculty retreat at Andrews Experimental Forest, October, 2011.*

and starts. Some gas hydrate stuff has just come out, including one paper in EPSL with former undergrad Kristen Fauria as lead author.

**Doug Toomey** just returned from a productive sabbatical in the Netherlands with Emilie and their children. During this time, he continued his research on the ETOMO seismic experiment, initiated collaborations with European colleagues --and convened several conferences, including a Chapman Conference in the Galapagos on the origin of Oceanic Islands.

**Dana Johnston's** big news since the last newsletter is that he became Associate Dean of Natural Sciences in July, 2010. As this is a full time appointment, he's stepped away from teaching, although his lab is still buzzing along, funded by two current NSF grants. One focuses on the hydrous liquidus phase relations of primitive subduction-related basalts at high pressure, and the other investigates partitioning behavior of trace elements between hydrous MORB liquids and

high-anorthite plagioclase feldspar. Dana anticipates serving as Associate Dean for a second term and then drawing to a close what has been a phenomenally rewarding career, to enable him to travel more and pursue other long-standing interests.

**Gene Humphreys** says that there's "too much exciting research stuff" right now. He continues his studies of tectonic processes of continental lithosphere, mostly in the western US and Mediterranean. Among other things, he's found that a Yellowstone Plume does exist and that there seems to be evidence for the abandoned Farallon oceanic lithosphere beneath Idaho and northern Washington. In the Mediterranean, he and post-doc Max Bezada are studying a deep (650 km) earthquake that took place *just after* they deployed their seismometers. **Pat Ryan** just returned from Morocco and southern Spain where he and Gene serviced some 90 seismograph stations. He suspects that by the project's end, they'll have some 2Tb of data!

**Becky Dorsey** just learned that she was awarded a 3-year NSF grant to investigate erosion, sedimentation, and vertical motions along the San Andreas fault in the Coachella Valley, southern California. She will be there in winter, 2012 with her new MS student, James McNabb.

**Samantha Hopkins** has now visited many of the known sites in Oregon's Oligocene and Miocene terrestrial record, to place UO's existing collections in a geologic context and address how mammalian faunas evolved through the Oligocene and Miocene climate changes in Oregon. **Edward Davis's** review of the evolution of ruminant headgear was published in The Proceedings of the Royal Society. He says: "the paper marks a new direction for me, investigating the evolution of the horns, antlers, and ossicones that mark the heads of cattle, deer, giraffes, antelope, and their relatives"

## Other Faculty and Staff News --in brief

**Mark Reed** reports that he and grad student Ryan Seward ran a newly designed and built fluid inclusion tool (FIT) in a high temperature (340°C) geothermal well in Iceland. It formed thousands of fluid inclusions that they then analyzed to determine the composition of the waters. This was a test of a novel method for sampling at temperatures too high (>250C) to sample any other way.

**Dennis Fletcher** just completed upgrade of sites for the Pacific Northwest Seismic Network, and continues its ongoing maintenance and data collection. He also continues to maintain our teaching computer network and lab. **Marli Miller** was awarded the contract to completely rewrite the Roadside Geology of Oregon book, and started a new project with MS student Sammy Castonguay in Death Valley. **Mary Baxter** is teaching more courses in the department, as well as at LCC. Most recently, she resurrected our sed-pet offering.

**Jim Palandri** just started working in Dana Johnston's lab, training users and maintaining cold-seal hydrothermal apparatuses. He also continues a range of activities, including managing the stable isotope lab.

**Qusheng Jin** continues his studies of microbes in natural environments through lab experiments and computer simulations. His student Scott Maguffin is examining impacts of aquifer microbial consortia on groundwater arsenic contamination, and new student Ben Shapiro is modeling microbial respiration.

**Kathy Cashman** is in her first year of a three-year Research Chair position at the School of Earth Sciences, University of Bristol. She says she's enjoying

life in Bristol and being part of a large and very dynamic volcanology group, but misses UO, Eugene and the Pacific Northwest.

## Emeritus Faculty Highlights



*Beginning-of-year party outside Cascade, 2011*

**Norm Savage** is working on several projects, including conodont zonation and terranes in northeastern Russia and west-central Alaska, and Late Devonian extinctions and climate change in Thailand. This December, he is a Keynote Speaker for the World Conference on Paleontology and Stratigraphy in Nakhon Ratchasima, Thailand.

**Alexander McBirney** recently published two books. "Faulty Geology," details some frauds and delusions in geology, and his novel, "The Trilobite Affair" describes a paleontologist accused of substituting fossils from other localities to support his interpretation of stratigraphy. Mac also notes that his igneous and petrology and volcanology books are still selling well --especially in China!



Paul Wallace and students at Crater Lake.

**Bill and Elizabeth Orr** report that the 6th edition of Geology of Oregon is now in press with OSU Press --and should be in bookstores next fall. During the past three years, Bill has been excavating a Pleistocene sloth in Kings Valley, north of Corvallis. So far, they have acquired about 60% of the skeleton and are adding it to the Condon Collection.

**Allan Kays** presented a paper on the Klamath Mountains and coauthored a field trip guide to the Klamaths for the 2009 Portland GSA meeting --and continues to study the petrology of Archean rocks in east Greenland.

## Grad Student News

### *Welcome new grad students!*

This year, we welcomed 12 new graduate students by taking them on a weekend camping trip to central Oregon. There, we climbed and hiked Smith Rock and floated down the Deschutes River.

#### **New Grad Students:**

Lauren Austin	<i>Structure and Neotectonics</i>
Joseph Byrnes	<i>Seismology</i>
Sammy Castonguay	<i>Structure and Tectonics</i>
Dana Drew	<i>Isotope Geochemistry</i>
Nick Famoso	<i>Vertebrate Paleontology</i>
Kristen Mackenzie	<i>Vertebrate Paleontology</i>
James McNabb	<i>Sedimentation/Tectonics</i>
Katie Paulson	<i>Structure and Neotectonics</i>
Kelly Rabjohns	<i>Geomicrobiology</i>
James Rea	<i>Volcanology</i>
Angela Seligman	<i>Isotope Geochemistry</i>
Ben Shapiro	<i>Geomicrobiology</i>
Robin Tuohy	<i>Volcanology</i>

Last year's departmental awards included the following. The Thayer Scholarship went to **Kristin Sweeney** to help her build an experimental erosive landscape. The Staples Award went to **Hannah Dieterich, Gary Nolan, and Stephanie Weaver**. Hannah is using the money to help pay for a research trip to Bristol, UK. Gary attended a conference and Stephanie participated in a workshop called "Engaging Difference: Diverse Women in STEM Building Careers." The Staples fund also helped defray expenses for graduate students who participated on the Morocco Field Trip. The Johnston Fund supported six other grad students, **Alexander Handwerger, Katie Marks, Hannah Dieterich, Rob Skarbek, Lucy Walsh, and Sammy Castonguay**, to attend conferences. These conferences included ones in Scotland for Gas Hydrates (Handwerger), in Australia for geodesy and geophysics (IUGG-Dieterich), and New Zealand for slow-slip fault events (Skarbek). The Johnston Fund also recognized PhD student **Brandon Schmandt** for his work in geophysics. **Natalia Deligne** received the department's Good Citizen Award.

Outside the department, several grad students were recognized last year with competitive awards. **Daniele Mckay** (volcanology) received an AGU Outstanding Student Paper award for her work on interactions between mafic eruptions and glacial ice or snow and implications for hazard assessments in the central Oregon Cascades. Daniele also received a University of Oregon Graduate School Public Impact Fellowship and an American Scandinavian Foundation Grant for study in Iceland. **Mike Darin** (Sed/Tectonics) received the 10th Annual AAPG Rocky Mountain Rendezvous 2nd Place Poster Prize, and **Win McLaughlin** (paleontology) received a GeoCorps of America



*Morocco Field Trip, 2011.*

Grant to spend this past summer working with the National Park Service at Rhenium Day Fossil Beds National Monument. Finally, **Jill Marshall** (geomorphology) was awarded NSF funding to do Critical Zone research in Spain, and **Natalia Deligne** (volcanology) received a scholarship to attend Colorado State U's Summer Soil Institute.

**Morocco Field Trip** Over spring break of last year, 21 graduate students and 8 faculty members and guests went to Morocco and Spain on a Staples Field Trip. The trip was led by Gene Humphreys, Elouai Driss (University Mohammed V., Morocco), and John Platt (U of Southern California). It was preceded by a seminar on Western Mediterranean Tectonics during winter term. The trip was fantastic: in addition to see-

ing breathtaking geology in Morocco and going through the crust down to the Moho in Spain, participants experienced the local culture by exploring markets in Marrakesh and Fez and getting lost in the beautiful streets of Rhonda.

We also continue to field teams in university-wide intramural sports and even win the occasional game!



## Recent Graduate Student Degrees

### Expected late 2011 or early 2012

Sequoia Alba, MS	Strain accumulation and slip associated with ETS in Cascadia from Tidal Records
Kohtaro Araragi, MS	Spatial distribution of anisotropy at shallow crustal structure deduced from shear wave splitting...
Michael Darin, MS	Late Miocene Extensional Deformation in the Sierra Bacha, coastal Sonora...
John Orcutt, PhD	Climate and ecological change in Oligo-Miocene mammals.
Niccole Shipley, MS	Isotopic and petrologic investigation and model of genesis of large-volume high-silica rhyolites... Russia.
Laura Van Alst, MS	Laboratory experiments in rock breaking.

### 2011

Matt Beachly, MS	Newberry Volcano: Constraining crustal structure with P-wave tomography.
Isolde Belien, PhD	Gas migration through crystal-rich mafic volcanic systems, Stromboli, Italy.
Nick Deardorff, PhD	Eruptive processes of mafic arc volcanism--subaerial and submarine perspectives.
D. Troy Durant, PhD	Effects of off-axis melt supply at fast-spreading mid-ocean ridges...
Haiying Gao, PhD	The seismic structures of the US Pacific Northwest and... of slow slip events.
Susan N. Riddick, MS	A time-series analysis of volcanic deformation near Three Sisters, OR using INSAR
Daniel M. Ruscitto, PhD	Magmatic volatile contents and explosive inder cone eruptions in the High Cascades...
Brandon Schmandt, PhD	Seismic structure of the western US mantle and its relation to regional tectonic and magmatic activity.
Kathryn Erin Watts, PhD	Large-volume rhyolite genesis in caldera complexes of the Snake River Plain.

### 2010

Sean Bemis, PhD	Moletrack scarps to mountains: Quaternary tectonics of the central Alaska Range.
Jonathan Calede, MS	Systematics and paleoecology of Northern Great Basin Mylagaulidae.
Ashley Daigle, MS	Investigating groundwater arsenic contamination using aquifer push-pull tests.
Ali Furmall, MS	Melt production and ridge geometry over the past 10 myr on the southern Kolbeinsey Ridge, Iceland.
Jonathan Giska, MS	Characterizing methanogens in the sediments of Upper Klamath Lake, OR, USA.
Darwin R. Villagomes Diaz, PhD	Crustal and upper mantle structure beneath the Galápagos Archipelago from seismic tomography.
Rachel Weber, MS	Near-liquidus Hydrous Phase Relations of High-Magnesia Andesite from the Trans-Mexican Volcanic Belt.

### 2009

David Adams, PhD	Effects of noise on teleseismic T* estimation and attenuation tomography of the Yellowstone region.
Lisa Emerson, PhD	The early Miocene Cape Blanco flora of coastal Oregon.
Todd LaMaskin, PhD	Stratigraphy, provenance, and tectonic evolution of Mesozoic basins in the Blue Mountains Province...
Benjamin Mackey, PhD	The contribution of large, slow-moving landslides to landscape evolution.
Celestine Mercer, PhD	Mineralogical indicators of magmatic and hydrothermal processes in continental arc crust.
Andrew Schneider, MS	Constraints on eruption dynamics, Mount St. Helens, WA.
Laura Stimely, MS	Characterizing landslide movement at the Boulder Creek Earthflow, N. California, Using L-Band InSar.
Anuwat Treerotchananon, MS	Extension between major faults, central Oregon Basin and Range.

## Undergrad News

Congratulations to **Patricia MacQueen** and **Rachel Lippoldt**, who received top honors at our annual spring picnic: The James C. and Mary Douglas Stovall Award, which funded their field camp experiences. Congratulations also to **Jordan Reeves**, **Adam Schreiner-McGraw**, **Jessica Miller**, and **Laurence Elliot**, who received either a Brunton Compass or rock hammer for Excellence in Geology.

This year, we have a lot of students working on research projects. Former UCORE student, **Naomi Meacham** is helping grad student Laura Van Alst run frost-cracking experiments on sandstone. **Kris Hornsby** is helping MS student Sammy Castonguay with field work in Death Valley. **Ellen Aster** is studying crust and upper mantle structure in the area of the Columbia River Basalt eruptions with Gene Humphreys. For senior theses, **Rachel Lippoldt** is studying offset lake terraces on the Santa Ana fault near Summer Lake, Oregon with Ray Weldon. **Dan Rasmussen** is studying volatiles from mafic magmas in two cinder cones near Mt. Lassen, California with Paul Wallace --and visited there in September to collect samples. **Adam Schreiner-McGraw** is working with Josh Roering on the chronology of large, deep-seated landslides in the Oregon Coast Range. In Vertebrate Paleontology, three students are working on senior theses. **Amy Atwater** is working with Edward Davis on the evolution of body size in Omomyid primates (they look like lemurs) through the Eo-



cene and Oligocene climate changes; **Brianna McHorse**, a biology major, is studying lower leg bones of Miocene camels to assess their gaits with Samantha Hopkins, and **Kelsey Stilson** is working with both Sam and Edward on evolutionary patterns in arthritis in fossil rhinos as well as evaluating taphonomic bias. Each of these students presented posters at the annual meeting of the Society of Vertebrate Paleontology, although Amy presented findings from her earlier study of diversity dynamics and tectonics.



*Geology Club members in Canyonlands National Park, 2011*

somewhere on the Colorado Plateau: this coming spring they plan to visit Grand Staircase/Escalante National Monument in Utah.

The Geology Club meets every Wednesday at 5:30PM in Cascade 310B (The Tower Room). They also have a Facebook page (<http://www.facebook.com/pages/University-of-Oregon-Geology-Club/242043502518933>), where they list activities, contact info, and tutoring information. Look for their bake sales in front of the U Bookstore!

## Alumni News

**2011 Haiying Gao** is doing at postdoc at the University of Rhode Island. **Ben Mackey** received the prestigious New Zealand Rutherford post-doc to develop a new technique for dating exposure ages of basalts. His PhD work on the Eel River was just written up in MSNBC Science. **Brandon Schmandt** is doing a postdoc at Caltech in the seismology lab. **Molly Keogh** is surveying wildlife for an environmental consulting company. She says the work is almost entirely in the field, which she loves-- an aspect which drew her to the geology degree in the first place! **Patricia McQueen** is starting a master's program at Simon Fraser University in geophysics and volcanology and



2009 Field camp group in Glacier National Park, Montana.

studying Nicaraguan volcano Cerro Negro. **Kathryn Watts** just finished with four papers published in leading journals and is now a Mendenhall postdoc at USGS.

**2010 Ashley Daigle** lives in Corvallis, OR where she works as a remote sensing field technician/aerial LiDAR operator for Watershed Sciences, Inc. She obtains imagery along the Alaska Pipeline corridor for fault studies and of the Texas-Mexico border for flood modeling.

**2009 Todd LaMaskin** started a new job as assistant professor at University of North Carolina Wilmington. He arrived just in time to be hit by Hurricane Irene and the 2011 Virginia earthquake. Despite the inauspicious timing, Todd is very much enjoying his new job. He was the lead author on a 2011 GSA Bulletin paper, with Jeff Vervoort, Becky Dorsey, and Jim Wright as coauthors. **Celeste Mercer** taught for a year at Colorado College before joining the

Lunar and Planetary Institute in Houston as a post-doc.. Just recently, she relocated to her home state of Colorado where she began a permanent position in the Minerals Group with the USGS in Denver.

**2007 David Levering** plans to finish his MS thesis at Oklahoma State University's Department of Zoology, this coming spring. He is analyzing disparity of the *Multituberculata* across the K-Pg boundary. He's also working with Sam Hopkins and Edward Davis in our department on the evolution of ungulate locomotor mechanics and ecology. In Summer 2011, he accepted a field/museum technician position at Hagerman Fossil Beds National Monument in Idaho, to which he plans to return this coming summer. Then? a PhD! **Stephanie Weaver** is in the final stages of her Ph.D. work in Dana Johnston's lab. After a lot of soul-searching about potential directions her career might take, she recently accepted a very nice offer of employment from Exxon-Mobil and expects to relocate to Houston in October 2012.

**2006 Seth Dee** was recently promoted to Senior Project Geologist at Furgro William Lettis and Associates. He also just summited Ama Dablam in Nepal. **Noah Fay** teaches at the University of Arizona.

**2005 Andy Lutz** is a project geologist at Lettis Consultants in the Bay area. He conducts large, multi-disciplinary studies of seismic and natural hazards for facilities such as nuclear power plants, dams, and bridges. **Julie Roberge** is a research scientist in volcanology at the University of Mexico City. **Kate Scharer** relocated from Appalachian State University to the USGS in Pasadena.

**2004 Trevor Contreras** works for the Washington Geological Survey --and is presently mapping along the Hood Canal. **Magdalena Sandoval Donahue** is working on her PhD in geology at University of New Mexico. She's still running --and plans to compete in the Olympic Trials for the marathon in January and on the track at Hayward Field here in Eugene next June.

**2003 Robin Beebee** works as a hydrologist with the U.S. Forest Service in Sitka Alaska, where she does watershed studies, river hydrology, and environmental impact statements. She enjoys cross country skiing, hiking, backpacking and photography in the Alaska wilderness. **Jessica**

## Alumni News

**Czajkowski** lives in Boston Harbor, WA with her husband and 4-year old son. When she's not manically gardening or knitting, she works as a geologist with the Washington State Geological Survey, a technical lead on a three-year, Department of Energy-funded project. The project focus is to gather both existing and new geologic data in the hopes of enhancing understanding of geothermal resources in Washington State. **Brian Rusk** received the prestigious Waldemar Lindgren award from the Society of Economic Geologists at the annual society meeting in Minneapolis in October 2011. He was honored for his ground breaking studies of fluid inclusions in the Butte hydrothermal system that demonstrate that a single fluid type occurs throughout the full range of vein types in the deposit.

**2000 Bill Hammond** is a research professor at the University of Nevada, Reno. **Charles Rogers** has been teaching the introductory geology series at Rogue Community College in Southern Oregon for 11 years now. He's on the board of the Crater Rock Museum and works there as a volunteer curator. He also works as Project Manager for the local watershed council where he writes grants and implements instream work for improving salmon habitat. **Derek Schutt** is an assistant professor in geophysics at Colorado State University in Fort Collins. **Brandon Schwab** was recently promoted to full professor and appointed co-Department Head in the Department of Geology at Humboldt State University in Arcata, CA. He and colleagues in Biology at HSU recently had a grant funded by the National Science Foundation to purchase a state-of-the-art Environmental Scanning Electron Microscope. Brandon still maintains close ties with Dana Johnston's lab and visits regularly to use the UO's electron microprobe.



**1999 Charlene Montierth** is currently Professor of Geology at Clark College in Vancouver Washington, where she won the Exceptional Faculty Award on 2003. **Jennifer**



*Structural geology class in Death Valley, CA, 2011.*

**Pickering** and **Rob Witter** relocated last summer with their three children to Anchorage, Alaska, where Rob began a new position in coastal neotectonics with the USGS. Previously, they lived in Newport, OR where Jen taught high school chemistry and Rob was the coastal geologist for DOGAMI.

**1998 Liz Hearn** is an Associate Professor in geophysics at the University of British Columbia.

**1997 Rebecca Saltzer** is a seismologist at Exxon/Mobil.

**1994 Glenn Biasi** is Research Associate in geophysics at the University of Nevada, Reno, where, among other things, he runs the Nevada Seismic Array. **Kenneth Dueker** is a geophysics professor at the University of Wyoming, Laramie. **Shaojian Mo** is now owner of Mmm International Trade Corporation in Kent, WA.

**1991 Dave Draper** relocated to Houston where he is now Manager of NASA's Astromaterials Research.

**1990 Alberto Patino Douce** is a full professor at the University of Georgia in Athens. He just published (Cambridge University Press) a monster 722 page tome entitled "Thermodynamics of the Earth and Planets".

**1976 Marilyn and Dave Lindstrom** report that they both retired in 2010 after 20-25 years with NASA. They got their start studying Moon rocks at Oregon, which "gave us a lifelong passion for planetary science."



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Department of Geological Sciences Newsletter

December, 2011

## Thank you for your generous donations!

During the past year, donations to the **Emeritus Faculty Fund** assisted all our undergraduates with field camp tuition, while the **Stovall Scholarship Fund** defrayed the field camp course fees as a special award. The **Thayer Scholarship** helped a grad student build an experimental erosive landscape. The **Staples Awards** helped defray expenses for graduate students who participated on the Morocco Field Trip. It also went to three grad students to help pay for conferences and workshops. The **Johnston Fund** supported six more grad students to attend conferences from Scotland to Australia and also recognized a PhD geophysics student. Finally, contributions to the **Geology Department Fund** help the department support undergraduate field trips, graduate student attendance at meetings and workshops, and our weekly seminars.



## We would love to hear from you!

Check out our web page at <http://geology.uoregon.edu>. It includes an alumni page with a form for you to tell us your whereabouts and recent accomplishments. You can also find up-to-date information about teaching, research, and current events around the department, email contact info, and an easy interface for Alumni Donations.