

# CSU Bakersfield Geology



## Fall 2010 Newsletter

### A MESSAGE FROM THE 2009/2010 DEPARTMENT CHAIR: DIRK BARON



The 2009/2010 academic year was the final of my three-year term as department chair and I handed the reigns over to Bob Horton at the start of the fall term. One of the rewarding aspects of my tenure as chair was connecting with many of our alumni and learning about their careers and how their education has served them. We have received much positive feedback about the department newsletter and therefore I will continue putting it together each fall. Another highlight was working with the strong and active group of students currently coming through our programs. The picture above shows what must be a record contingent of CSUB Geology graduating seniors in Nevada's Virgin Mountains during their Southern Utah University summer field camp. We hope you will enjoy reading about the exciting news from the department, our students, and our alumni. And please stay in touch!

### DEPARTMENT NEWS

It has been another fast-paced year in which we continued to see the number of our majors increasing. As of Fall 2010 we had 82 undergraduate majors and 25 graduate students. While this influx of students is welcome news, it also creates some problems with classes such as mineralogy bursting at the seams.

The year brought some staffing changes. After a year with only limited administrative support, we welcomed **Ellen Armour** as the new department administrative assistant. Her energy and cheerful attitude have already made a positive impact. Long-time instrument technician **Tom Osborn** retired at the end of November after 25 years of service. If you know Tom, you are aware of the amazing job he has done to keep our labs and instruments running and to help with many research projects. His skill and creativity will be sorely missed.

On the topic of instruments, we acquired a wavelength dispersive X-ray spectrometer and a micro-XRF system for our scanning electron microscope. Together, these instruments should give us much improved detection limits for elemental analyses. We also now have a new paleoclimate lab with a particle size analyzer, a carbon analyzer, and an elemental combustion system. All these instruments were funded through a grant from the US Department of Education.

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*Department News*

*Faculty and Staff News*

*Student News*

*Alumni News*

*SJV Rocks! - K-12 Outreach*

## DEPARTMENT NEWS CONTINUED

There have been some big changes in the organization of the academic departments on campus. The old School of Humanities and Social Sciences has been split into two new Schools and the School of Education has been eliminated, with most of its faculty being incorporated into a new School of Social Sciences and Education. However, as a result of this realignment and several recent retirements, the Anthropology faculty (who have scientific backgrounds) has been reassigned to the School of Natural Sciences and Mathematics with the charge to develop a program in Anthropological Sciences that will be housed within the Geology Department for administrative purposes. As part of this process the Department of Physics and Geology is formally proposing to split into separate departments, something that has been unofficially in effect for several years. Assuming the Academic Senate approves of these changes, Dr. **Robert Yohe**, Professor of Archeology, and Dr. **Brian Hemphill**, Professor of Biological Anthropology, will soon become official members of our department. Drs. Yohe and Hemphill are among CSUB's most distinguished scholars and we are delighted with this turn of events. Stay tuned for more on this developing story...

Department faculty have also been active organizing events for the community. **Dirk Baron** organized the February 2010 **Engineers Day** which brought over 500 top Kern County high school students interested in science and

engineering careers to the campus. They listened to talks from prominent engineers and scientists, saw exhibits from employers and professional organizations, and took a tour of the science departments.



*High school students at the Edwards Air Force flight simulator, a popular exhibit at Engineers Day.*

The department also organized another day-long workshop on geologic **Carbon Capture and Sequestration** technologies. With two projects proposed for Kern County there is a lot of interest in this topic and over 200 community members filled the multipurpose room in the student union to capacity. **Jan Gillespie** and **Rob Negrini** gave presentations, along with national experts on the topic. **Bob Horton** moderated the event.



*Bob with Tiffany Rau from the CCS Coalition and Les Clark, Executive Vice President of the Independent Oil Producers Association outside the student union.*



*Geo Club members Will Neuenkirk, Jera Tucker, Gina Gonzales and Bekowei Okoro members staffing a table with information about the department while Rob looks on and club mascot Randy snoozes in the background.*

## FACULTY AND STAFF NEWS

**Dirk Baron** enjoys being back as a regular faculty member after three years as chair and being able to focus again on teaching and new research projects. I am also looking forward to working with the new instruments on our scanning electron microscope, the wave-length dispersive X-ray spectrometer and a micro XRF system.

In addition to my regular duties, earlier this year I have taken on a campus-wide role as the project director for a major five-year U.S. Department of Education grant with the goal of improving graduate education at CSUB. One of the first

tangible outcomes is a new Graduate Student Center that will provide help with admissions, advising, and workshops for students, as well as with promotion of our graduate programs. Watch out for an announcement for the January 20, 2011 Grand Opening of the Center.

I also continue to work with the Kern High School District on a planning grant from the National Science Foundation Math and Science Partnership program. We will submit a proposal for an implementation grant for a MSP “Institute Partnership” next spring.



Last but not least, this fall I was honored to receive the 2010/2011 CSUB Faculty Research Award. It take the award as motivation for more productive research with students in the future.

**Jan Gillespie** I am developing a research program in carbon capture and storage (CCS) and continue my interests in the early and middle Miocene strata in the southeastern San Joaquin Valley and Tehachapi Mountains. I gave a presentation on opportunities for CCS in San Joaquin Valley oilfields at the 2nd CCS symposium sponsored by the Geology Department at CSUB. This year I am working with scientists at Lawrence Berkeley Laboratory who are looking at pressure response to fluid withdrawal from San Joaquin Valley reservoirs. I have a graduate student, Gelson Goulart from Brazil, who is working on a study of the Vedder Formation in the Greeley oilfield. The Vedder is one of the three formations that are the likely foci of carbon storage in the San Joaquin Valley. Gelson will be looking at the degree of compartmentalization of the reservoir and how the reservoir pressure responds to fluid production. We will be getting funding from Lawrence Berkeley. I am looking for two more students to study the Stevens reservoir at North Coles Levee and the Temblor reservoirs at McKittrick.

This year there were 29 students in my Strat-Sed class and we had a very interesting field trip to Death Valley to measure sections at Red Rock

Canyon (clastic sediments) and in the Nopah Range (carbonates). This year is also the petroleum geology year at CSUB (next year is hydrogeology/GIS) so I am teaching the Petroleum Exploration course and the Oil Field Development (aka reservoir engineering for geologists) course. I have also been teaching one-day seminar classes in Petroleum Geology and Basic Well Logging for the Pacific Coast section of the Petroleum Technology Transfer Council. We increased our software holdings in the department to include Petra (a PC-based subsurface mapping program offered by HIS) and Petrel and Eclipse (programs offered by Schlumberger). I have been working hard to convince the administration that we need a computer lab that geology students can access to use these programs for teaching and research. So far the monies have not been forthcoming but we keep trying. Meanwhile, the software is available on three computers in my research lab.

For fun, I attacked a couple new slot canyons this summer—the Fiery Furnace in Arches NP and Zero Gravity on the San Rafael Swell in Utah. Also took a neat mountain biking trip through Borneo this summer. It was interesting to see how much of the rainforest has been converted to palm



oil plantations—it reminded me of how much of the Iowa prairie has been converted to corn and soybeans on my bike ride across Iowa last summer!

*Jan biking across a stream in the Borneo rainforest*

**Bob Horton** This past year zipped by so fast that my head is still spinning. It took some time adjusting from the structured life of an administrator to the life of teaching and working with students, and while there is much that I miss about the Grants office, I’m happy to be back in

the Geology Department. As reported last year, I'm working with Rob Negrini on an NSF grant. Last winter graduate student Dan McCuan and I began examining magnetic separates from cores that Rob recovered from Summer Lake in order to characterize the magnetic mineralogy using XRD, SEM, and reflected light microscopy. Dan presented a paper outlining our preliminary results last year at the joint AAPG Pacific Section – GSA Cordilleran Section meeting in Anaheim.

Over the summer Dirk Baron and I participated in the REVS-UP summer program sponsored by Chevron. Our group consisted of two high school teachers, two Bakersfield College students, four high school students, and one of our graduate students studying sediments from the Kern Water Bank and the Kern River oil field. This program ended with poster presentations (and judging) at a CSUB-hosted luncheon for participants and community members, and the two posters prepared by our group placed first and third out of the twenty or so posters that were on display. The next day I left for Wyoming and my first vacation in three years (one more reason I'm no longer in Administration)! This fall I took over as Department Chair for the third time (some people are questioning my sanity over this); fortunately Dirk left things in very good order. The state's budget crisis continues to affect the university's budget in a negative manner meaning challenges ahead for small departments like ours, but enrollments have been picking up so things are looking bright.

**Staci Loewy** It has been another very busy and productive year. I have enjoyed working with all the new Geology students. Can you believe we now have over 100? There were 30 students in my Historical Geology class last spring. During the winter I team taught a new Scanning Electron Microscopy (SEM) Course with Bob Horton. We had 36 students from four departments. Everyone conducted research with the SEM and shared their results with the class in a poster presentation. Students enjoyed working with the technology and it was great to see such a wide range of research applications. I have been getting things going in the two new geology laboratory facilities. Students and faculty can now cut, crush and

pulverize rock samples, concentrate specific minerals (like zircon for geochronology) and prepare samples for geochemical and isotopic analyses. The SEM class used the labs to prepare materials for their class projects and the facilities have been used by visiting and CSUB Geology students to complete their research projects. I prepared a manuscript for submission to the journal "Geology", presenting new isotopic data from eastern Antarctica and southern Africa that suggests that these regions were next to west Texas 1 billion years ago when all the continents collided to form a supercontinent called Rodinia. Over the summer, I ran two back-to-back research programs, one to enhance the Earth Science curriculum in the public schools (See SJV Rocks!!) and the other was a Keck Geology Consortium Summer Research Program. During the Keck Program six students from universities around the country (including Stanley Hensley from CSUB) came to Bakersfield to study how plutons formed in Sequoia National Park. During the month-long program, we spent two weeks collecting samples throughout the park, processed the samples at CSUB and Pomona College, and analyzed materials using the SHRIMP at Stanford University and the XRF at Pomona College. Each student carved out an individual research project and five of them, including Stan, presented their research at GSA and AGU national meetings this fall. In between all this, Patrick, Sierra and I were able to take a quick trip back east to visit family over the summer and we are expecting our second child in January. Whew!



*Staci, Patrick and Sierra and a very big tree*

**Patrick Mickler** Looking back on 2010 I would have to say my greatest accomplishment was potty-training a two year old. Bending the will of a toddler apparently requires a different kind of education than I possess. Regardless, Sierra saw the benefit of no more diapers and the process was 95% complete in a weekend. While this was going on I taught my first physical hydrogeology class. The class included a fun afternoon with students up to their armpits in the Kern River gauging stream discharge near campus. In addition to hydrogeology, I also taught Geo 201 (Physical Geology) and got the chance of meeting our new batch of undergraduate students. The class was large, close to 50 students, and was full of motivated Geo majors.

Last summer was filled with two summer programs and a trip to see family. I participated in the REVS-UP program, helping out with the Geology research programs. I was also a content expert in the SJV Rocks!! summer program coordinated by Staci Loewy. I worked with a team of teachers and college students to create innovative classroom activities on plate tectonics and the Sierra Nevada. After this busy phase of the summer was over I enjoyed a relaxing trip back to New York State to visit family. The trip included an afternoon boating on the Hudson River and a day canoeing in the Adirondack Mountains. These were Sierra's first trips on the water and she was very excited. She particularly enjoyed trailing her fingers in the water over the gunwale of a 100+ year old wood canoe we borrowed for the afternoon.

**Rob Negrini's** courses this year included Spring Field and Senior Seminar in which he developed a new module where students mapped a Quaternary-aged fault in the Mojave Desert. They then presented seminars in a simulated work environment on possible methods and technologies for determining the last age of movement on that fault given their mapping results. The development of this module was assisted by D. Miller of the U.S.G.S. in Menlo Park who has worked in this region for more than a decade. Rob also taught Geophysics in the Fall 2010 term. This year the course was taught in a lecture-only basis due to state budget cuts, an

unwelcome change that was fortunately received with good humor and hard work on the behalf of the affected students.

Research by Rob and his students continues on magnetic field behavior, paleolake levels, neotectonics, and stratigraphy problems in Neogene sediments. This research is funded by the



A) Dave Wahl, Dirk Baron, and Dan McCuan at the Southern Soda Lake coring site in the Carrizo Plain, May 2001. B) Resulting core representing 3,000 years of lake history.

National Science Foundation, Chevron, and Occidental Petroleum. Dan McCuan and Gina Gonzales, respectively, gave related presentations at the GSA Cordilleran Section meeting in Fullerton in May and the Southern California Conference for Undergraduate Research at Pepperdine University in November. Negrini's research team initiated a new study on a core from Soda Lake in the Carrizo Plain that represents the most recent 3,000 years of lake-level change. The core was taken by CSUB students with the help of Dave Wahl of the U.S.G.S. in Menlo Park (see photo). Sediment grain-size, organic and inorganic carbon, and carbon/nitrogen ratios of the sediments will be analyzed with the Geology Department's new Malvern Particle Size Analyzer, CosTech Elemental Analyzer, and UIC Carbon Coulometer. Pedro Arredondo and James Lopez helped to collect the core and will be conducting the analyses as part of their M.S. research.

## DONATIONS

In this time of shrinking state funding for the CSUs, support from the community and our alumni becomes essential for maintaining the quality of the educational experience of our students. We gratefully acknowledge donations to the Department from the following (in alphabetical order):

**Corporations and Organizations:** Aera Energy, American Petroleum Institute, Apache Energy, Chevron, Hydrogen Energy, Oxy, San Joaquin Geological Society

**Individuals:** Eric Oehlschlaeger, Kyle Mayborn, Marty Smithey



*After his seminar talk in October, alumnus Marty Smithey presented a \$2,500 donation to the department. The donation*

*was matched by his employer Apache Energy for a total of \$5,000.*

Apologies if we forgot someone, let us know so we can include you in future newsletters.

## STUDENT NEWS

**Kelly Harrington** was awarded a scholarship from the **American Petroleum Institute**

**C.E. Strange Scholarships:** Kelly Harrington, Gina Gonzales, Stan Hensley, Harold Holt, Dustin Leavitt, Simarjit Chehal, Joanna Pounds, Shawn Larkin, Michael Adamson, Heidi Snow, Pedro Arredondo, and Gunnar Tornstrom

**Africa Array Scholarships** Thanks to Staci's connections and efforts, the department is now participating in PennState's "[Africa Array](#)" for training geoscientists. As part of the program, students **Jon Godell, Kelsey Padilla, Rebecca Rodriguez, Raisa Lora** and **Walter Fuentes** are receiving scholarships and will have the

opportunity to actually travel to Africa for a summer research project. More on this program in the back of the newsletter.

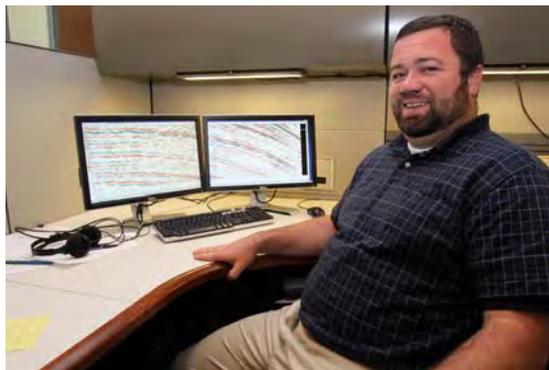
**Community College Transfer CSUB-LSAMP Scholarship:** Jon Goodall

**Simmie Chehal** received the **Jim Costa – Kern County Water Agency Scholarship**.

We also awarded several scholarships funded by **Chevron** and the **San Joaquin Geological Society**.

Sadly, several endowments did not produce enough income last year for scholarship awards. We are hoping to resume awarding these scholarships next year.

**Dan McCuan** received a travel grant from the **Geological Society of America** to support a presentation on the "Magnetic mineralogy of the BB2 Series sediment cores from Summer Lake, OR" about his MS research. Dan also wrote a successful grant proposal procuring several thousands of dollars of instrument time and travel support to the NSF-sponsored Institute for Rock Magnetism at the University of Minnesota. Dan and his research was also featured in the [Fall 2010 Your CSUB magazine](#).



At the spring 2010 commencement, **Jlynn Bowen** was honored as the **Outstanding Graduate in Geology**,

**Recent BS/BA Geology Graduates** include Ryan Glauser, J.J. Navarette Bolanos, and Heidi Snow.

**Recent MS Geology Graduate:** Sarah Catherine Schindler

**Geology Student Club** The Club has had another very productive year, organizing its second **Spring Barbeque**, a **Fall Back to School Reception** for new and returning students, several guest speakers, and a number of field trips. The club has also been very active in community outreach activities such as visiting K-12 schools and helping with geology lessons. Mark your calendars and watch out for forthcoming details on the **2011 CSUB Geology Spring BBQ** on **May 20, 2011**.



*Geo Club Officers Alyshia Parnel, Gina Gonzales, Travis Aragon, and President Pedro Arredondo with Club Mascot "Randy". Missing is Jera Tucker.*



*Enjoying good company and food at the 2010 Spring BBQ organized by the club.*

## ALUMNI NEWS

Alumna Anne Draucker has created a CSUB Geology Alumni Facebook Group. Join to connect with old friends and find out news about department events.

The list alumni below is complete and accurate to the best of our knowledge but undoubtedly contains outdated information, errors and

omissions. Please send any corrections, updated addresses, news, and pictures for inclusion in future newsletters to Dirk Baron ([dbaron@csub.edu](mailto:dbaron@csub.edu)). We would love to hear from more of our alumni. Note that all degrees before 1985 were in Earth Science, afterwards in Geology.

**John Acord**, BS 1986, MS 1990, works for Oxy at the Elk Hills Oil Field.

**Fidelis Agbor**, BS 1992, is a Major and International Military Affairs Officer in the US Army.

**Richard Aldrich**, BS 2000, is a school teacher in the Lake of the Woods, CA area

**Michael Alexander**, BS 1975

**Anthony Amarante**, BS 1981

**Harry Angell**, BS 1997, works for Oxy in Bakersfield.

**Sara Ante** (formerly Draucker), BS 2002, is a geologist with Chevron in Houston.

**Jason Anthony**, BS 1994, MS 2002, is working for *Shaw Environmental and Infrastructure*, a large engineering firm, in New Jersey.

**James Armstrong**, BS 1988

**Richard Armstrong**, BS 1979, is the Chief of the Oil and Gas Division in the Kern County Assessor's Office.

**Ariel Auffant**, BS 1998, MS 2005 is a geologist for Chevron in Bakersfield.

**Suzanne Baehr**, BS 1989, is a geologist and GIS analyst for Cenergy International and is also pursuing her graduate degree at CSUB.

**David Bates**, BS 1994

**Charlie Bauer**, MS 2002, works for the Kern County Environmental Health Department in the Hazardous Materials/Waste Division and is part of the HazMats First Responder Emergency Response Team.

**Carol Register Beahm**, BS 2007, works for Berry Petroleum and is also working on her MS Geology degree at CSUB. Carol and her husband Sean Beahm are proud parents of their new baby son Porter.

**Jessie Becerra**, BS 2009

**Christy Beiber**, BS 1978

**Dave Beiber**, BS 1974

**Karen Bennett**, BS 2003

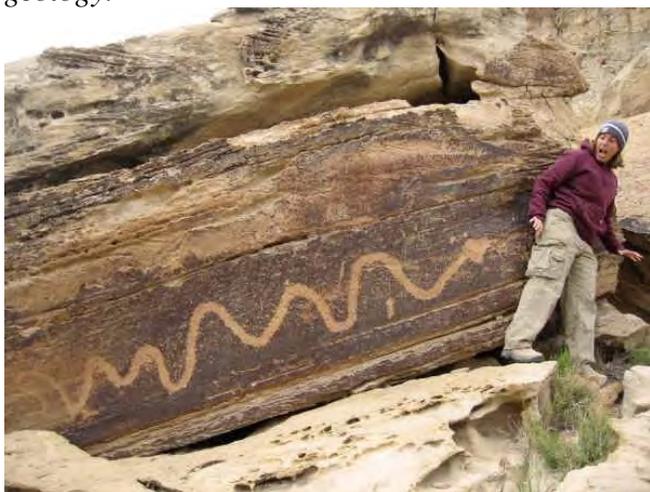
**Gregory Berg**, BS 1989

**Michael Blackwell**, BS 1993

**Cheryl Blume**, BS 1986

**Dean Boehler**, BS 1980

**Leslie Boockoff**, MS 2005, writes *“After 6 very fine years working for Chevron in San Joaquin Valley, I was transferred in 2009 to Houston, TX. I work in the Deepwater Exploration Business Unit and am on the Geology and Geophysics Operations Team. I work as a wellsite geologist which means I work and live on a drill ship for 14 days then have 14 days off. I spent the first 6 months of my new assignment on the Discoverer Deep Seas and the Discoverer Clear Leader. In January of 2010, I was moved to my permanent rig assignment, the Discoverer Inspiration. Last year, I was fortunate enough to be a part of the deepest well drilled in the Gulf of Mexico (over 35,000 ft). The photo was taken by Anne while we were on a Chevron field trip to Utah. Clearly, we were having too much fun for it to be considered work. I sure do love geology!”*



**Floyd Bowen**, BS 1978

**Jlynn Bowen**, BS 2009

**Michael Bowery**, BS 1975

**Scott Briscoe**, BS 1993

**Bryan Bruce**, BS 1993

**Craig Byington**, MS 2005, works for Millennium Mining in Clancy, Montana.

**Meniford Canterbury**, BS 1973

**Christopher Carrisalez**, BS 1994

**Clifford Carter**, BS 1973

**Cheryl Casdorff**, BS 1983, is a supervising planner for Kern County.

**Michelle Casterline**, BA 2001, is a Hydrogeologist with the Kern County Water Agency and also working on her graduate geology degree at CSUB.

**Richard Charboneau**, BA 1998

**Robert Chow**, BS 1973

**Michael Coburn**, BS 1987, MS 1996, is a teacher at Highland High School in Bakersfield where he teaches Earth Science and AP Environmental Science.

**Sophia Luz Cobos**, MS 2006, is now working for Oxy in Columbia, South America.

**Kevin Coodey**, BA 2003, works for the Bureau of Land Management in Bakersfield.



**Rasa “Kay”**

**Coodey** (formerly Cates), BS 2004, writes *“I’m working at Aera Energy as a geoscience technician for the Beldridge Light Oil Recovery Process Evaluation team.”*



**Florn Core**, BS 1974, retired at the end of 2009 after a long career as the Water Resources Manager for the City of Bakersfield.

**Joshua Courter**, BS 2005, is the District Hydrologist for the USDA Forest Service in Porterville.

**Ronald Cribbs**, BS 1976

**Callie Cullum**, BS 1989

**Brian Cunningham**, BS 2006, writes: *“I still work for Bonanza Creek Energy Operating Co., but I have moved to our Denver office. I still look over all our California geology and now I also take care of all our Colorado geology. It’s a different beast out here with the hardrock and drilling. I will soon be drilling Bonanza Creeks first Horizontal in Colorado targeting the Niobrara Shale.”*

**Kevin Danley**, BS 1994

**Thanh Dao**, BS 1996, Thanh works for Oxy at the Elk Hills Field

**Flora Darling**, BS 1983

**Rick Darke**, BS 1977

**Robert Diosi**, BS 1976

**Anne Draucker**, BS 2003, MS 2007, is working as a geologist for Chevron in Bakersfield.

**Richard Durbin**, BS 1972

**Neil Durham**, BS 2005, is currently working in Bakersfield for Clear Creek Systems, Inc. as an Engineering Project Manager.

**Kathy Edwards**, BS 2002

**Daniel Erbes**, MS 1993, works as hydrogeologist for the Bureau of Land Management in Carson City, Nevada

**Anne Falcon**, BS 1988, works as geologist for the Bureau of Land Management in Bakersfield

**Alan Febus**, BS 1989

**John Ferguson**, BS 1974

**Ben Fleming**, BS 2006

**Dayne Frary**, BS 1979, is a Senior Geologist for McIntosh&Associates in Bakersfield.

**William Galloway**, BS 1972

**Lance Garcia**, BS 1977

**Boyd Getz**, BS 1980, received an MS from San Diego State University and is now Exploration Manager for JP Oil Company in Bakersfield.

**Lee Gholz**, BS 1973

**Joy Gillick**, BS 1997

**Rene Glass**, BS 1989

**Ryan Glauser**, BS 2010

**Elizabeth Golob**, MS 2005

**Jacinto Gonzalez**, BS 1976

**Greg Gordon**, MS 2009, writes *“I am currently a Ph.D. student in Geology at the Colorado School of Mines, and I am working as a research assistant in the Chevron Center of Research Excellence.*

*My research involves stratigraphic architecture and sedimentology*

*of turbidite systems in structurally confined basin settings, with particular emphasis on reservoir quality at the lateral and distal fringes of submarine fans. My dissertation relies upon using turbidite outcrops as analogs for subsurface reservoirs in the Gulf of Mexico, offshore West Africa, the North Sea, and even the San Joaquin basin. My field areas are in the Ainsa basin (southern Spanish Pyrenees) and the East Ventura basin (Lake Piru area). I hope to graduate in Fall of 2012, and then return to the petroleum industry. My wife, Jessamyn, and I are the proud parents of two boys, Joshua and Nathan, and we are enjoying life in Colorado!”* We are hoping that Greg will give a seminar talk about his dissertation research at CSUB sometime early next year.



**Dennis Green**, BS 1990, works for Landmark Graphics (aka Halliburton) in Houston.

**Jatinderpal Grewal**, BS 1994

**Michael Griebing**, BS 1979 is currently the chair of the science department at Stockdale High School in Bakersfield.

**Elihud Grijalva**, BS 1989, works for Chevron, USA, in San Ramon, CA

**Karin Hagan** (formerly Faber), BS 1997, MS 2002 is a hydrogeologist and GIS professional for Kleinfelder in Las Vegas, NV.

**Kevin Hamilton**, BS 1989, MS 2000, is a Waste Management Specialist with the Kern County Waste Management Department.

**Mark Hamilton**, BS 1979

**Greg Hammett**, BS 1996, is the General Manager of the Belridge Water Storage District.

**Dawn Hanson**, MS 1998

**Khalil Hassan**, BA 2004, works for Halliburton in Bakersfield

**Patrick Hauptman**, BS 1983, was the Water Resources Superintendent for the City of Bakersfield and retired in 2005. We were sad to hear that he passed away in 2006.

**William Hawes**, BS 1978

**Mitchell Herd**, BS 1995, last we heard, Mitchell is with Oxy International in Houston, TX

**Gene Hershberger**, BS 1979

**Adam Herrera**, BS 1997, is an Earth Science teacher at North High School in Bakersfield and is also working on his graduate degree in geology at CSUB.

**Bill Hluza**, BS 1998, works for AERA Energy in Bakersfield

**Daniel Holland**, BS 1978, is retired after a long career in agriculture and the food industry.

**Karla Hoobler**, BA 2004

**Barbara Houghton**, MS 1994, is a hydrogeologist with the County of Kern.

**Devon Hovis**, BS 2004

**Patrick Howard**, BS 1997

**Cynthia Huggins**, BS 1983, is a geologist at Aera Energy in Bakersfield and the president of the Pacific Section AAPG this year.

**John Huff**, BS 2002, works as a geologist for CA DOGGR in Cypress, CA

**Carl Hulick**, BS 1984, is the President of CMH Environmental Group, Inc. based in Fullerton, CA.

**Hal Hynds**, BS 1979

**Ellett Jackson**, BS 1975

**Christopher Jamison**, BS 1994

**Robert Jelaca**, BS 1988

**Richard Jewell**, BS 1973

**Joe Johnson**, BS 1992, is working for Oxy in Houston where he works on the Permian Basin.

**Christopher Jones**, BS 1995, is a Senior Geotechnical/Geological Engineer for the

California Department of Water Resources in Sacramento.

**Grant Jones**, BS 1992, works for Swift Energy Exploration Services in Carpinteria, CA.

**Richard Jones**, BS 1975

**Jennifer Kalkis**, BA 2009, now lives in Minnesota.

**Harvinder "Nikki" Kaur**, BS 2000

**Kenneth David Kay**, BS 2009, works for Core Lab in Bakersfield and has started to work on his graduate degree at CSUB.

**F Kirn**, BS 1988

**Lori Kloesel**, BS 1997

**Melvin Krause**, BS 1975

**Tara Kuhn**, BS 1997

**Harmon Larue**, BS 1974

**Dwight Lee**, BS 1986, is a consulting geologist working out of the Sierra Valley area in northern CA

**Lea Lehman**, BS 1973

**Jason Leiran**, BS 2008

**Tim Lester**, BS 1985, last we heard owns a geotechnical company in the San Diego area

**Robert Lewy**, BS 1982, teaches high school science at East High School in Bakersfield and geology at Bakersfield College.

**Robert Lisenbee**, BS 1976

**Timothy Long**, BS 1996

**Katherine Longcrier**, BS 1977

**Oscar Lopez**, BS 1973

**William Lowry**, BS 1996

**Christine Luther**, BS 1994

**Charles Magee**, BS 1994, works for Kern County Solid Waste Department

**Adam Mahan**, BS 2001, works as a geologist for Aera Energy in Bakersfield.

**Rosemary Marble**, BS 2008, is a geologist with WZI in Bakersfield.

**Andrew Marinello**, BS 1988

**Frank Martens**, BS 1975

**Laura Martin**, BS 1994

**Kyle Mayborn**, BS 1991, is a professor of geology at Western Illinois University. See a recent letter from him in the back of this newsletter.

**Janet McAlee**, BS 1996, works as a geologist for Bonanza Creek Energy in Bakersfield

**Michael McCray**, BS 1994, works as a geologist for Oxy at the Elk Hills Oil Field, CA

**Dan McCuan**, BS 2009, is a graduate research assistant at CSUB working on his MS degree.

**Marc McCulloch**, BS 1993, is a directional driller for Halliburton in Indiana.

**Patrick McCullough**, MS 1995

**Inge McDonald**, BS 1984, is the Exploration Manager for Africa Oil Corporation, based in Calgary, Alberta

**Cari Meyer**, MS 2005, is teaching part-time at Bakersfield College.

**Gregory Middleton**, BS 1990

**Edward Eugene Miller**, BS 1978 - Edward is the President of Gas TransBoliviano S.A. in Bolivia.

**Michael Minner**, BS 1997, is a geologist for Chevron, USA, in Bakersfield

**Charles Moore**, BS 1991

**Jonathan Mullings**, BS 1993

**J.J. Navarette Bolanos**, BS 2010

**Ben Nelson**, BA 2005, works for Core Lab in Bakersfield.

**Mary Newman**, BS 1977

**Geoffrey Nicholson**, BS 1974, is back in Bakersfield as a consulting geologist after almost 20 years in Saudi Arabia with ARAMCO

**Erik Oehlschlager**, BS 1997, is a geologist for Engineering/Remediation Resources Group (ERRG) in the Bay Area.

**James Ogilvie**, BS 1975

**Joanna Oseguera**, BS 2006. After working for Occidental Petroleum at Elk Hills for over a year, Joanna Oseguera is now



working on her Masters in Geology at UC Riverside. We saw her at the 2010 GSA meeting in Denver where she presented a poster about her research.

**Katie O'Sullivan**, BS 2005, is now a Ph.D. student at the University of Notre Dame where she works with rocks from the moon.

**James Ostdick**, BS 1993, MS 1997 teaches Earth Science at San Benito High School in Hollister, near the Central California Coast.

**John Otto**, BS 1975, recently retired as the Assistant Manager of the Tehachapi-Cummings Water District. He resides in Tehachapi.

**Peggy Panero**, BS 1978.

**Kathy Parker**, BS 1985 MS 1993, works as an air quality control specialist for Insight Environmental in Bakersfield

**Nedra Peace**, BS 1975

**Dawne Pennell**, MS 1997, is a geologist for AERA Energy in Bakersfield

**Vanessa Perez Bustamante**, BS 2005, is employed by the California State Lands Commission (CSLC) in Long Beach, CA. In 2007, she transferred to CSLC from the Dept. of Conservation in Cypress, CA. She currently works as an Associate Mineral Resources Engineer and is a negotiator for mineral extraction leases, permits, and agreements for mineral exploration and development. She writes, "I am an active member of the Los Angeles Basin Society of Petroleum Engineers (LASPE). I was chairperson for the 2009-2010 term and under my leadership ur section was awarded the 2010 'President's Award for Section Excellence' at the ATCE conference held in Florence, Italy. I was present to receive the award and it was a wonderful experience." The picture shows Vanessa receiving the award.



Congratulations!

**Paul Phillely**, BS 2004, got a graduate degree from UCLA and now works Sacramento Metropolitan Air Quality Management District.

**Daphne Porter**, BS 2000, is a science teacher at Arvin High School.

**Robert Privett**, BS 2008

**Michael Quilliam**, BS 2001, works for Plains XP in Bakersfield

**Frances Razo**, BS 1997

**Raquel Ramirez**, BS 2008

**Kenneth Renz**, BS 1980

**Keith Roberts**, BS 1977

**Bill Robin**, MS 1991

**Jason Robbins**, BS 2008, is a Technical Assistant Geologist with on Chevron's Kern River Asset Development Team in Bakersfield. He writes: *"My past year working with Chevron has been very exciting and challenging. I was fortunate to get in on the "proof of concept" phase of using ArcGIS to make asset development decision for the Kern River oilfield. The "proof of concept" was a success and now it is a routine to make million dollar decisions from data and processes that I have developed. I am now referred to as a GIS resource and have trained many new employees in an introductory ArcGIS class that I developed. Next month I will be giving a worldwide presentation illustrating Kern Rivers best practices and value earned. I have become more comfortable in giving presentations and public speaking for two main reasons; a solid knowledge base on a topic and because of Patrick Mickler's dreaded end of quarter class presentations. Thanks Patrick."*

**William Rosica**, BS 1981

**Juan Santiago**, BS 2005, works for Oxy and has also started his graduate work in geology at CSUB.

**Lorelea Samano**, BS 2003, MS 2007, is an Development Geologist for Chevron in Bakersfield. She works for at the Kern River Field.

**Michael Sarad**, BS 1977

**Justin Schimnowski**, BS 1994

**Rick Schroeder**, BS 2004, is finishing up his Ph.D. dissertation at the University of Calgary.

**Dean Seaton**, BS 1979.

**Bernard Sentianin**, BS 1984

**Dewey Shanholtzer**, BS 1977

**Andrew Sherman**, BS 1997

**Ced Shermer**, BS 2008

**Jennifer Shives**, BS 2005

**Frank Slinkard**, BS 1977, is a Licensed Land Surveyor and has owned 2 local Civil Engineering Companies (Sequoia Engineering and FAS Engineering & Surveying).

**Ronald Smith**, BS 1994

**Timothy Smith**, BS 1994

**Marty Smithey**, BS 1983, is the Exploration and Development Team Leader - Northern Argentina for Apache Energia Argentina and based in Buenos Aires. Marty visited the department in October and gave a very interesting talk about his work on *New Unconventional Exploration Opportunities in Argentina - A Multi-Disiplinary Approach to Gas Shale Exploration*. Students and faculty peppered him with questions long after the end of the talk. During his visit, Marty also

presented a very generous donation to the department that was matched by Apache Energy



**Heidi Snow**, BS 2010

**David Stanton**, BS 1977

**Daniel Steward**, BS 1992, MS 1997, was promoted to Business Unit Exploration Manager for Noble Energy's West Africa Business Unit. He has been working on the Gulf of Mexico Deepwater team for Noble Energy in Houston since 2006. Most recently he was the Deepwater's Lease Sale Team Leader and has helped guide the Deepwater team through several very successful lease sale efforts.

**George Stewart**, BS 1978, received an MS from USC and now works for Plains E&P here in Bakersfield.

**Keith R. Stewart**, BS 1984

**Steve Story**, BS 1977

**Patricia Stubblefield**, BS 1973

**Robert Swartz**, BS 1992, MS 1995, is a principal project manager of the Regional Water Authority in Sacramento.

**Brian Taylor**, BS 2003, MS 2007, is a geologist with E&B Natural Resources Management Corporation in Bakersfield.

**Sean Taylor**, MS 2008, is a Petrophysicist with EnCana Oil & Gas (USA) Inc. based in Denver.

**Don Terndrup**, BS 1981

**Brett Thompsett**, BS 1997, last we heard worked as a Baker Hughes as directional drilling specialist.

**Kent Thompson**, BS 1978

**Michael Thompson**, BS 1997

**Myron Tiede**, BS 1991, is an Exploration Geologist for Tri-Valley Oil & Gas in Bakersfield.

**Michael Toland**, BS 1982, is an Energy and Minerals Resource Engineer for the California Department of Conservation Division of Oil, Gas and Geothermal Resources office in Bakersfield.

**David Umali**, BS 1997, works for AERA Energy in Bakersfield

**James Vickery**, BS 2008, is a graduate teaching assistant at the Colorado School of Mines where he is pursuing his doctoral degree.

**Marco Voinich**, BS 2009

**Joel Waldrum**, BS 1973

**Jonathan Walker**, BA 2005, teaches science at North High School in Bakersfield.

**Michael Walters**, BS 1975, is a teacher at Rio Bravo Elementary School in Bakersfield.

**Eric Wardlaw**, BS 1991

**Robert Wells**, BS 1978

**Matthew Woessner**, BS 1989, teaches high school science in northern Kern County

**Jeffrey Wussow**, BS 2002

**G Young**, BS 1974

**Mladen “Sam” Zic**, MS 2001

### **K-12 OUTREACH HIGHLIGHT SJGS ROCKS! – INSPIRING FUTURE GEOSCIENTISTS**

Staci Loewy’s NSF-funded program SJV Rocks!! had a very successful summer. The program seeks to enhance diversity in the Geosciences through enhancing the Earth Science curriculum in the public schools in Kern County and increasing teacher confidence to engage students on Geology topics. Twenty very enthusiastic and hardworking teachers, scientists, and college students worked in teams to create new, fun classroom activities. Several CSUB Geology folks participated; faculty Dr. Patrick Mickler and Dr. Peter Wigand; undergraduate students Gina Gonzales, Kelsey Padilla, Alyshia Parnell, Joseph Scott, Robert Kelty, Raisa Lora, Jenny Head and Martin Jimenez; and MS student and teacher-participant Adam Herrera. During the last two days of the program each team taught their activities to the rest of the group. There was a lot of laughing to be heard as we enjoyed acting 12 years old and playing with items like flavored Cheerio’s and pipe cleaners to learn about tree-ring cores, corn syrup and kitchen sponges to learn about permeability, m&m’s to learn about radioactive decay, and crayons, scissors, and glue to make plate tectonic models. The eight teachers are now testing these new activities with students in their own classrooms. Next summer the original eight teachers and eight students will come back for a week-long workshop to teach the tested activities to as many teachers as we can.



## A LETTER FROM KYLE MAYBORN, BS, 1991

Greetings CSUB Geology Faculty and Fellow Alumni,

I have really enjoyed receiving the alumni newsletter the past few years so I decided to take the opportunity to thank everyone who made my time at CSUB so wonderful and life changing. I remember started my journey as a geology major by going to the third floor of the Science II Building and sitting down in **Dr. Mitchell's** Historical Geology Class. Those of you who remember Dr. Mitchell know that he was a firm believer in learning by self discovery, thus there I sat quite confused with a box of minerals in front of me. Thankfully **Barbara Houghton** and **Greg Middleton** took me under their wings and, based on the fact that this was their second geology class, taught me the finer points of mineral identification.

This was my first experience with many of my fellow students that helped me create so many wonderful memories as an undergrad at CSUB. These times certainly included sitting in **Dr. Laskowski's** Mineralogy class with **Chris Carrisalez**, **David Umali**, and **Dan Steward** trying to figure out if this block was an octahedron modified by a dodecahedron modified by a tristetrahedron or was it simply a tetartoid? Laughing at the antics of **Bill Hluza** in **Dr. Horton's** Geochemistry class. Being fortunate enough to have **Dr. Riese** teach us Petrology and Structure as a night class after he had worked a full day at Arco. Being part of the first group of students to take Petroleum Geology from **Dr. Gillespie**.

And who of course could forget the fieldtrips. The memory of almost being in a head-on collision on a bridge near Baker when **Dr. Coash** was gesturing out the drivers side window on the finer points of desert geomorphology. Memories of flying food as we tried to eat dinner on a very blustery day in Death Valley. Exploring the Point Sal Ophiolite on **Dr. Negrini's** Tectonics fieldtrip. Camping in the desert on Dr. Negrini's geophysics class and thinking "wow, field research could be fun, perhaps I should get a masters degree so I could do my own fieldwork."

Yet, we all know that many of the fondest memories come from field camp. Including arguing with Dr. Horton about the structures at the Poleta Folds, or trying to explain to him how **Joe Johnson**, **Chris Carrisalez** and **Pat McCullough** managed to scare a rattlesnake into falling into the toilet pit at our campsite. Having **Dennis Green** drive us over the Westgard Pass to swim in the Owens River for our nightly "bath". Rejoicing with **Fidelis Agbor** about the success of his home country of Cameroon during the 1990 World cup and it inspiring us to play soccer at our campsite near Pyramid Lake.

I know that all of you could write similar stories about your times at CSUB and I'm sure that Dr. Baron would love to get them.

Best wishes,

Kyle Mayborn (B.S. 1991)

[kr-mayborn@wiu.edu](mailto:kr-mayborn@wiu.edu)



# Donations

**A Message from Kyle Mayborn '91:** My experience at Western Illinois University has shown me what a difference generous alumni can make in the experience of current undergraduates. So I want to encourage you to consider rewarding the department for everything it has done for you and your career by giving a financial gift and please check to see if your company matches charitable giving to Universities.

**A Message from Rob Negrini:** As you have seen in this newsletter, the total number of Geology majors exceeds 100! This is great news for both the department and for local industry, who will now receive a steady supply of well-educated, Bachelors- and Masters-level geologists. However, we need your help to support activities and facilities that make a CSUB Geology education special, such as student-travel, student-research, equipment upkeep, and field activities. Please dig deep and pay back your Geology Department with a tax deductible donation. We appreciate your donation in advance, however much you can afford to give us.

Please make your check payable to **Geology Department Trust Account MX083** and indicate if you want your donation to go to one of the specific causes listed below. **Return to the address on the back of this page, to the attention of Dirk Baron.**

Name:

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Affiliation (if applicable):

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Please indicate the amount you want to donate:

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Please indicate if you want your donation to go to one of these specific causes:

- Student Scholarships (will be added to the existing CE Strange Scholarship Fund)**
- Undergraduate Student Research**
- Unrestricted to support current needs identified by department faculty**

**Thank You!**



From Daniel Steward: *“A classic from Rob Negrini's Tectonics course in 1991: the trip to the Point Sal ophiolite. Pat McCullough gestures, Kyle Mayborn goes in for a closer look, and Rob Swartz grins. This outcrop was a bit of a wake-up call after cruising through the ophiolite then finding this vertical "Monterey" sitting immediately adjacent to the complex.”*



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