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Year of Graduation: _______ Degree: _______ Advisor: ___________________________

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Any News to Share?: __________________________________________________________________

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Please submit this form by mail, email the Department at geodept@unlv.edu, or use the online Contact Form at http://geoscience.unlv.edu/AlumniContactForm3.html

We look forward to hearing from you!
Greetings to all of our alumni and friends from the UNLV Geoscience Department! I hope that 2012 finds you healthy and happy as we weather these challenging times. Now that the picture has begun to clear, I would like to update you on how UNLV and the Geoscience Department have fared during the financial upheaval throughout the State of Nevada. Although some of the details are depressing, the UNLV Geoscience Department is stronger today than before the start of the 2008 recession. By sticking to our core mission, we have remained committed to building internationally recognized research programs and providing high quality educational experiences for our undergraduate and graduate students. As chair, I am proud of the accomplishments of our students and faculty, some of which are highlighted in this newsletter.

I am sure that you heard alarming news over the past year, and wondered how the Geoscience Department was faring in the midst of Nevada’s fiscal turmoil. At the time of writing of the Spring 2011 newsletter, the impact of budget cuts was simply too uncertain and fluid to comment on. In hindsight, I can tell you that we in the Department were very alarmed, as we were targeted for elimination or for a significant downsizing. We were a hair’s breadth away from contacting you to ask for your help in advocating for the Department. As you know, the state funding for public education in Nevada is fickle, as the tax base is not only insufficient for a state of this size, it is also narrow, unbalanced and thus vulnerable. Fiscal years 2009, 2010, 2011, and 2012 saw sequential cuts of 4.5%, 24%, 6.9%, and 13% to UNLV’s state-funded budget. Why our politicians and policy makers fail to recognize (or at least act upon) knowledge of the role that education and research plays in economic diversification, and public policy, and most importantly, addressing challenges that impact the future viability of life on Planet Earth.

Now on to the positive developments within the Department! Over the previous summer, we received approval to fill a Research Professor position to support our Electron Microscopy and Imaging Lab (EMIL). We were very fortunate to hire Dr. Minghua Ren, who joined us from University of Texas El Paso. In addition to the Electron Microscope and Scanning Electron Microscope (SEM), Dr. Ren is now overseeing the use of an additional instrument, a Field Emission SEM, which has an imaging resolution down to 10 nanometers, providing an important new research tool to the Department.

We have set some new milestones this past year. In efforts to broaden our participation in science education, we have developed additional distance education (DE) lecture and laboratory courses. This past year we offered new DE courses in Introductory Geology, and in Natural Disasters. We also unveiled DE laboratory classes supporting Introductory Geology and Physical Geography. By all accounts, the online laboratory classes have been very well received, and the number of students introduced to the geological sciences has reached an all-time high. By University edict, we have restructured our 3 undergraduate programs into 2; we now offer BS degrees in Geology and in Earth and Environmental Science. In making these changes, we also restructured the curriculum to provide greater flexibility for students to pursue a wider range of career paths.

As always, we love to hear from our alumni and friends, so please stay in touch. You can update your contact information by using the enclosed form, emailing the department at geodept@unlv.edu, or submitting the new online contact form found on our website at http://geoscience.unlv.edu/AlumniContactForm3.html. We would love to see you at an upcoming professional meeting, or please consider attending our next Geosymposium in 2013.

Best Wishes,

Michael Wells
Department Chair
AMY BROCK-HON
Ph.D. 2007

Since earning my PhD at UNLV in 2007 I spent ~3 years as a tenure-track Assistant Professor of Geology at Western Illinois University in Macomb, IL. In Fall of 2010 I started a tenure-track position at the University of Tennessee at Chattanooga. As an Assistant Professor in the Physics, Geology, and Astronomy Department I thoroughly enjoy teaching Physical Geology, Geomorphology, Soil Properties and Genesis, and Mineralogy. I continue to be active in research of the Mormon Mesa surface north of Las Vegas, Nevada. Currently, Brenda Buck and I recently published a paper on pedogenic barite in the petrocalcic horizons at Mormon Mesa. Whew! In the past several years I’ve introduced two undergraduate students to the desert who had never traveled west of the Mississippi River as part of a project to map the geology and geomorphology around the Vegas Valley area. After bouncing around the country a little bit I’ve landed in Chattanooga and am very happy to be living in a place with so many outdoor activities available. The music scene is fabulous and I am really into bluegrass right now! I am fortunate to have my fellow geo-gEEK husband Kevin Hon (former student of NMSU’s Tim Lawton) with me and based out of Chattanooga as Project Geophysicist for a local Geotechnical Engineering company. Kevin and I were married in 2010 in Yosemite National Park and enjoy being able to get out and explore the many trails around Chattanooga each weekend.

COLIN ROBINS - Ph.D. 2010

Since graduating from UNLV in May, 2010, I’ve completed an externally funded post-doctoral project with Brenda Buck on edaphic controls of the Las Vegas buckwheat, and taught for two years as a visiting assistant professor in the Macalester College Geology Department in Saint Paul, MN. Beginning in the 2012-2013 academic year, I will start as an assistant professor (tenure-track) in the Keck Sciences Department (Environmental Analysis program) of the Claremont McKenna, Pitzer, and Scripps Colleges in Claremont, CA.

KELLY ROBERTSON - Ph.D. 2011

I finished my PhD in 2011 and have worked for the past two years as a postdoctoral fellow in Department of Earth and Planetary Science at the American Museum of Natural History in New York City. My work here involves mostly involves experiments designed to explore the chemical link between the oxidation state of iron in silicate magmas and their dissolved halogens (Cl and F) contents. In September of 2012 I will begin a new position as a Research Scientist at the Institute of Meteoritics at the University of New Mexico where I will be involved in multiple analytical and experimental studies of volatile-rich accessory minerals in martian, lunar, and chondritic meteorites. My wife Meghan (MS Geoscience, 2009) and I will be celebrating our first wedding anniversary in June 2012.

AARON BELL - Ph.D. 2010

I finished my PhD in 2010 and have worked for the past two years as a postdoctoral fellow in Department of Earth and Planetary Science at the American Museum of Natural History in New York City. My work here involves mostly involves experiments designed to explore the chemical link between the oxidation state of iron in silicate magmas and their dissolved halogens (Cl and F) contents. In September of 2012 I will begin a new position as a Research Scientist at the Institute of Meteoritics at the University of New Mexico where I will be involved in multiple analytical and experimental studies of volatile-rich accessory minerals in martian, lunar, and chondritic meteorites. My wife Meghan (MS Geoscience, 2009) and I will be celebrating our first wedding anniversary in June 2012.
The UNLV Department of Geoscience hosted the 7th Annual GeoSymposium on April 13-14, at the Science and Engineering Building (SEB) Auditorium and the Lobby at the UNLV campus, with keynote addresses, student oral and poster presentations, industry booths and a field trip to the Lake Mead National Park on the final day. The symposium was entirely organized by the students and created an opportunity to present their original research to the industry professionals, as well as academic experts.

The generosity in contributions of financial support from many organizations, including the Department of Geoscience and individuals greatly contributed to the success of the event. This year, the entire event was fully funded by all the donations we received. Diamond Donations were made by Barrick Gold of North America, Aera Energy LLC and ExxonMobil Foundation. A Gold Donation was made by Marathon Oil Corporation. Topaz Donations were made by the UNLV Science and Engineering Society, the citrus industry, and the UNLV community, with measured increases of U-element and soluble carbon concentrations with low (~0.1) TKU values, of migmatic zircon document a coupled dissolution-reprecipitation event with increased fluid-rock interaction, and the presence of dark mirror zircons during partial melting of ancient oceanic crust. An industry of analytical geochronology and sedimentology are rapidly increasing with the capability of interpreting ages, where hydrothermal alteration products resulting from late-stage fluid/melt interactions yield "mixed" ages, and the U-Pb isotopic system.

The day started with addresses from the GeoSymposium Coordinator Swapan Kc, Sahoo, Department of Science Chair Dr. Michael Wells and from the Dean of Advancement Dr. William Boldt. Keynote speaker Dr. Kevin Peterson of Dartmouth College gave a spectacular presentation on "Cambrian Exploration on Animal Life" to start the morning session. This was followed by some of the brilliant exhibits of student's research which showcased the department's recent academic success. Students were also encouraged by the evening keynote speaker, Timothy Garfield, Senior Technical Officer from ExxonMobil Exploration Company, whose talk was entitled "Reservoir Development on the Distal Basin Floor: Controls and Implications for Deep-water Exploration and Development". The day was filled with eight oral presentations which included six UNLV graduate and one undergraduate student as well as one graduate student from University of California, Riverside. We also had a wide variety of posters this year. A total of forty-two posters were presented by graduate and undergraduate students in various topics of research, from deep-sea geophysics to closure geospatial analysis. A complimentary continental breakfast, sponsored by Marathon Oil Corporation and College of Southern Nevada, sponsored by ExxonMobil was also a highlight of the day. A second round of oral presentations succeeded the luncheon. Afterwards students and presenters resumed poster discussions.

At the Lunar and Planetary Science Conference in Houston.

Jason Cornell (UNLV class of 2010) will be starting graduate school at Western Washington University in the fall.

The Las Vegas Valley professional chapter of the Association of Environmental and Engineering Geologists (AEG) hosted a Student Presentation Night, where graduate and undergraduate students were able to present their research and top presenters were awarded cash prizes. This year three UNLV Geoscience students presented their research. Mai Sas won the prize for best poster and Dawn Reynoso won second price in the talk competition.

Considering how much work organizing can be, a number of majors have been sharing the responsibilities. Margarita Rodriguez served as president for the fall term, and Renee Schofield and Minnie Souji were co-presidents. Leticia Llamas served as secretary. A total of thirty-two students were members of GeoClub this year.

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The first big trip of the year occurred in November, when twelve students ventured into the Mojave National Preserve for the weekend. The trip was a smorgasbord of geologic features: dunes, cinder cones, lava tubes, alluvial fans, and everything in-between. The energy of the group was contagious, with senior students sharing their experiences while making the club work and expanding the numbers of participants. In the beginning of the fall term, GeoClub manned a booth for the first week of classes and registered the interest of more than 70 students, many of whom were enrolled in introductory classes. Since that time, representatives have been making appearances in 100-level classrooms to let more students know what is going on.

For more information about the group’s activities, check out the blog at http://unlvgeocup.org.
Graduate Students Continued

Julie Baumeister - MS

I have studied the geology of the A Lookout mine during the summer of 2011, in an effort to better understand how exposure age of the basalt flow that contains the olivine. Normalized dissolution rate for olivine and pyroxene were determined using the Rietveld method and the impact of drilling fluids on the dissolution process was also monitored. In addition, I examined olivine weathering in an acid environment at Black Rock Desert, Nevada and calculated a surface area-normalized dissolution rate for olivine using thin section SEM analysis and the exposure age of the basalt flow that contains the olivine.

Kurt Helton - Ph. D.

In my dissertation I am investigating the spatial and temporal distribution of key elements, such as C, N, and P, and their impact on trophic interactions in the Walker River, NV and adjacent tributaries throughout the Great Basin and the Mojave Desert. I am also monitoring the consequences of elemental imbalances between terrestrial microorganisms (Bacteroidetes and Chloroflexi) and the aquatic ecosystems, processes to produce a dynamic model of C, N, and P cycling and to study the impact of dust on these elements. I am also interested in studying the impact of dust on the spatial and temporal distribution of C, N, and P (e.g. nutrient input due to agricultural practices) and in consequently their role in the ecosystem.

Undergraduate Awards & Activities

Largely through the generosity of friends and alumni of the Department, we were able to provide financial assistance to eleven undergraduate geology majors during the spring semester. Scholarship recipients were: Chris Cline, Mai Sas, Brett Perry, Tim Howell, Dana Olsen, Nick Wong, Erika Lomeli, Steven McDonnell, Tim Bright, and Kireekos Sefelin. In addition, two of these students, Mai Sas and Margarita Rodriguez, received the Honorable L. Austin Weeks award, which is a $1,000 cash award. Margarita was a recipient of this award last year and was May this year.

Gene Smith had three undergrads present at Geosymposium. Mai Sas presented results of a crystal-size distribution study in the Lunar Crater volcanic field of central Nevada; the Belmonts presented his geologic map of a previously unrecognized, caldera-like feature in the Plomosa Range; and the Greenwater Range, near Death Valley; and Eli Drechsel presented his map of complex Miocene volcanic rocks in the Lucy Grey Range south of Las Vegas.

Andrew Hanson's 4th-grade class presented a Geosymposium poster on the results of their study of diagenesis in samples from the Paradox Basin of Utah; they were testing for the influence of diagenetic change due to the proximity of mobile salt. Graduating senior Brett Perry has also been working with Andrew on a study of Paradox Basin salt-related phenomena. Brett, who has been accepted into the UNLV graduate program for the fall, was a speaker at the first annual meeting of the Thermal-Anomalies-Around-Salt consortium.

Steve Rowland had seven undergraduate research students present posters at Geosymposium: Alexandra Kosmides and Margarita Rodriguez reported on a study of an assemblage of Homogenes bison (Bison bison) from Cathedral Gorge State Park in Lincoln County, Nevada; Fabian Hardy and Margarita Rodriguez reported the results of a study of a Pleistocene long-horned bison (Bison latifrons) from a site near Panaca, Nevada; Daniel Haber and David Bloomfield reported the results of a study in which they used provincially data in Cambrian reef-building archaeozoan to constrain the configuration of the Proterozoic supercontinent. Rodney M. biology major Matt Fakoshi reported the results of a study in which he tested the hypothesis that stability in the number of cervical vertebrae in certain groups of vertebrates over geological time can be used as a proxy for mammalian metabolic rate, and biology major Michael Salcido reported the results of his study on the use of the morphology of Cambrian trace fossils as a proxy for neurological complexity and searching behavior in the early history of multicellular animals.

Valerie Tu (UNLV class of 2011) received a scholarship from Marathon Oil to attend UNLV, where she is studying phosphate mobility and geochemistry. Brett Gold of North America sponsored the Evening Reception and Silent Auction and which were well attended by all the guests and the students. This event provided an opportunity for guests and students to network within the mining, mineral, and fossil specimens, as well as enjoy some refreshments. The auction was a fun way to build relationships between students and professionals.

A field trip coupled with boat ride was offered to Rainbow Gardens and Lake Mead National Park on Saturday, April 14. Dr. Steve Rowland and Dr. Gene Smith offered their valuable time to show the attendants some great exposures of 'The Great Unconformity', a rock outcrop equivalent to the Grand Canyon Formations. Dr. Rowland also showed the group some unique Rapakavi Granite exposures and discussed their formation and geomorphology. Dr. Smith discussed many volcanic and geomorphological features in and around the Lake Mead and shared humorous stories about underground tunnels in the Lake Mead area. Despite an initially chilly morning, the day became brighter and was ideal for the Lake Mead Boat Ride. Dr. Smith talked about the geology of the faults and formations around the lake area and said the lake is one of the largest artificial lakes in the world. An early breakfast, picnic lunch with refreshments throughout the day was provided and sponsored by Aera Energy LLC.

The GeoSymposium committee extended heartfelt thanks to all who contributed to the success of the 7th Annual GeoSymposium!
Society of Vertebrate Paleontologists’ Las Vegas Meeting

Last November the Society of Vertebrate Paleontologists held a very successful meeting at the Paris Las Vegas Hotel. Steve Rowland, along with grad students Aubrey Bonde and Josh Bonde formed the core of the host committee. Fourteen hundred vertebrate paleontologists and students attended, which set a new attendance record for the annual SVP meeting. Several UNLV students and alumni (including May Sas, Fabian Hardy, Heather Stoller, Margarita Rodriguez, Dawn Reynoso, Vicki Meyers and Rhonda Fairchild) served as volunteers in various capacities. (Sorry if I inadvertently left out the names of others who helped.) Hosting this high-profile meeting was a big boost for the vertebrate paleontology program at UNLV.

Graduate Students Continued

Aubrey (Shink) Bonde - Ph. D.

I am writing up my dissertation on the paleontological age of the Lake Turkana megaherbivores from the southwest. This includes eight different localities of the genus Styracotherium from northern California to southern Nevada which are approximately 80 Ma. Each of these localities contains similar assemblages of herbivorous megafauna which I’ve analyzed for carbon and oxygen isotope to identify diet and behavior. By doing this I am able to observe how communities of extinct large mammals were utilizing food resources in their environment and were partitioning to accommodate certain ecological factors, such as competition. This has also allowed me insight into the ancient environmental plasticity a species can handle, contributing towards an understanding of what environmental conditions these large herbivores were able to tolerate before their extinction in the end Pleistocene.

Heather Stoller - MS

I am studying taphonomy of the Late Cretaceous, Middle Jurassic animals found within the Artinskian Formation located in Las Vegas Wash and outcrops in the Spring Mountain Area. With the help of my advisor, Dr. Aubrey Bonde, the complete list of tracks and trails will be created for the Artinskian Supermassif. The analysis of each track will be studied, and research will be conducted to see whether the tracks and trails occur in distinct islands. A reconstruction of the local Jurassic environment is an overall goal of this research.

Dawn Reynoso - MS

For my research I will be working with Dr. Aubrey Bonde in the Oligocene-Miocene geology and fossils in the West Turkana District of Kenya, which is located in the East African Rift Basin. The study area, the Oligocene-Miocene boundary, Albina made paleontological contact with Eurasia. My goal will be to examine how the boundary is compressed, the size of the fossils.

In addition to training and helping users for the EML suite, I collaborate with other researchers on campus. My research interests are geochemistry and igneous petrology and my favorite rocks are granite and rhyolite. My work involves both field and laboratory analyses for select samples. In addition to high temperature geochemistry, I also consider geochronology problems including low temperature and environmental geochemistry.

Minghua Ren

I graduated with a Ph.D. from Baylor University at Waco, central Texas and worked at UT El Paso, in the far west point of Texas. UNLV is the first place I have lived outside of Texas since I came to the US. Friends in El Paso told me, “You are moving from a hot plate to a sizzling plate!” So far the weather here is not too much different from El Paso, except that the wind here is not as dusty as an El Paso breeze. I have yet to go through summer here, so I may change my statement.

My new position at UNLV is that of Assistant Research Professor and a major part of my duty is supervising our Geoscience EML suite located in the new Science and Engineering Building. I mainly utilize three JEOL tools, a Scanning Electron Microscope (SEM), a Field Emission Scanning Electron Microscope, and an Electron Microprobe, so that the lab can produce sample analysis for geochemistry and other areas. The SEM has a magnification range from x35 to x20,000 (2 millimeter to 1 micrometer), with the ability to collect a variety of images and qualitative chemical compositions. The Field Emission SEM has a magnification range from x500 to x430,000 (5 micrometers to 10 nanometers), with excellent resolution at 5 nanometers. It is amazing how much detail we can see when the magnification of the image reaches the nanometer range. The Electron Microprobe (EMP) quantitatively analyzes all elements heavier than nitrogen. In addition to training and helping users for the EML suite, I collaborate with other researchers on campus. My research interests are geochemistry and igneous petrology. My favorite rocks are granite and rhyolite. My work involves both field and laboratory analyses for select samples. In addition to high temperature geochemistry, I also consider geochronology problems including low temperature and environmental geochemistry.

Graduate Students Continued

Sujan Sahoo - Ph. D.

In my current project I plan to address the early history of Sr-isotope and Sr-isotopic variations and their association with paleo-environmental and paleo-climatic interpretations. I will study Sr-isotope and Sr-isotopic chemo-stratigraphy across a range of basins and will compare and contrast Sr-isotope excursions. Sr-isotope chemo-stratigraphy will help to elucidate the conditions that caused the dramatic increase in Sr-isotope excursions in the early Proterozoic and the sign of life evolution in black shales.

Deb Mukhopadhyay - Ph. D.

My research is about the climate change in the early Mesoproterozoic (Kinderhookian-Devonian) and the positive carbon isotope excursions which is one of the largest excursions in the Phanerozoic. This excursion has been interpreted as enhanced organic carbon burial, but I would like to see this surface based, changes in carbon cycle and sea level change across the positive carbon excursion. This summer I will find the link between paleo-carbon excursion and climate change.
Graduate Students Continued

Katrina Sauer  -  MS
I am currently enrolled in the UNLV Geoscience Department studying the evolutionary history of the Central Nevada Province, with an emphasis on understanding the tectonic setting of runs. My main research interests lie in understanding the thermal history of the province as well as the potential for Au and other mineralizations to exist. A significant portion of my time is spent in the Nevada geothermal region, where I collect samples and gain a better understanding of the geology of the area.

Nevada. Potential of northern Nye County for oil and gas, and the timing of exhumation of the Funeral Range thrust belt. The Willard is a thermochronology study of the Willard thrust belt.

Jenifer Zaloudek  -  Ph. D.
I am currently involved in the study of the geology of the Willard thrust belt in southeast Nevada.

Christopher Adcock  -  Ph. D.
I am currently working on understanding the thermal history of the Central Nevada Province with an emphasis on understanding the tectonic setting of runs. My main research interests lie in understanding the thermal history of the province as well as the potential for Au and other mineralizations to exist. A significant portion of my time is spent in the Nevada geothermal region, where I collect samples and gain a better understanding of the geology of the area.

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Graduate Students Continued

Christopher Adcock  -  Ph. D.
A Ph.D. student currently studying phosphate mineral dissolution and its role in the formation of phosphorite deposits. My research focuses on understanding the early life and Mars' role in the development of phosphorite deposits. This research is part of a larger project that aims to better understand the conditions that drove Mars exploration missions as well as yield insights into the origins and development of Life on Earth.

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Graduate Students Continued

Alison Stout  -  Ph. D.

I am currently working on understanding the potential for Cu-Au mineralization in the southern portion of the Cordilleran Region.
**A LETTER FROM AN EMERITUS PROFESSOR**

LIFE, 25 YEARS AFTER RETIREMENT - BILL FIERO

One has to be fortunate to be writing under such a heading. To explain, my wife, El and I left UNLV 15 years before 'normal' retirement age. We loved our research and teaching, but with the last kid off to college, we could see down the trail into the future – and there was a fork in the trail – either leaving jobs early and having time and less money, or, down the other fork, working on to age 65 and perhaps have more money but less time. We shared the experience of a parent who had to continue to age 65 for retirement and didn’t make it, so we opted for leaving our jobs at age 50, hopefully to have more time together, but less money.

Consequently, we sold our house and most of our belongings, hopped unencumbered, without things to anchor us, into a 20-foot RV. After traveling the country by road, we purchased a 20-foot sailboat and eventually a 22-foot powerboat to give us the ability to go up and down the coasts. In almost ten years of living aboard, we cruised all of the rivers designated as navigable by the Corps of Engineers, all the Great Lakes and many other great lakes throughout the country, cruised all three coasts and north up the inside Passage to Alaska several times.

We traveled across Europe on the water last spring, through the Panama Canal last winter, and head back for more water travel in Europe this spring.

As a former geology and environmental science professor at UNLV, my eyes are well equipped to appreciate the beauty of the water, recharge, water quality, and water supply in the north central part of the country. Melanie is working on determining whether expansion of the number of wells in the region is sustainable for her Master’s thesis.

**Steve Rowland** will be on sabbatical leave during the 2012-2013 academic year, working on a couple of book projects.

He and his former grad student Slava Korolev (M.S. 1967) recently completed a Russian-to-English translation of a historically significant eighteenth-century book titled *On the Strata of the Earth* by Mikhail Lomonosov, published in 1763. Their translation will be published later this year by the Geological Society of America. Steve will be attending the International Geological Congress this summer in Brisbane, Australia, presenting two papers, one on Mikhail Lomonosov’s *On the Strata of the Earth* and the other on a recently discovered Ediacaran fauna from Esmeralda County, Nevada. The Ediacaran presentation will co-authored by undergrad Margarita Rodriguez. While Steve is on sabbatical leave, his recently graduated PhD student Josh Bonde will be filling in for him as a Visiting Assistant Professor.

**Professor Brenda J. Buck** is an invited member of a John Wesley Powell Grant to study the distribution of erionite and other fibrous minerals in the United States and the implications for human health. She is the only soil scientist on a team of 15 scientists from the Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), United States Geological Survey (USGS), National Institute of Environmental Health Sciences (NEIHS), and National Institute for Occupational Safety and Health (NIOSH), Agency for Toxic Substances and Disease Registry (ATSDR), and participants from three other Universities. This 2-year project was one of several “Big Data” projects recently announced by John Holdren, assistant to the President and director, White House Office of Science and Technology Policy.

**My research focuses on examining the diagenetic change and proximity to salt features.**

**Andrew Miller - MS**

My research focuses on examining the diagenetic change and proximity to salt features. This research is investigating the thermal impact of salt diapirs on adjacent strata. We have shared this knowledge on boat building websites and with those with whom we have traveled. Retirement has been a joy for us. Best wishes to all who remember us.

**Associate Professor Adam Simon** collaborated with curriculum planners from the Clark County School District to develop a weeklong earth science boot camp that focused on energy through a geologic lens. This joint UNLV-CCSD program hosted 58 elementary school teachers in June of 2011. Later in that summer, he served as a lecturer for a workshop in Goslar, Germany that was directed at graduate students and postdoctoral researchers. This workshop was sponsored by the European Union and National Science Foundation, and coincided with a special issue of Reviews in Mineralogy and Geochemistry entitled “Sulfur in Magmas and Melts and Its Importance for Natural and Technical Processes.”

**Dean A. Wood** will be on sabbatical leave during the 2012-2013 academic year, working on a couple of book projects.

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**Dave Kreamer** recently returned from Ghana where he was working with his graduate student Melanie Kraustrunk during the Spring break on ground water recharge, water quality, and water supply in the north central part of the country. Melanie is working on determining whether expansion of the number of wells in the region is sustainable for her Master’s thesis.

**Below:** Melanie Kraustrunk (MS) is performing a digital titration at a hand pumped well near the town of Savogler.

**Nick Downs (M.S. spring 2012)** overlooking the Bay of Biscay on the northern coast of Spain where he could see down the trail into the future – and there was a fork in the trail – either leaving jobs early and having time and less money, or, down the other fork, working on to age 65 and perhaps have more money but less time. We shared the experience of a parent who had to continue to age 65 for retirement and didn’t make it, so we opted for leaving our jobs at age 50, hopefully to have more time together, but less money.

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**Nick Downs (M.S. spring 2012)** overlooking the Bay of Biscay on the northern coast of Spain where he investigated the thermal impact of salt diapirs on adjacent strata.

**Associate Professor Andrew Hanson** initiated the first ever industry supported research consortium at UNLV. The consortium, named ‘Thermal Anomalies around Salt’, focuses on thermal issues adjacent to salt features in sedimentary basins. Member companies, currently Anadarko, ConocoPhillips and Apache Energy each contribute $22K for a 2-year membership. Our field areas include the La Popa basin in Mexico, the Eastern Pyrenees in Spain, and the Paradox basin near Moab, UT. As part of this program, a number of graduate students in the Spring 2012 Sed/Strat course are working with sandstone samples from the Paradox basin in order to explore the relationship between diagenetic change and proximity to salt features.

**Ember Flagg - MS**

For my project, I will conduct the same kind of gold immobilization as the Milliken-Floresville Estable Property located in the South Central Alaska Range. The study was a large gold deposit model such as the gold-on-phyllite deposit or a radium-uranium-related gold system and led to an overall better understanding of gold-on-phillite deposits.

**Nikola Ivanov - MS**

My research involves utilizing data from NASA’s Gravity Recovery and Climate Experiment (GRACE) satellite to look at water storage change over time for Southern Nevada. I will be comparing that information against historical hydrological data from the area, inferring trends between the GRACE data and the declining levels of recharge and groundwater storage, as well as climatic changes in temperature and solar radiation. These trends may help be informed of the impact of drought and short-term climate change in Southern Nevada. The research results will not only help predict future water storage decreases, but will also show any adverse effects that climate change may have on Southern Nevada’s water system in general.

**Sarah Oldershaw - MS**

My research focuses on examining the diagenetic change and proximity to salt features. This research is investigating the thermal impact of salt diapirs on adjacent strata. We have shared this knowledge on boat building websites and with those with whom we have traveled. Retirement has been a joy for us. Best wishes to all who remember us.

**Associate Professor Adam Simon** collaborated with curriculum planners from the Clark County School District to develop a weeklong earth science boot camp that focused on energy through a geologic lens. This joint UNLV-CCSD program hosted 58 elementary school teachers in June of 2011. Later in that summer, he served as a lecturer for a workshop in Goslar, Germany that was directed at graduate students and postdoctoral researchers. This workshop was sponsored by the European Union and National Science Foundation, and coincided with a special issue of Reviews in Mineralogy and Geochemistry entitled “Sulfur in Magmas and Melts and Its Importance for Natural and Technical Processes.”

**Graduate Students Continued**

**Emily Flagg - MS**

I am working on the sedimentological response to climate change across a major Mississippian marine transgression. My focus is to integrate the stratigraphic evidence with the isotope record to create a comprehensive evaluation on the coupling of the deep-time global carbon cycle and climate-driven sea-level changes during the Early Mississippian.

**Matteo Swee - MS**

My research involves utilizing data from NASA’s GRAVITY RECOVERY AND CLIMATE EXPERIMENT (GRACE) satellite to look at water storage change over time for Southern Nevada. I will be comparing that information against historical hydrological data from the area, inferring trends between the GRACE data and the declining levels of recharge and groundwater storage, as well as climatic changes in temperature and solar radiation. These trends may help be informed of the impact of drought and short-term climate change in Southern Nevada. The research results will not only help predict future water storage decreases, but will also show any adverse effects that climate change may have on Southern Nevada’s water system in general.

**Angeli Ventre - MS**

I am working on the sedimentological response to climate change across a major Mississippian marine transgression. My focus is to integrate the stratigraphic evidence with the isotope record to create a comprehensive evaluation on the coupling of the deep-time global carbon cycle and climate-driven sea-level changes during the Early Mississippian.