



# Department of Earth and Environmental Sciences

2012 ALUMNI NEWSLETTER



UNIVERSITY of  
ROCHESTER

# Letter from the Chair

Dear Alumni and Friends,

Welcome to the 2<sup>nd</sup> Annual Earth and Environmental Sciences newsletter. We are glad that the newsletter has inspired many reconnections with the EES department and enjoy hearing all of the news from our alumni.

The geosciences play a vital role in society today. More than ever, knowledge of Earth systems is essential for addressing the environmental and resource challenges of the twenty-first century. Despite the importance of the role of geosciences, we are facing a serious national challenge of not being able to maintain the geosciences workforce over the next decade and beyond.

The American Geosciences Institute (AGI) estimates that by 2021, 150,000 to 220,000 geosciences positions will need to be filled, but that current graduation rates will leave most of these positions unoccupied ([www.agiweb.org/workforce](http://www.agiweb.org/workforce)). Our department recognizes this challenge and is expanding to meet the varied needs of our society to include a broader range of disciplines in global change research.

In 2011, Dr. Vasilii Petrenko, who studies atmospheric geochemistry through high latitude ice records, joined the department. You can read about Dr. Petrenko's research, which is highlighted in the newsletter. We are currently engaged in a search to hire a new faculty member in the field of ocean science/paleoceanography, and we plan to hire an additional faculty member next academic year that will bring our faculty up to 9.

We have been active in collaborating with other departments to develop new interdisciplinary global change and sustainability curricula at Rochester, including a new interdisciplinary sustainability minor and an environmental engineering minor. New sustainability curricula provide students with interdisciplinary connections between the sciences and social sciences that enable them to think and solve problems that span traditional disciplinary boundaries.

Over the past six years, we have seen a more than doubling of undergraduate majors in EES with increases in both geology and environmental science. We believe that this is a reflection of the obvious need for geoscientists in the workforce, but also reflects our department's broader communication of the importance of the geosciences.

Please join us in spreading the word about Earth and Environmental Sciences at the University of Rochester!

Enjoy the newsletter, and get in touch with us if you haven't already.

Sincerely,

Carmala Garzione

Associate Professor and Chair



# Faculty Highlight

**Vasilii Petrenko** is the newest addition to the EES faculty, bringing expertise in the area of climate change with a focus on reconstructions of past climate from ice cores.

Vasilii received his Bachelor's degree in Chemistry from the University of New Hampshire in 1997. He then became an educator, teaching Middle School and High School science, first at the International School of Dusseldorf in Germany, and later at the Rivers School near Boston. Vasilii received a Master's degree in Education from Harvard University in 2000. While at Harvard, he took some courses in Earth Science that sparked his interest in this field in general, and in the area of past climate change in particular.

Vasilii went on to study past climate change and atmospheric composition at Scripps Institution of Oceanography (part of UC San Diego) under the direction of Dr. Jeffrey Severinghaus. Vasilii's research at Scripps focused on making the first measurements of carbon-14 in past atmospheric methane recovered from ice cores in order to understand how natural wetlands and marine methane hydrates respond to climate warming events. Vasilii received his Ph.D. from Scripps in 2008 and went on to continue his ice core research as a NOAA Postdoctoral Fellow in Climate and Global Change at the Institute of Arctic and Alpine Research (part of University of Colorado, Boulder) under the supervision of Dr. James White.

Vasilii is adding several new courses in the general area of Climate to the EES class offerings, such as Introduction to Climate Change, Paleoclimate and Atmospheric Geochemistry.

Vasilii uses ancient ice and air preserved in the polar ice caps to study past atmospheric composition, chemistry and climate. One ongoing direction of research is understanding past natural variations in methane (an important greenhouse gas), particularly in response to climate change. There is concern that current global warming may destabilize part of the massive underwater methane deposits in the oceans, as well as release methane from thawing permafrost. Vasilii's work on isotopes of paleo-atmospheric methane is testing whether such methane releases do in fact occur at times of climate warming.

Another research direction explores past changes in atmospheric carbon monoxide. Carbon monoxide is a highly reactive gas and is a key player in global atmospheric chemistry. A good understanding of past concentrations and sources of carbon monoxide would improve our understanding of the oxidizing capacity of the atmosphere and cycling of greenhouse gases. Vasilii is also interested in using carbon-14 in polar ice as a dating tool for ice cores and as a tracer of past cosmic ray flux. He regularly participates in expeditions to remote areas of Greenland and Antarctica to conduct ice core drilling.



# Graduate Students



## Talor Walsh

My research focuses on fluid flow through deformation features, specifically fluid flow through fractures in the Marcellus shale of the Appalachian Plateau. When I arrived at the University of Rochester in September of 2009, I was interested in the role that fractures played in carbon sequestration, in developing new ways to enhance hydrocarbon production with pollutants, and in understanding the role that structural geology plays in developing natural resources. Since I arrived, I have been refocused with a more fundamental approach that allows me to tackle these problems by working to understand how geologic deformation affects fluid flow on multiple scales. I look at geologic structures and tracers of fluid flow across the Appalachian Plateau in order to record changes in and create a history of fracturing and fracture related fluid flow and associate this with large scale structures; to determine the characteristics of natural fractures that allow them to accommodate fluid flow; and to understand the composition and nature of the migrating fluids in the past so that they may be compared to the present. My work here in the Earth and Environmental Sciences department has implications

for hydrocarbon production from the Marcellus shale, monitoring and mitigating potential groundwater contamination, and can be applied to ensure proper conditions for geologic carbon sequestration.

Working here at the University of Rochester has provided me with several unique opportunities. The small size of the department allows me to work with multiple professors and integrate a variety of techniques into my research. Professor Mitra advises me on structural geology and deformation and has provided me with a strong base that allows me to work with Professor Poreda on using Noble Gas isotopes as tracers for fluid flow. Additionally, I have worked with Tom Darrah at the University of Massachusetts, Boston on developing Laser Ablation ICP-MS as a method of analyzing the spatial geochemistry of veins and Mark Evans at Central Connecticut State University on integrating this work with fluid inclusion geothermometry. With this excellent support network, I feel able to make significant progress on developing myself as a geoscientist and tackling research problems in the future.

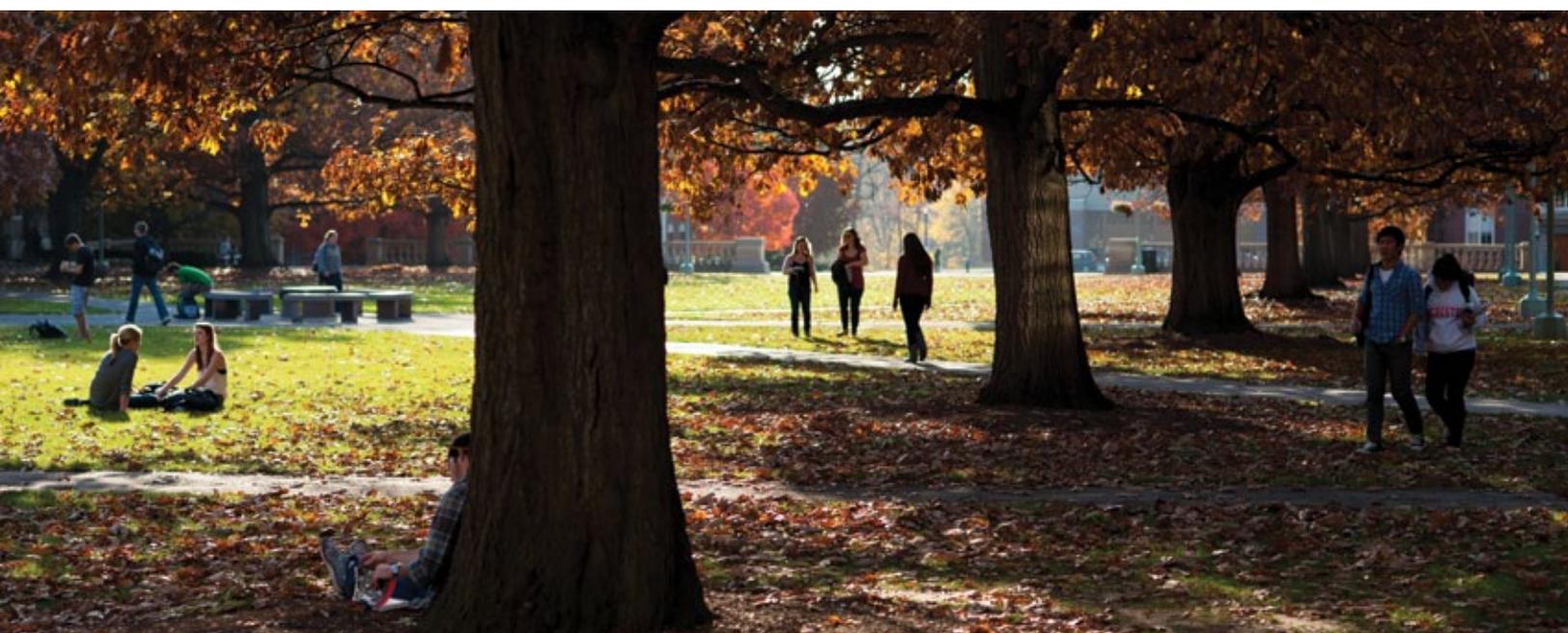
## Nilotpal Ghosh

I am a third year graduate student at the Department of Earth & Environmental Sciences researching in the field of Petrology and Isotope Geochemistry under the mentorship of Prof. Asish R. Basu. I received my undergraduate (Chemistry) and graduate (Environmental Studies) degrees from the University of Delhi in India. I arrived in Rochester in the fall of 2009 with keen interest to understand how Earth originated and evolved through its 4.567 billion year old history and what it tells us about its future. I was specifically curious to explore and study the wide range of earth processes and catastrophic events that have shaped the Earth into what we see today. Specifically, I use elemental and isotope geochemistry to test my objectives as it provides a robust and efficient tool to understand the underlying mechanisms of nature.

I am currently working on three exciting projects towards my PhD thesis. One project deals with the geochemical/isotopic study of less studied Permian-Triassic stratigraphic sections in Spiti in the Tethyan Himalayas of India. The sections comprise of Permian shales, overlain by Triassic carbonate layers and the two separated abruptly by a reddish iron-rich layer called the ferruginous layer. I am applying trace element (including rare earth elements), carbon ( $\delta^{13}\text{C}$ ), neodymium ( $^{143}\text{Nd}/^{144}\text{Nd}$ ), strontium ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) and lead isotopic ( $^{206}\text{Pb}/^{204}\text{Pb} - ^{207}\text{Pb}/^{204}\text{Pb}$ ) data and comparing them to corresponding studies of the Guryul ravine of Kashmir and Meishan section in South China to assess the paleoenvironmental changes and sequence of events that may have led to the largest mass extinction 251 million years ago. This study is attempting to address the controversies regarding the possible causes of this biotic crisis that include changing sea levels,



ocean anoxia, flood basalt volcanism, or even meteorite impact. I am also working on the elemental (trace and major elements) and isotopic (Nd-Sr-Pb) geochemistry of bimodal volcanic rocks (basalts/rhyolites) from the Gona region of the Afar depression in Ethiopia to model the evolution of the mantle lithosphere in this volcanically and seismically active region. I have also completed a lead isotopic ( $^{206}\text{Pb}/^{204}\text{Pb}$ ,  $^{207}\text{Pb}/^{204}\text{Pb}$  and  $^{208}\text{Pb}/^{204}\text{Pb}$ ) study of hydrothermal Galena deposits from the Central Taurus Mountains of Turkey. It provides a geochemical model for the possible source of these ore deposits and suggests a rifting process terminating with the closure of the ocean basin by compressional tectonic activity. I presented this work at AGU Fall meeting in 2010 that also provides an idea of the possible tectonic settings that may be considered for future mineral exploration efforts.



# Undergraduate Students

## Beth Meyers

After my first exposure to geology in an introductory EES course during my freshman year, I knew that geology would be academic focus since it combined my interests of math, science, and the Earth. Out of all the undergraduate coursework I have taken at the University of Rochester, my EES courses with fieldwork and laboratory work were the classes I enjoyed most because of their hands-on approach.

During my junior year, my interests in geology led me to study abroad in New Zealand due to its being located in a part of the world that is tectonically active. Unfortunately, my desire for close proximity to tectonics caught me off guard and in just my second week there, I experienced the February 2011 earthquake. This 6.3 magnitude earthquake did not just destroy the city of Christchurch but its aftershocks are still impacting the lives of those who live there. Luckily, I was able to turn this negative experience into a positive one, as being part of a seismic event first-hand cemented my decision to pursue geology as a career.

More recently, I was an undergraduate teaching assistant for the structural geology class. It was rewarding to pass along my knowledge to make a difficult upper level class more accessible to other EES students. Currently, I plan to continue my education by applying to graduate schools in pursuit of a master's degree in geology.





## Joseph Griggs

As a student in high school, I had studied and enjoyed marine and environmental science, so my decision to study in the EES Department at the University of Rochester wasn't all that difficult. The surprising part for me was my new found desire to study geology, a topic I had very little exposure to until my first class taken at the UR. I originally thought I may double major in biology and environmental science, or environmental science with a focus in biology, but over the course of the first year at the UR I discovered not only my love for geology, but also that of the support and strength of the EES Department, which set the path for my next three years of study.

As an EES student at the UR, outside of taking classes in the department, I've found it to be enjoyable and rewarding to assist in teaching them. The undergraduate teaching assistant and workshop leader positions that I've held have allowed me to both get closer to my professors and fellow students. They've also enabled me to receive practical teaching experience that would be nearly impossible to provide in a regular classroom setting.

Upon graduation, I hope to at least continue my education to receive a master's degree in environmental or climate policy. I'd like to make use of my use of my natural sciences background in political debate (something that I find is often lacking). However, I'd also like a chance to study some more abroad (something that I am already doing for two semesters here at the UR thanks to the aforementioned support of the department). In order to take advantage of my time abroad and graduate studies, I plan to apply for a Fulbright to mesh both into one fantastic experience after my time at the UR.

## Cecilia Scribner

I've always chosen to spend my free time outdoors. While hiking, camping, swimming, or biking I found myself wondering how landforms were shaped and what was here before humans. Growing older, the conflict around energy and global warming demonstrated how powerful geology is in the global community, and I found myself gravitating towards the Earth Sciences. I initially came to the University of Rochester planning to obtain an Environmental Studies degree, but my initial geology courses drew me in and I decided to pursue Geological Sciences. Geology offers insight into the history of the Earth that is truly fascinating.

Studying at the University of Rochester has given me a number of unexpected and wonderful opportunities to expand my education while taking students out of the classrooms and into the field. EES professors know all of their students well; the connections I've made here are irreplaceable. I've taken trips to view active fault zones in California, as well as to New York's own fold and thrust belt. As a study abroad student in Australia, I explored oceanic systems and deposits, as well as a unique perspective on water management issues.

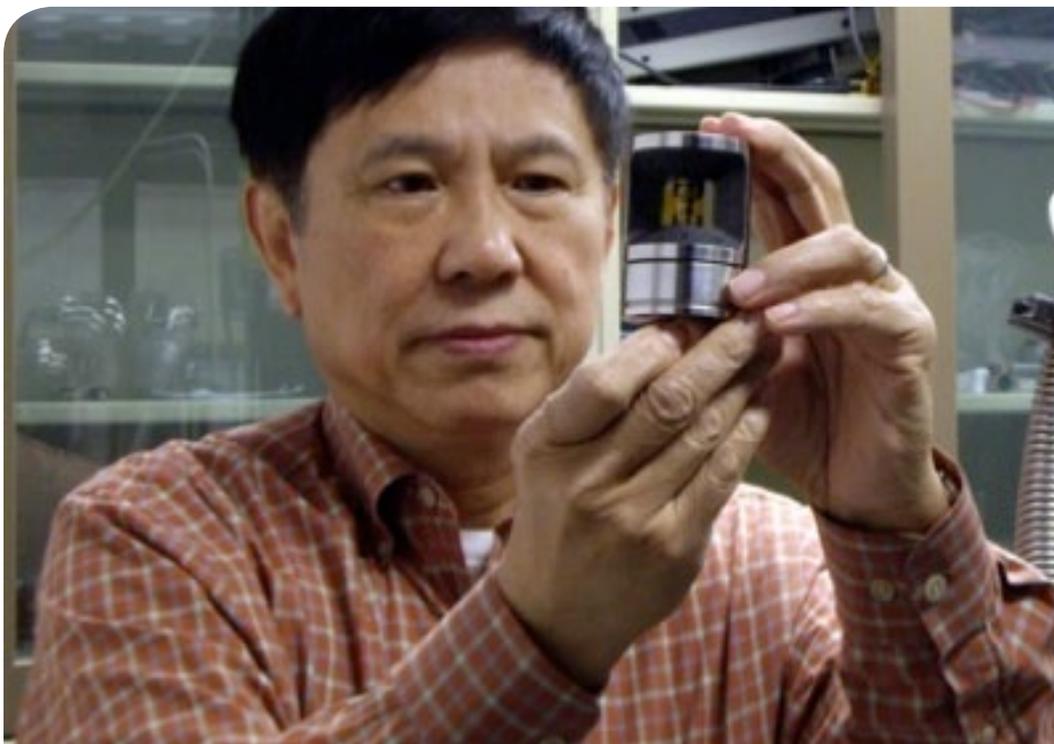
At the University of Rochester I have also had access to world class facilities and faculty leading their field. Participating in research over the last two years has opened the door to career possibilities I may not have imagined for myself. Having presented at a major conference, and now a published author, I feel prepared to take on a new chapter in graduate education. I plan to begin a Master's program in Geology this fall.



# EES Department News Section

## EES Alumni Achievement Award – 2011 & 2012

**Dr. Ho-Kwong (Dave) Mao** at the Geophysical Laboratory of Carnegie Institution of Washington received the 2011 EES Alumni Achievement Award on September 7<sup>th</sup> 2011. Dr. Mao gave a talk entitled “Deep Earth Research in the 21<sup>st</sup> Century.”



**Dr. Howard (Howdy) Pratt** is the 2012 recipient of the EES Alumni Achievement Award. Dr. Pratt earned his BS in 1960, MS in 1962, and PhD in 1966, all in Geology, from the University of Rochester. Dr. Pratt previously served as Senior Vice President at Science Applications International Corporation (SAIC). At the University of Rochester, Dr. Pratt was inducted into the Sports Hall of Fame in 2004, having lettered in tennis. He was a Meliora Weekend speaker in 2001 and has been very active in reunions of the Class of 1960. Dr. Pratt received his award on April 3, 2012, and gave a talk entitled “Field of Dreams: If You Build it, They Will Come.”



**EES Fairchild Colloquium Series** featured a seminar by **Jeff Severinghaus** from Scripps Institution of Oceanography entitled “A View of Past and Future Climate from Air Bubbles in Polar Ice” during Meliora Weekend, Fall 2011.

**Gautam Mitra** received the **2012 University of Rochester Lifetime Achievement Award for Graduate Education**. Gautam is receiving this award for his outstanding contributions as a mentor and a role model to graduate students.





# Graduate Student News and Awards

## PhD Degree

Manahloh Belachew Yihun - May 2012

Thesis title:

**Dynamics of dike intrusions and 3D velocity structure beneath an incipient seafloor spreading center in Afar, Ethiopia.**

## MS Degrees

Dustin Cote - May 2011

Julia Nelson - May 2011

Richard Bono - October 2011

Nilotpal Ghosh - October 2011

Lisa Imamura - October 2011

Diego Vasquez - October 2011

Talor Walsh - March 2012

**Nilotpal Ghosh** was selected to attend the **EarthScope workshop** and also the 2012 **Cooperative Institute for Dynamic Earth Research workshop (CIDER)**.

**Manahloh Belachew Yihun** was awarded the **NSF GeoPrisms program outstanding student presentation prize** for his poster at the **2011 Fall American Geophysical Union Meeting**. Manahloh was also awarded Statoil funding for study of "Earth's youngest magmatic passive margin: the Southern Red Sea Rift in Afar".

**Dustin Cote** was awarded the **GSA Bighorn Basin Field Award (2011)**.

**Richard Bono** was awarded a **2012 GSA Graduate Student Research Grant** for "Testing Motion between Pacific and Indo-Atlantic Hotspots Using Paleomagnetic Data from Midway Atoll Basalt Cores"

**Nandini Kar** was awarded a **2012 GSA Graduate Student Research Grant** for "Rapid versus slow steady uplift of the Central Andes: use of late Miocene paleoslope to determine which model describes the uplift history better"

**Lin Li** was awarded a **2012 GSA Graduate Student Research Grant** for "Stable isotopes of modern surface water in the west Hoh Xil Basin, NW Tibetan Plateau: variations and controlling factors"

**Nilotpal Ghosh** was awarded a **2012 GSA Graduate Student Research Grant** for "Petrological, geochemical and isotopic study of element mobility during subduction metamorphism of the Franciscan Subduction Complex, California"

**Elizabeth Baker** and **Lisa Imamura** were awarded the **Nuria Pequera Prize for Field Research in Structural Geology**.

**Nandini Kar** and **Lin Li** were awarded admission and full travel support to attend the **Mountain Ranges and High Plateaus Summer School**.

**Elizabeth Baker** was selected to be **Guest Scientist at the John Day Fossil Beds National Monument**. She will develop structural mapping research project in the national monument.

# Undergraduate Awards and Fellowships

## 2011 Phi Beta Kappa

Mary E. Dzaugis

## 2011 Lattimore Prize Scholarship for Geology Field Study

- Beth Sarah Meyers –  
University of Michigan Field Camp
- Joshua David Pawlicki –  
Indiana Field Camp (Judson Mead)
- Cecilia Anna Scribner –  
University of Arizona Field Camp

## 2011 Faculty Prize for Academic Excellence in Environmental Sciences

Austen M. Erickson

Annalise Kjolhede

Megan E. O'Connor

## 2011 Faculty Prize for Academic Excellence in Geology

Jacqueline R. Cinella

Mary E. Dzaugis

## Take-5 Elected for 2012-2013

Brian Castro

Lindsay Davidge

**Brian Castro** was selected for the SAGE REU Program and is the recipient of a funded internship in a New Zealand Geothermal Program (April - May 2012).

**Lindsay Davidge** was selected for the SCEC Grand Challenge REU, USC 2011.

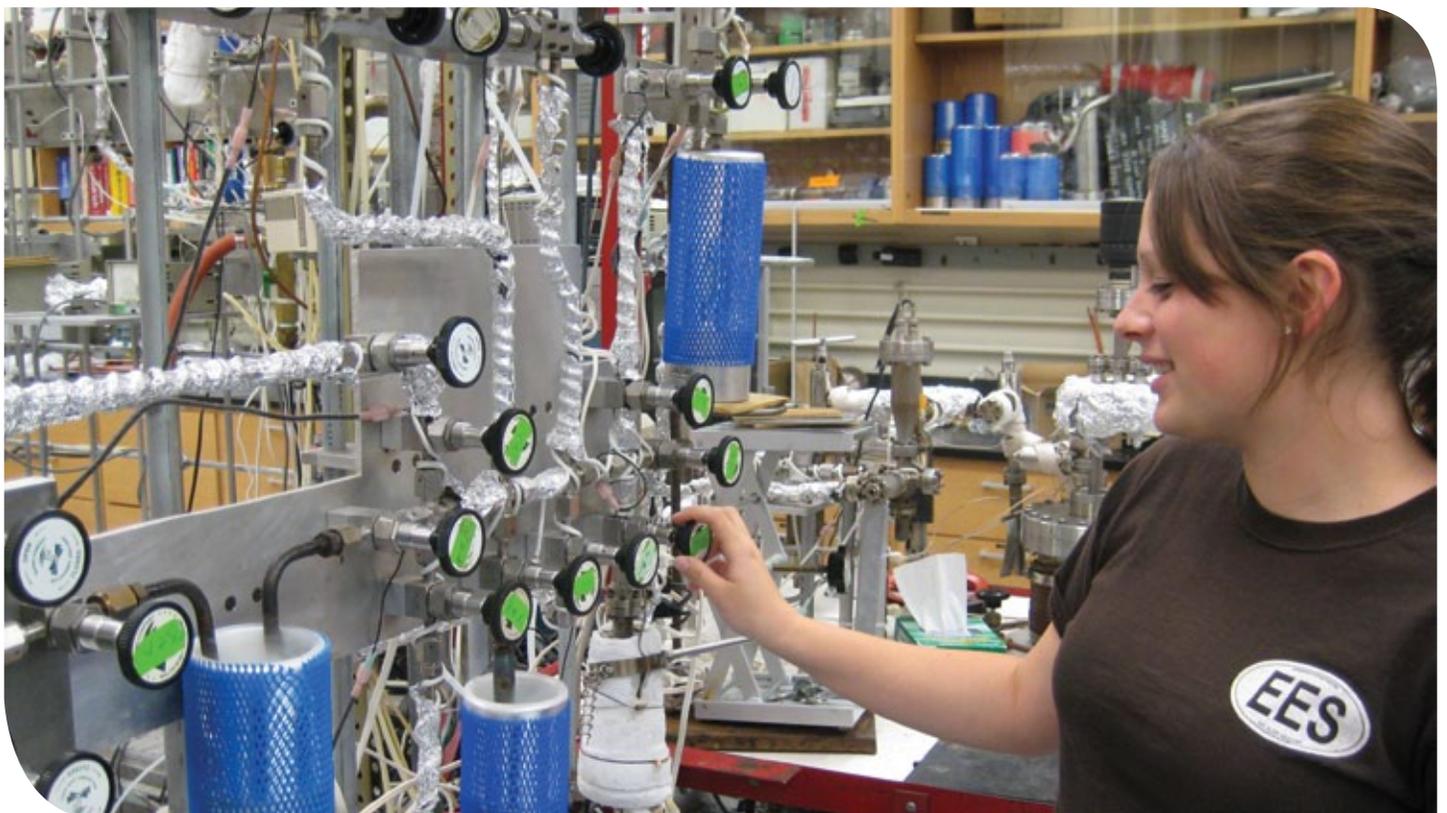
**Mary Dzaugis** was awarded the President's Prize for the best oral presentation at the 2011 UR Undergraduate Research Expo.

**Joseph Griggs** was nominated for the 2012 Udall National Scholarship.

**Nathaniel Lindsey** was awarded the Deans' Award for his oral presentation at the 2011 UR Undergraduate Research Expo.

**Tyler Nicholas** was a participant in NCUR in Ogden, Utah, March 29-31.

**Leah Sabbeth** received Caltech funds to attend the GSA Cordillera Section Meeting in Queretaro, Mexico March 2012. Leah has a summer internship at Los Alamos National Laboratory.



# Alumni Responses

## David Pefley-1952

Here I am in Las Vegas (I live in Henderson, NV) pointing at the great unconformity between the pre-Cambrian and the Cambrian rocks at the base of Frenchman's Mountain, located just to the east of Las Vegas. I daily view some of the most spectacular geologic scenery in the United States, ranging from the thrust faulted Spring Mountains to the west of Las Vegas to the young volcanoes on the south. I live on the north flank of one of the volcanoes, appropriately name Black Mountain. I've lived here for six years after moving from Florida where I became tired of the repeated hurricanes; three major hurricanes made direct hits on my home in two years. Three strikes and we're out as I told my wife, Diana. My wife died three years ago of breast cancer, and I miss her terribly. I'm just glad that she had a chance to see the beautiful geology of southern Nevada.

## John McCrevey-1962

I received my B.S. on Geology in 1962. I am now retired from the oil patch and the space shuttle program and live with Sylvia, his wife of 47 years, in Houston, Texas.

## Gary Falk-1976

Since graduating UR Bio-Geo in 1976, I went onto UR School of Medicine and am now on the faculty at the University of Pennsylvania School of Medicine. I look back fondly on my days in the Bio-Geo program.

## Gregory Roy- 1978

After graduating from UR in Geology, I was an Earth Science teacher at the HS level, with the plan to go back for a Master's in Geology, hoping to get into the exploration field (oil, uranium, coal, etc). I fell in love with coaching and took a left turn to Grad School at UMASS in Sports Management, where I started my college-coaching career. I was at Bucknell for 2 years, and have been coaching at the University of Connecticut ever since (current Head Coach-Mens Track and Field/Cross Country). Go to [uconnhuskies.com](http://uconnhuskies.com) for more information. I reminisce about my undergraduate days a lot and often wander into the Geology department at Connecticut while waiting for athletes to do a warm up run on the other side of campus.

## William Samuels-1979

After completing graduate school in 1979, I worked at the US Geological Survey in Reston, VA for 6 years. My projects involved oil spill trajectory modeling. For the last 28 years, I have been with Science Applications International Corporation in McLean, VA. I am an Assistant Vice President and SAIC Technical Fellow. My projects involve the integration of geographic information systems and hydrologic and hydraulic modeling. One recent project has been modeling the transport of radionuclides from the Fukushima Nuclear Power Plant incident. This website describes the work we do at SAIC's Center for Water Science and Engineering: <http://eh2o.saic.com>. I have also enclosed a picture from one of our annual reports

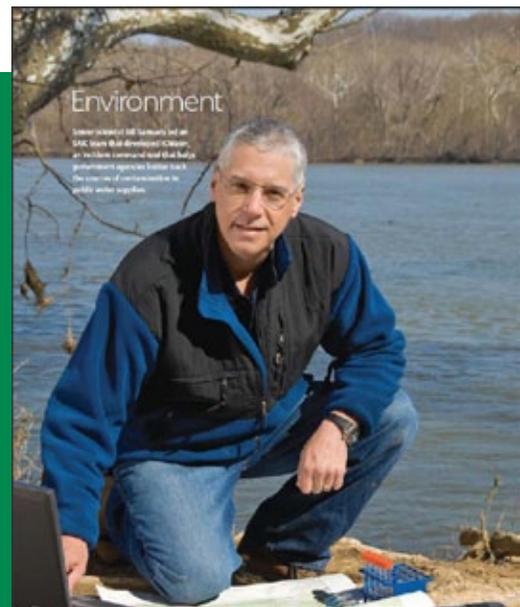
## Paul Stryker-1981

I retired from the Navy in 2009 as a Commander and am working full time for Sempra Utilities in San Diego, CA as a GIS I.T. Manager. I am married with three children, living in Solana Beach, CA.



## Deborah Greene-GEO- 1982

I am an EES (although it was the Geology Department then) Geology alumnus. The UR gave me a great start on a very fulfilling career as a professional geologist. After getting my M.S. in Engineering Geology at Texas A&M, I went to work in consulting and industry, and then started my own consulting practice where I've been a Principal Geologist with Tilford and Green, Environmental and Engineering Geology since 1995. I feel so fortunate to do what I love for my living. Thanks for the great start UR! Here's a picture of me working in the field near Crested Butte, Colorado



### **Brett Leslie-GEO-1983**

After Rochester, I went to USC (SoCal) to get an MS by playing with mud (early diagenesis and its effects on rock magnetism in lacustrine and marine sediments; with a dive in Alvin to the bottom of the Pacific along the way) and a Ph.D. playing with hot water (U-series disequilibria in geothermal systems). I married Karen Stern (UofR 1983, Psych) and worked at the Center for Nuclear Waste Regulatory Analyses in San Antonio to start my career. We moved back to DC area, and I worked for an NGO promoting democratization of science, especially issues associated with radioactive waste. After spending a year at the US EPA working on the safety standard for the Yucca Mountain nuclear waste repository, I have been with US Nuclear Regulatory Commission since 1996. I've worked on a variety of issues associated with radioactive waste and have developed risk-informed and performance-based approaches for nuclear waste disposal. I've served as mentor for an EES department student (Beth Meyers, 2012) during her summer employment and came back to the department in 2010 to lecture about Yucca Mountain. With the current demise of the Yucca Program, I am serving as facilitator for contentious NRC public meetings such as the restart of the North Anna power plant after the Mineral VA earthquake (see attached photo).



### **Glenn Neuschwender-1987**

I graduated in 1987 with a BS in Biology-Geology. Carlton Brett was my advisor. There were many wonderful memories created during those four years, including numerous field trips to Niagara Gorge, the GEO 251 field trip throughout NYS around the Escarpment, and of course the highlight, our semester at the West Indies Laboratory in St. Croix, USVI. I was fortunate to make some wonderful friends along the way, including Rob Good, Ron Salz, Susie Richter, Maria Molina, Molly Napieralski and the late Jamie King, to name a few. I've been back a few times over the years, including the past two for reunions with friends, and this year will be returning in October for my 25th class reunion. I'm a dad of three great children, and I live in West Sayville on Long Island. I have owned an environmental consulting firm (Enviroscience Consultants, Inc.) for a little over 20 years. Look forward to the next issue of the newsletter, thanks for thinking of us!



### **Aleksey Smirnov-PhD-2002**

I and an Assistant Professor of Geophysics at Michigan Technological University. Our family is doing well here. Andrew and Anton are in 4th and 10th grades, respectively, and Tatyana now works as a float nurse (RN) in the local hospital. I attach a recent family photo.



### **Alexandra Larsen-2003**

I graduated from UR with a Geology degree in 2003. After completing a Master of Philosophy in Environment and Development at the University of Cambridge in 2005, I worked for both Ducks Unlimited and The Nature Conservancy managing field programs in South Dakota and Eastern Colorado, respectively. In 2007, I started medical school at the University of Illinois in Chicago. I graduated in May 2011, got married, and have begun my residency in Pathology at Northwestern Memorial Hospital in Chicago, IL. I still peruse my Sedimentology and Stratigraphy text from time to time and treated myself to a Hawaiian volcano vacation to ease the transition from earth to medicine.

### **Frank Ciampa-EVS-2005**

I was an environmental science major. Since graduating, I have taken a job abroad and am now working in Abu Dhabi, United Arab Emirates. The company is called KEO International Consultants, and my role is Corporate Social Responsibility Manager. As part of the Sustainability Unit, I am leading KEO's CSR strategy by organizing campaigns to turn KEO's inherent corporate values into positive actions within the company. Additionally, I am helping to expand KEO's core services to include guidance to businesses and government entities to allow them to understand their exposure to economic, social, and environmental risks, and formulate strategies to mitigate those "triple bottom line" risks. It's a challenging and exciting role that is providing me with exposure to a variety of business practices and cultural nuances. I am enjoying it very much.

### **David Auerbach-M.S.-2009**

I am teaching geology at Norwich University in Vermont. This fall on the NEIGC field trip I ran into Jackie Cinella, who was one of our majors a few years ago. Now she's in grad school at Boston College and was leading a cluster of undergrads around. Great to see people continuing in the geosciences!

**Diego Vasquez-BS-2010-MS-2011**

I started graduate school in Spring 2012 at the University of Southern California in Los Angeles. I am getting a second MS degree in Geospatial Information Science and Technology while at the same time working for a small independent oil company operating in the easternmost section of the Los Angeles Basin. My thesis project will be combining Geochemistry and GIS for mature oil field reservoir characterization. In collaboration with Bob Poreda, Tom Darrah, and Carmie Garziona and using the techniques I've learned at the UofR and UMass-Boston (Noble Gases, Bulk Gases, Stable Isotopes, Trace Metals, Major Ions) and the GIS technology I'll learn at USC, we hope to optimize the extractability of hydrocarbons in one of our leases. I'm attaching two photos, the first is a pic of me with one of our stripper wells at dawn. The second is a photo of me and Tom getting some samples ready for Noble Gas Geochemical Analyses.

**John Bershaw-PhD-2011**

Angel and I had our second child, a baby girl named Juno, not long after starting work at Chevron in Houston, Texas. Get in touch if you're in the area (jbershaw@gmail.com).

**Dave Duryea-1983**

I am currently a Rear Admiral in the US Navy assigned as the Deputy Commander for Undersea Warfare at the Naval Sea Systems Command [www.navsea.navy.mil](http://www.navsea.navy.mil) in Washington DC. My LinkedIn profile is: <http://www.linkedin.com/pub/david-duryea/1/855/36b>. My email address is: [dmduryea@urgrad.rochester.edu](mailto:dmduryea@urgrad.rochester.edu)



# Thank you to all who have generously donated to the EES department over the past year!

## EES Donors 2011 to 2012

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