

Geosciences Program Newsletter

for alumni and friends of the geosciences program.

March, 2015



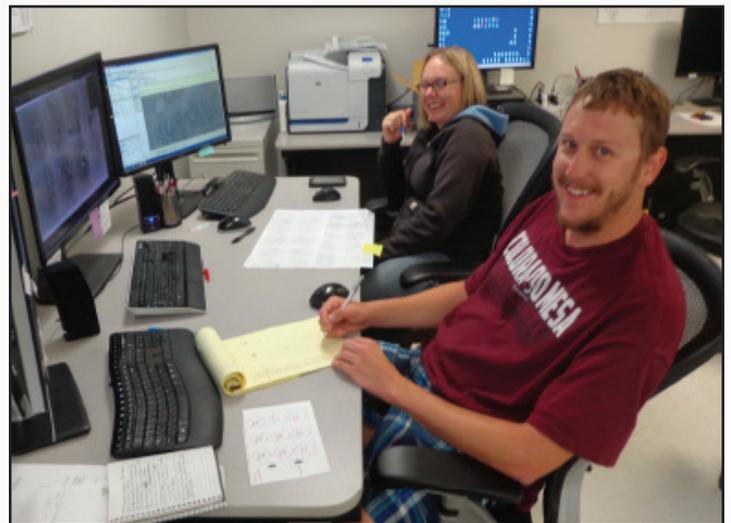
CMU Field Camp, Summer, 2012, Green River overlook, Green River, WY

CMU Geology DZ "Heads": Student Research at the University of Arizona LASERCHRON Lab

What is a DZ "Head" you may ask? DZs are detrital zircons acquired from sand or sandstones, and DZ Heads are those of us who enjoy probability density plots and puzzling late at night over the origins of zircon grains that may be billions of years old! Detrital zircon studies are providing the geosciences community with a fascinating means for interpreting the provenance and maximum ages of sedimentary deposits, and studies are spreading like wildfire.

At CMU, geology professor Andres Aslan has teamed up with students and colleagues at the University of New Mexico and Oregon State to study the long-term evolution of rivers in the western U.S. including the upper Colorado, Green, and Yampa. Detrital zircons play an important role in this research, which is carried out using the LASERCHRON lab at the University of Arizona. In this state-of-the-art facility, laser ablation coupled with mass spectrometry produces U-Pb ages on individual zircon grains in less than one minute! For a typical sample, 100 zircon grains are dated, and the resulting age populations are used to evaluate provenance and the maximum depositional age of the sample. Professor Aslan and CMU students have traveled to the LASERCHRON lab multiple times over winter and summer breaks to complete the analyses, in conjunction with field work in the summers.

The results of the detrital zircon work are proving very interesting. For example, ancient Colorado River deposits found by **Dustin Czaplá** (BS '09) beneath ca. 11 Ma basalt flows on the flanks of Grand Mesa have a maximum age of 11.6 ± 2.4 Ma. Based on this result, these deposits represent the oldest evidence of the Colorado River in the upper basin. **Marisa Boraas** (BS '14) recently completed her undergraduate geology thesis using detrital zircons to determine maximum ages of Bishop Conglomerate crops out in the southern Green River Basin near Green River, WY. Marisa's work shows that the Bishop Conglomerate deposits of southern Wyoming are generally



Doug Nichols and Marisa Boraas (BS '14) at the University of Arizona LASERCHRON lab, July 2014.

contemporaneous (ca. 34-31 Ma) with Bishop outcrops near Vernal, UT, although her work also shows that there is a slightly younger age (30-28 Ma) for Bishop Conglomerate samples located east of the Uinta Mountains near Elk Springs and Maybell, CO. This difference in age may provide a clue as to when exactly (ca. 30-28 Ma) the eastern Uinta Mountains collapsed to form the Browns Park graben. **Doug Nichols** is currently completing an undergraduate geology thesis using detrital zircons to constrain the age and paleogeography of ancient rivers represented by basal conglomerates in the Oligo-Miocene Browns Park Formation of the Flat Tops region of northern Colorado. Traditional views have suggested that the coarse-grained sediments in this unit were derived from either the Park Range or the eastern Uinta Mountains, but Doug's research shows that there is an enigmatic Precambrian sediment source elsewhere in the Colorado Rockies. Doug's work also hints at regional tectonic

uplift in the late Oligocene of north-central Colorado, perhaps related to the ignimbrite flareup and asthenospheric upwelling.

CMU alumni **Marisa Boraas** (BS '14) and **Erinn Fought** (BS '14), and current geology students **Doug Nichols**, **Jaron Ragsdale**, and **JT Waggoner** have conducted field work in recent summers to acquire detrital zircon samples. Marisa, Doug and current geology student **Keegan DePriest** have analyzed zircons at the University of Arizona lab. Keegan and Marisa visited the lab while working

on a detrital zircon project led by CMU alumna **Dr. Sally Potter-McIntyre** (BS '06) who is currently a professor of sedimentology at Southern Illinois University. Other CMU alumni and current students including **Mike Feil** (BS '14), **Kelsey Hoffmann**, and **Thomas Spain** have completed projects using detrital zircon data. Funding for this work has come from a \$95,000 NSF grant to professor Aslan and more recently, a \$35,000 CMU Unconventional Energy Research Institute grant for which Exxon-Mobil is an industry partner. •

Coordinator's Corner

First, thanks to all our alumni and friends who contacted us about the 2014 Fall newsletter with words of encouragement and support. We're excited to let everyone know about the latest developments in the geosciences program at CMU, and we hope to re-connect with even more of our alumni and friends – so when you receive this newsletter, please forward it to friends or colleagues that we may have missed!

One of the best ways for current and past students to connect is through alumni visits. **Alexis Navarre-Sitchler** (BS '00) returned to campus in September of 2014 to present her recent Grand Canyon research to the Grand Junction Geological Society. Alexis also took time out to meet with current geology students to discuss student research and graduate school. Alexis is currently an Assistant Professor of Geology at the Colorado School of Mines specializing in geochemistry. Upon graduating from Mesa, Alexis completed an MS at the Colorado School of Mines, a PhD at Penn State University, and a post-doc at the University of Wyoming. The current geology students greatly appreciated Alexis' visit, and it was fun for all of us to catch up with Alexis. Thanks for making the time, Alexis!

We always encourage students to take advantage of opportunities outside of the traditional classroom. This spring, an amazing opportunity has presented itself for several of our students and myself. As part of our ongoing National Science Foundation research on the Colorado River in collaboration with Professor Karl Karlstrom of University of New Mexico, students and I will participate on a 16-day geology raft trip through Grand Canyon! CMU geology students **Mike Hale**, **Jaron Ragsdale**, and **Tyanna Church** will



Dr. Andres Aslan, Geosciences Program Coordinator



Alexis Navarre-Sitchler (BS '00) currently teaches at the Colorado School of Mines

accompany other undergraduate and graduate Geology students through Grand Canyon and receive field camp credit as part of University of New Mexico's advanced summer field camp course. In 2012, **Max Schultz** (BS '13) participated in this field course and the Grand Canyon raft trip. Few people will ever be able to experience the Grand Canyon in the way that we will this coming May - living, eating and breathing geology for 16 days on a raft... this is as close as one gets to achieving geology nirvana!

We hope everyone is well, and we hope to see you at the upcoming geosciences program Spring Field Trip and Barbecue (Sunday April 26; see announcement in this newsletter). If you can't attend, we would still love to hear from you, so feel free to email (aslan@coloradomesa.edu), or simply stop by if you are in town. •

Sincerely,

Andres Aslan
Geosciences Program Coordinator

Faculty Profile: Dr. Rex Cole Professor of Geology

PhD, Geology, University of Utah
BS, Geology, Colorado State University
AS, Geology, Mesa State Junior College

Rex Cole was born and raised in Delta, Colorado, and developed an interest in the science at an early age. Initially, his college ambitions were to study forestry at Mesa College (a precursor to Mesa State College and Colorado Mesa University), but thanks to contact with the legendary Dr. Robert Young, who was then teaching at Mesa College, he became addicted to geology. This addiction continues. Cole received his AS degree in geology in 1968, followed by a BS in geology from Colorado State University (1970), and a PhD in geology at the University of Utah (1975). His dissertation research focused on the sedimentology, mineralogy, and isotope geochemistry of the Green River Formation in Colorado and Utah. During grad school, he also had the good fortune to have part-time employment (mineral exploration) with Duval Corp., Inspiration Development Corp., and ASARCO, Inc.

Cole's first post-doctoral employment (1975-1977) was as an assistant professor of geology at Southern Illinois University - Carbondale, where he taught courses in general geology, sedimentology, stratigraphy, and isotope geochemistry. It was at SIU-C where he first met Dr. Bill Hood, who was also on the faculty. This fostered a research collaboration that continues to this day. Cole did not stay long at SIU-C because of the topographical challenges associated with the area and family issues. So, it was back to Grand Junction, thanks again to Dr. Young, who was then a geotechnical manager at Bendix Field Engineering. Cole's employment (1978-1980) at Bendix involved research into unconventional uranium and thorium resources in various areas in the western U.S. In 1980, Cole left Bendix and joined Multi-Mineral Corp. in Grand Junction and started building a geotechnical program focused on oil-shale and saline-mineral resources in the north-central Piceance Basin. This work lasted until the collapse of the oil-shale industry in 1982 precipitated by "Black Sunday." After consulting for six months on saline-minerals, Cole was offered a job (1982) as a research geologist (sedimentology) with Union Oil Co. of California (later Unocal) in Brea, California. This work embraced many aspects of oil and gas exploration and development on the company's assets in North America and the North Sea. The most enjoyable projects were on Alaska's North Slope and adjacent Beaufort Sea (subsurface), but also included work in northwest Canada and the Canadian Rockies. He spent six field seasons in the Arctic measuring sections, collecting samples, and swatting bugs. Other Unocal projects were in Wyoming, Utah, Montana, Texas, Louisiana, California, and offshore Gulf of Mexico. The Unocal experience, which included field training of company personnel, came to an end in 1995, when the company closed its research facility and moved the survivors to Houston. Fortunately, at this time Dr. Dell Foutz announced his retirement from MSC. Cole applied, and to his surprise, was offered the job as the geology program's sedimentologist-stratigrapher-paleontologist. Ironically, this is the same position that Dr. Robert Young had when Cole took his first geology course in 1966.



Dr. Rex Cole

The conclusion of spring semester, 2015, will mark the end of Cole's 20th year at CMU. During this period he has had the privilege of interacting with many, many students from numerous disciplines, plus his colleagues in the Department of Physical and Environmental Sciences. He has also witnessed the rapid growth of the campus infrastructure. His main courses are Geology of Colorado, Historical Geology, Sedimentology and Stratigraphy, Energy Resources, and Summer Field Camp. He also frequently teaches field seminars for petroleum companies in western Colorado and eastern Utah.

Over the last 20 years, Cole's research has mainly focused on the Cretaceous strata in the Piceance and Uinta Basins, and the geologic history of Grand Mesa. Part of the Cretaceous effort between 2001 and 2012 involved collaboration with faculty and graduate students at the University of Colorado, Boulder, via the Williams Fork Consortium. This initiative was funded by numerous oil and gas companies and focused on reservoir characterization of fluvial sandstone bodies in the Williams Fork Formation, which is one of the major gas producing intervals in western Colorado. Five CMU students were also involved in this project. More recently, Cole has teamed up with Bill Hood to work on the mineralogy and geochemistry of the Mancos Shale in the southwest Piceance Basin. This work, which is its second phase, was funded by CMU's Unconventional Energy Center, plus five oil and gas companies. Cole's research on Grand Mesa spans more than 40 years, and includes work on the age, geochemistry, stratigraphy, and eruptive history of the Miocene, mafic lava flows, the sedimentology and stratigraphy of the Miocene (?) strata underlying the flows, and the overall erosional history of Grand Mesa. More recently, Cole has been involved with the large, deadly landslide that occurred in May, 2014, on the north flank of the Grand Mesa near Collbran, Colorado.

Cole has authored or co-authored a number of journal articles, guidebook chapters, technical abstracts, consortium proceedings, and book reviews. Major honors include the Distinguished Faculty Award (scholarship) from MSC (2006), the A.I. Levorsen Award (with Dr. Matt Pranter at CU-Boulder) from the Rocky Mountain Section of the American Association of Petroleum

Geologists (2008), the Best Paper of the Year Award (with Steve Cumella) from the Rocky Mountain Association of Geologists (2005), and a research creativity award from Unocal Corporation (1992). He is a registered professional geologist in Wyoming and is a member of the Geological Society of America and the Grand Junction Geological Society. Cole's hobbies include back-country and cross-country skiing, hiking, kayaking, geotouring, and fishing. He has one child, Dr. B. Erin Cole, who is a historian. His former wife, Pam, passed away in 2012. •

Still Rockin'! Retired Faculty Profile: Dr. Jack Roadifer

PhD, Geology, University of Arizona
MS, Geology, South Dakota School of Mines
BS, Geology, South Dakota School of Mines



Dr. Jack Roadifer

Dr. Roadifer grew up in Custer, South Dakota on the southern flank of the Black Hills uplift. After high school, he spent several years in the Navy, and then attended the South Dakota School of Mines where he earned a BS in geology. His degree landed him a job with Honolulu Oil Company, which had holdings in Montana, West Texas, and New Mexico. During his stint with Honolulu, he and his fellow geologists endured jokes about wearing grass skirts, and he moved several times, eventually ending up in Farmington, New Mexico. While in Farmington, he made occasional trips to the Grand Junction area where he met his future wife, Nancy.

He left Honolulu to further his education and earned his MS in geology from South Dakota School of Mines in one full year, a year he describes as a busy one! He then went to the University of Arizona and earned a PhD in geology. Dr. Roadifer then returned to industry and worked for Pan American Oil Company in Denver. By this time, he and Nancy had children. They felt that the amount of moving around required with oil company jobs was not ideal, so he started looking for a teaching position. He was able to

obtain a position with Mesa Junior College in 1966, so the family moved to Grand Junction where he taught and Nancy continued her career as a nurse. He has never regretting making that career change even though it included a significant salary reduction.

Many changes occurred, and a lot of growth took place while Dr. Roadifer was at CMU. He introduced a Mineralogy course early on. In those days, school didn't start until late September so that students, most of whom were local, could help finish the peach harvest. When the school changed from a junior college to a four-year college in 1974, he and the other faculty added more courses and developed the curriculum for the BS degree. Field camp was added and initially ran for eight weeks. He and the other faculty soon decided to shorten that to six weeks, which it still is today. Early on, field camp enrollment was low, so the program advertised around the country to bring in more students. In 1982, during the peak of the oil and oil shale booms, field camp had 43 students! That was a lot of work for the three faculty who were teaching! Not too many years later, after the Exxon Exodus and bust times in Mesa County, he had a petrology class with only a single student and several other courses with just a few students. The boom and bust cycles hit the school as well as the community.

Dr. Roadifer has a number of "fond" memories of his time at CMU, not the least of which were some exceptional Navajo tacos at an early Western Slope Field Conference. Another memorable moment occurred one year during field camp when a student mooned a couple in a passing car near Radium Hot Springs. The indignant couple complained about this "white whale" to the Colorado State Patrol, who notified school authorities. Dr. Roadifer then gathered all the students together and informed them there would be a lineup to "get to the bottom" of the matter. Although the miscreant was never publicly identified, Dr. Roadifer is well aware of his identity...

Jack had quite a reputation as a hard-nosed educator who made rules and enforced them. The students eventually gave him the nickname, "No Slack Jack" because he simply would not cut them any slack. One year, students actually got together and presented him with a t-shirt with that inscription on it.

Dr. Roadifer has kept busy since retirement. He and his wife Nancy have traveled to Costa Rica, Galapagos Islands, Italy (Pompeii), Spain, Portugal, England, and Scotland, mostly with the Elderhostel (now Road Scholar). He has volunteered at Colorado National Monument and at the John McConnell Math and Science Center. He has also enjoyed helping out with the literacy program at the Mesa County library, tutoring immigrants who are studying for their citizen tests, and also helping people prepare for the GED exam.

Dr. Roadifer has continued to support the geology program by funding an annual \$500 scholarship for a student who attends summer field camp. He has offered this scholarship for about the last 10 years, and plans to award yet another scholarship this coming year. The geology program and students greatly appreciate this type of support!

Jack still lives in the Grand Junction area with his wife Nancy and cat, "Cookie", who also answers to "Kitty". He occasionally runs into students around town and enjoys hearing what they are doing. •

Upcoming 2015 CMU Geosciences Spring Field Trip

The 2014 Western Slope Field Conference was such a success bringing together faculty, alumni and our geology students that we've decided to organize a similar event for the spring semester. On Sunday April 26, the geology program will host a field trip to visit Cretaceous strata of the Book Cliffs. The geology program will provide vans that will leave from campus at 8:00 am, and the field trip will include lunch provided by the geology program. We hope that alumni as well as current students will take this opportunity to re-connect with the faculty and the CMU geology program on the rocks! For further information, please contact Andres Aslan (aaaslan@coloradomesa.edu; 970.712.3834). •

Donations to the New Geosciences Scholarships

Two new scholarship funds have been started to help worthy CMU students. The geosciences program and students greatly appreciate the donations of Barry Brinton (Site Development Consultants) and Patricia Powell to these two scholarships. Thank you! •

2014 Western Slope Field Conference – A Big Success!

Colorado Mesa University geology program hosted the 2014 Western Slope Field Conference from Sept 12 – 14. The meeting was a great success and was attended by about 30 current students, some Fort Lewis College students, and CMU Geology alumni. A (mostly) carnivorous barbeque at Island Acres State



WSFC 2014 The Slide located near Collbran, CO.

Park (RL even ate a hamburger) was hosted by Sigma Gamma Epsilon (thanks Alexandra!), and several alumni and former faculty including **Dr. Jim Johnson** (emeritus), **Eric Farmer** (BS, '02), **Trevor Burrell** (BS '14), **Anna Dunn** (BS '14), and **Dave Wolny** (BS '95).

This was followed by a well-attended Saturday trip co-led by professors **Rick Livaccari**, **Jonathan Cooley**, and newly-hired **Julia McHugh**. Rick got students in the mood for geology with a visit to the wonders of slickenlines in the "Great Wall of Slicks" at Rabbit Valley where the Entrada Formation is cut by a right-lateral strike-slip fault. Julia, our new vertebrate paleontologist, and Jonathan led a tour of the dinosaurs of the Rabbit Valley "body farm" including an update of several new finds at the Mygatt-Moore quarry. Julia discussed the excavation of the largest Apatosaurus femur ever found (a very big bone!). Jonathon Cooley then led us to additional outcrops in Rabbit Valley along the Split Rock Trail. Along the way, he started a lively discussion related to the massive problem of dinosaur chow. The problem: vast numbers of sauropod (vegetarian) dinosaur bones are found in the Morrison, but plant remains are scarce. So what did those multi-ton monsters eat? Some think they overindulged on French fries, but that has not yet been proven as no fossil fry in maw has been found. The problem was left unresolved as we moved on to look at the vast array of bones. Two things in particular were very impressive. One was the bullet-hole bone, the bullet-hole from a "good ol' boy" practicing his marksmanship (good shot, by the way) or perhaps a bite mark from another dinosaur (maybe they were eating each other)? Equally impressive was the fine-scale detail pointed out by Jonathan in some of the bones that show how the actual ligaments (sinew) held the skeleton together. Very impressive!

Sunday's grand finale to the West Salt Creek landslide was amazing. The group visited the 3-mile long landslide and walked among the debris at the toe. The slide took place at West Salt Creek in May of 2014 and made the national headlines because of its size and the sobering fact that it buried three men that were working on the irrigation system in that area. Many thanks go to Rex Cole for arranging this trip which was logistically challenging due to the fact that there was much private land in the area as well as gas extraction pads. Although the slide had tragic consequences, the opportunity to visit firsthand the scene of this historic event was unforgettable. •

Going With the Flow: Water-Related Activities in CMU's Geosciences Program

The Water Center at CMU had a very busy fall semester, starting with a film premier of *Water in the Desert: The Grand Valley and its Rivers*. The film was produced by the Water Center and is a 30-minute documentary on the Grand Valley and its evolving relationship with the Colorado and Gunnison Rivers. The premier drew about 200 people, assisted by donated beer from the Palisade Brewing Company. You can watch the film on the Water Center's website at: coloradomesa.edu/watercenter/Documentary.html.

The big event of the fall semester was our 4th Annual Upper Colorado River Basin Water Forum in November, which was two days of presentations and discussions about Seeking a Resilient Future for water in the upper Colorado River Basin. Speakers and attendees came from throughout the upper



Dr. Gigi Richard, Faculty Director, Water Center at CMU

basin, and this year's keynote speakers shared perspectives from the lower basin, including Las Vegas and California.

Throughout the semester, we hosted our annual Natural Resources of the West seminar series, which focused on the role of social and natural sciences in natural resource management. Speakers shared insights regarding connections between science and decision-making on topics ranging from hydropower, endangered species, and peach farming to landslides and oil and gas drilling.

In September, the Water Center hosted the 1st Annual Colorado Student Water Field Conference, which drew about 25 students and faculty from Front Range universities for a weekend of camping, rafting, and site visits to learn about water, agriculture, and river restoration in the Grand Valley. Next year, Metro State will host the field trip in Denver.

Upcoming events include the annual Water Course in February 2015, which will focus on Water for Agriculture, and the annual State of the Rivers seminar in May 2015. See coloradomesa.edu/watercenter for more details.

The mission of the Water Center at CMU is to support and promote education, outreach, research, and dialogue to address the water issues facing the Upper Colorado River Basin. •

— Dr. Gigi Richard, Faculty Director, Water Center at CMU

Student News:

Mike Feil, Jennifer Graham and Christian Klaiber received their BS degrees in geology this past December. Jennifer mentioned that President Foster took note of all her "hardware" when her degree was conferred. In addition to receiving the prestigious Aspinall Scholarship and spending two and a half years as an officer in the Associated Student Government

while attending CMU, Jennifer graduated Magna Cum Laude, completed the CMU Honors program, and was a member of the Earth Sciences Honors Society (Sigma Gamma Epsilon) and Alpha Chi (top 10% of the Honors society). Nice job Jennifer!



Mike Feil & Jennifer Graham at December graduation

Student Club Activities

Zeta Nu Chapter of Sigma Gamma Epsilon. CMU's Zeta Nu chapter of Sigma Gamma Epsilon inducted 14 new members to the honor society in October 2014 from both geology and environmental science. Students must maintain a 3.0 GPA to be members of the honor society. SGE members provide great service to the CMU community by volunteering at events such as the Water Center's Upper Colorado River Basin Water Forum. Another initiation will be held in the spring. The chapter will also host guest speakers and a dinner to honor graduating seniors.

Colorado Mesa University Student Chapter, American Association of Petroleum Geologists. The AAPG Student Chapter at Colorado Mesa University has kept busy this past fall with monthly meetings, a guest speaker, and a weekend field trip. The club was honored to have Alexis Navarre-Sitchler, CMU alumna (BS '00) and currently Assistant Professor at Colorado School of Mines, meet with students and discuss the ins and outs of graduate school admission. The field trip took interested students to several working WPX drill rigs in the Piceance Creek Basin. Several spring field trips are in the planning stages.

The chapter is interested in hosting speakers, particularly those who would like to talk about local geology or who can provide job-finding guidance to geology graduates. The chapter would also be interested in hearing from geologists who would like to guide students on local field trips. Interested individuals should contact AAPG Student Chapter president Thomas Spain: tspain@mavs.coloradomesa.edu.

Rock Stars: Alumni News

Debra Higley, Class of 1977

Dr. Debra Higley is currently with the USGS Denver Office involved with petroleum resource assessment for basins in America and building 4D petroleum system models of basins. Her current projects relate to the Anadarko and Appalachian Basins but she would like to get geologically closer to home in the near future. Last year Debra was president of Rocky Mountain Association of Geologists. She has about 100 publications and gives talks at various events and to different groups.

Jacob Rundell, Class of 2003

After 2003 graduation Jacob moved to Denver and got married. He intended to go to Air Force Officer Training School (OTS), but was told that only people whose degree said "Engineering" were being accepted. So Jacob instead enlisted the next year. His first job after training was with the Air Force Technical Applications Center, Det 45 at Buckley AFB, CO as an Airman First Class.

In 2006 Jacob was accepted to a commissioning program that sent him to get the engineering degree needed for OTS. Jacob went to Colorado School of Mines for three years for a BS in geological engineering. He was able to do it in only three years because the department there accepted the majority of the classes Jacob took at Mesa. This let Jacob concentrate on the engineering and math courses. He only had to complete geology classes not offered at Mesa like Petroleum and Economic geology. As an interesting aside, Jacob felt that the 2002 Mesa field camp was tougher than the 2008 Mines field camp. Mines had porta-potties or government camp grounds at each site. The first week of Mines' camp they even stayed in the dorm at Ft Lewis College while working on urban geologic mapping of moraines.

After the degree from Mines and OTS, Jacob was stationed at White Sands Missile Range in April 2010 as a 2nd lieutenant. He



Jacob Rundell (BS '03) with his wife and daughter Leta

started learning about the geology of southern New Mexico in his spare time. For work Jacob coordinated Air Force testing on the range. His daughter Leta was born in August 2011. They got to see White Sands National Monument, maar volcanoes, lava flows, old mines, and the "sky islands" of Arizona. Since Jacob was assigned to the range, he went multiple times to the Trinity site. There is also an entire mountain range on the range that has barely been studied that Jacob got to have a close look at. Jacob also started a ME degree through Missouri University of Science and Technology. They have a hybrid online program specifically for working professionals that need an advanced degree. Jacob should wrap that up this semester.

In 2014 Jacob has been assigned to HQ Air Force Technical Applications Center, Patrick AFB, FL as a captain. He's managed to land a desk in the geophysics area. After four to six years Jacob expects to have another assignment somewhere else as a major.

Editor's Note:

This column is specifically intended for YOU, CMU geology alumni, to keep in touch with old friends and the department. Please feel free to send a paragraph or two that summarizes your accomplishments and maybe a few good memories to the editor, Larry Jones, lajones@coloradomesa.edu. Please specify that your comments are for the "Alumni News" column in your email. Pictures (then or now) are encouraged! Also, please be aware of the CMU Geology Facebook page. You can find it at facebook.com/CMUGeology.



How many Ph. Ds does it take to change a tire? Your editor in action!

Base Level: from The Editor

Welcome to the second issue of the Colorado Mesa University Geosciences Newsletter. We welcome your input and suggestions. As before, we are particularly interested in hearing from alumni – where are you and what are you doing? Pictures are welcome! You can contact me directly at lajones@coloradomesa.edu.

Larry Jones,
Newsletter Editor



COLORADO MESA UNIVERSITY

DEPARTMENT OF PHYSICAL AND ENVIRONMENTAL SCIENCES



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