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UNIVERSITY OF WYOMING

FALL 2006

## FROM THE DEPARTMENT HEAD

Art Snoke



As a field-oriented structural geologist, the Annual Meeting of the Geological Society of America is always a significant watershed during the fall academic semester for me. This year the Annual Meeting was held in Philadelphia, Pennsylvania, the site of the formulation of the *Declaration of Independence* and *Constitution*. I had not been in Philadelphia for decades, but it was enjoyable to meet UW alumni, old friends, listen to “new science,” and revisit some of the most important historical sites in our nation’s history. This was not a “big” meeting for the Department because of distance and expense, but about a dozen faculty and students attended this meeting—many making scientific presentations of recent research results. Many faculty and students are planning to attend the upcoming fall meeting of the American Geophysical Union in San Francisco (December 11–15, 2006), and we will have a departmental booth in the Academic Showcase of the Exhibit Hall to advertise our graduate programs in geology and geophysics.

It constantly amazes me how fast the fall semester speeds by with many activities on the departmental calendar. The semester began with the usual departmental Labor Day weekend field trip (in part sponsored by ConocoPhillips); a brief summary of the fall 2006 field trip is included in this newsletter (see p. 5). Less than one month later the Department once again hosted the AAPG Rocky Mountain Rendezvous, which is also summarized in this newsletter (see p. 6–7). The Rendezvous was an enormous success because of the leadership of Senior Lecturer **Randi Martinsen** and the tremendous support of our departmental staff. Each year this event is growing larger, and this year 24 companies were involved in this regional geoscience job fair. Likewise the attendance by geoscience students from the Rocky Mountain region as well as from more distant parts of the country reached an all-time high of about 125. Recruiters and students were very busy during the Rendezvous. I had the pleasure of leading a one-day field trip to Medicine Bow Mountains on the Saturday before the start of the Rendezvous. The weather that day was absolutely superb—warm, sunny, and no wind (Does that sound like Wyoming at greater than 10,000 feet above sea level?). Well, on that day it was, and the fall colors, especially at the lower elevations in the mountains were spectacular.

We had a very successful recruitment of new faculty in AY 2005–06 with the hiring of **Barbara Carrapa** and **Ye “Linda” Zhang**, although both new faculty are still finishing post-doctoral appointments at Potsdam (Germany) and University of Michigan, respectively, and will not arrive in Laramie until summer 2007. Presently, the Department is searching for our first position in the newly created School of Energy Resources (SER), and this position has been earmarked in the broad field of geophysics as related to energy research (see p. 4 in this newsletter for more information on the SER, including the appointment of Professor **Carol D. Frost** as Interim Director).

Finally, I want to highlight that the Board of Visitors (College of Arts and Sciences) is continuing its match (up to \$1,000) of donations of all “first-time” donors to any Department in the College. I hope some of you will take advantage of this special opportunity. We greatly appreciate your support of our Department, and your contributions are important for providing our students many activities beyond regular courses, including special field trips, support for field studies, and participation at professional meetings.

I wish all of you an enjoyable upcoming holiday season as well as a productive, healthy, and Happy New Year!



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Research Professor **Kevin Chamberlain** and Department of Geology and Geophysics alumna and consulting geologist **Kelli Trujillo** (Ph.D. '03) were invited participants to the NSF-funded Earthtime workshop entitled "Probing the limits of temporal resolution in the Geological Record" held at Sante Fe, N.M., Sept 10–12, 2006.



Research Prof. Kevin Chamberlain

Earthtime is a collaborative initiative funded by the NSF Instrument and Facilities Division designed to foster coordination between geochronologists, paleontologists, and stratigraphers in addressing critical questions in Earth's history. A primary goal of Earthtime is to achieve the theoretical age precision of 0.1% reproducibility in multiple laboratories, and then apply these high-precision dating methods to previously unapproachable questions, such as the rates of evolution, the rates of recovery after mass extinction events, the timing and cyclicity of past climate change, calibration of the astronomical forcing of climate change, calibration of the magnetostratigraphic timescale, and determination of the temporal variations of the Earth's magnetic dynamo. Previous workshops focussed on calibration of U-Pb to Ar/Ar radiometric dating methods and intercalibration of U-Pb and Ar/Ar labs, to root out all interlaboratory bias and develop a network of linked geochronology labs capable of producing accurate, high-precision dates.

The 2006 workshop brought together 41 geochronologists, paleontologists, and stratigraphers from around the world to select a proof of concept geologic application and demonstrate the power of multiinstitutional and multi-disciplinary collaboration. The University of Wyoming U-Pb geochronology lab, headed by Chamberlain, is one of the founding members of the Earthtime laboratory network.

Research Professor **Kevin Chamberlain**, Professor **Ron Frost**, and Academic Professional Researcher **Mike Meredith**, organized and led two days of field trips during a recent GSA Penrose conference in Lander, Wyoming. The conference, entitled "When did plate tectonics begin on Earth," ran from June 13–19, 2006. The two field trips took place on June 15th and 17th and visited regions with evidence of some of the earliest (2.65 million years ago) plate tectonics processes in Wyoming, including South Pass in the southern Wind River Range, and the Tin Cup Mountain region of the western Granite Mountains. A total of 64 geoscientists, representing six continents and 15 countries, attended the conference. More than half of the conference attendees came from outside the United States.

Associate Professor **Mike Cheadle** was awarded an NSF grant of \$159,373 to study the Dufek

intrusion in Antarctica for three years. Cheadle and graduate student **Craig Grimes** will go to Antarctica with colleagues from Scripps Institution of Oceanography in early December for six weeks.

The Dufek Intrusion is arguably the second largest layered intrusion in the world. Cheadle and the team will be using the rocks to study how the Earth's magnetic field behaves during magnetic reversals and the magmatic construction and thermal history of the intrusion.

In August, Assistant Professor **Mark Clementz** attended the 5th International Conference on Applications of Stable Isotope Techniques to Ecological Studies in Belfast, Northern Ireland. The conferences purpose was to bring together researchers who use stable isotopes in ecological research and to discuss new ideas and techniques in this field.

Clementz also attended the Society of Vertebrate Paleontology Conference in Ottawa, Canada, from October 18–22.

The National Science Foundation Continental Dynamics Program recently funded a four-year interdisciplinary project led by Associate Professor **Ken Dueker** to study the origin of the high standing topography associated with the Colorado Rocky Mountains. The four-year project has eight principle investigators from five universities and two collaborators from Los Alamos National Lab. Dueker's research group will be responsible for deploying a network of 60 broadband seismometers within a 200-mile-wide box in the central Colorado Rockies. The seismic network will be mobilized in the summer of 2008 and demobilized in the fall of 2009.

Professor **Carol Frost** was elected secretary-treasurer of the State of Wyoming Board of Professional Geologists for 2006–2007. The members of the Board of Geologists board are appointed by the governor and are charged with overseeing the licensing of professional geologists and upholding the code of professional code of conduct.

Professor **Barbara John**, Associate Professor **Mike Cheadle**, and Ph.D. student **Craig Grimes** were invited to attend the IODP/JOI “Mission Moho” workshop in Portland, Oregon, in September. This workshop developed the scientific and operational framework for IODP’s 21st Century MoHole Initiative for a decade or more. The workshop resurrected the goals of the 1960’s Project MoHole, and identified the scientific and engineering objectives that can begin immediately with available technology in order to lead us toward the ultimate “MoHole,” a complete, *in situ* section through ocean crust and across the Moho into the Earth’s mantle.

As part of her American Association of Petroleum Geologists (AAPG) treasurer duties **Randi Martinsen**, Senior Lecturer, attended the Gulf Coast Association of Geological Societies Annual Meeting in Lafayette, Louisiana, and will be attending the 2006 AAPG International Conference and Exhibition in Perth, Australia, in November.

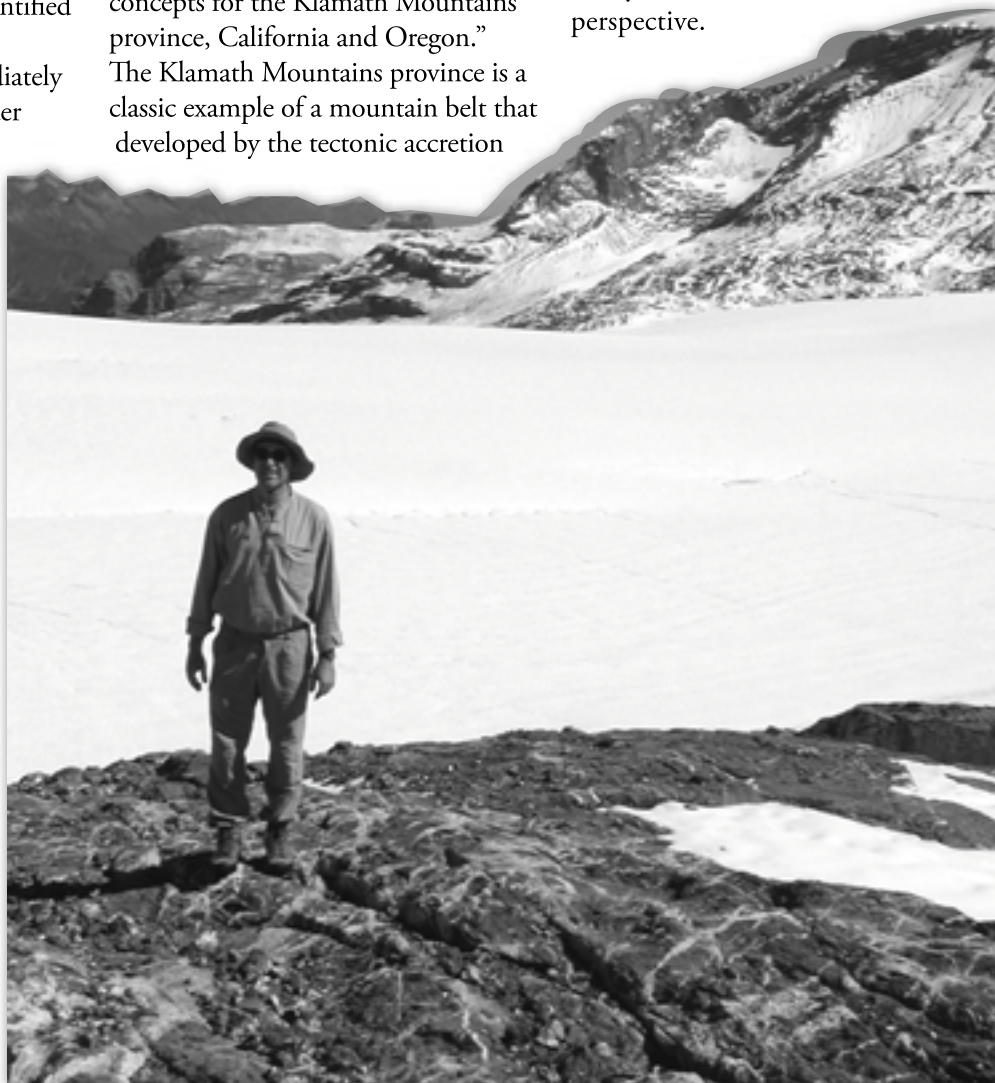
The Geological Society of America recently published *Special Paper 410*, co-edited by Professor

and Department Head **Art Snoke** and Dr. Calvin G. Barnes (Texas Tech University). The title of the book is: “Geological studies in the Klamath Mountains province, California and Oregon: A volume in honor of William P. Irwin.” Snoke is the author or coauthor of seven contributions to the volume, including the “Dedication.” Other UW authors and coauthors are Professor **Carol Frost**, Research Professor **Kevin Chamberlain**, Senior Research Scientist **Susan Swapp**, MS alumni Jonathan C. Bushey, and Rory R. McFadden. The book consists of 23 chapters plus a Dedication to William P. Irwin. The lead chapter of this major synthesis of Klamath Mountains geology is by Snoke and Barnes and titled: “The development of tectonic concepts for the Klamath Mountains province, California and Oregon.” The Klamath Mountains province is a classic example of a mountain belt that developed by the tectonic accretion

of rock assemblages of oceanic affinity during progressive crustal growth along an active continental margin.

### Professor Carrick Eggleston Returns From Sabbatical

Professor **Carrick Eggleston** returned to the Department after a sabbatical leave during the 2005–2006 academic year. During the leave, he was a visiting professor at the Swiss Federal Institute of Technology in Lausanne, working within the Institute for Chemical Sciences and Engineering on the use of a common mineral—hematite—as a photocatalyst in the production of hydrogen from sunlight. Eggleston was an oil field mudlogger in the early 1980s, and thus returns to the energy field with a very different scientific perspective.



**Right:** Professor Carrick Eggleston at Glacier de la Plaine Morte, at about 3,000 meters above sea level, in the Swiss Alps.



# FACULTY & DEPARTMENT NEWS

Eggleston was also a visiting professor at the Laboratory for the Physical Chemistry and Microbiology of the Environment, a CNRS (National Center for Scientific Research) lab in Nancy, France, associated with the Université Henri Poincaré, where he worked on electrochemical and spectroscopic approaches to the interaction of proteins with minerals.

During his sabbatical year, Eggleston wrote two successful proposals to the U.S. Department of Energy, one for \$407,000 that supports the development of a new kind of microscope called a “waveguide scanning photocurrent microscope” that will make use of his newfound knowledge on mineral semiconductors, and another for \$307,000 that supports continuing work on bacteria (and the extracellular proteins they synthesize) that have the ability to respire food using ferric minerals instead of oxygen. This process has important global geochemical cycling implications as well as important applications in environmental remediation processes.

## Department Head Art Snoke Appointed to NASA Planetary Science Subcommittee

**P**rofessor and Department Head **Art Snoke** has been appointed to the NASA Planetary Science Subcommittee (PSS), which is a committee that advises the NASA Advisory Council. The scope of the PSS includes all aspects of planetary science, scientific exploration of the Moon and Mars, the robotic exploration of the solar system, astrobiology, space- and ground-based research, technology development, planning, and training required to support these science areas. Snoke

has also been appointed the co-chairman of the Field Exploration Analysis Team, which will consist of a group of geoscientists who will be involved in geological field training of astronauts for the proposed return to the Moon.

## Department of Geology and Geophysics Provides Leadership for New UW School of Energy

**T**he Department of Geology and Geophysics is playing a pivotal role in launching the University of Wyoming School of Energy (SER). The SER was authorized by the Wyoming State Legislature during its 2006 session. Its three-part mission includes undergraduate and graduate education, focusing UW research on existing and emerging energy resources, and disseminating scientific, engineering, and economic information to support Wyoming’s near-term and long-term energy-related activities.

The enabling legislation also created a University of Wyoming Energy Resources Council to help guide the school in all of its mission components. At its initial meeting in August, the council authorized UW to hire an interim director for the school. Geology and Geophysics Professor and Associate Head **Carol Frost** was named interim director in September by UW Vice President for Academic Affairs Myron Allen.

Frost leads the search for a permanent director, who will be hired from industry, a national research laboratory, or academia. Geology and Geophysics faculty member **Paul Heller** also serves on the search committee for the director.

Searches also are underway for the school’s first four faculty members, with international expertise in applied mathematics, energy economics, geophysics, and coal conversion technology. Geology and Geophysics Associate Professor **Mike**

**Cheadle** heads the search for the distinguished professor of geophysics, and is joined on that search committee by Professors **Art Snoke, Carrick Eggleston, Steve Holbrook**, and Associate Professor **Ken Dueker**.

The SER represents an important opportunity for the Department

to enhance its expertise in energy-related research and to develop more interdisciplinary research with other experts at UW. “Wyoming is one of the most forward-looking states I can imagine,” says Frost. “The legislature established this school as a means for us to pull together all the expertise we have here at the University and add some great additional talent. This will enable us to better enhance our workforce by graduating students who are educated in energy resource issues and enabling us to do research that will help us to get better value from Wyoming’s natural resources.” ♦



Professor Carol Frost



Ph.D. candidate **Kay Achenbach** was invited to and attended the second international Meeting of Young Researchers in Earth Sciences (MYRES) meeting: "Dynamics of the Lithosphere" in July 2–6, 2006, in Verbania, a town on the shore of Lake Maggiore in northern Italy. For more information on the meeting visit [www.myres.org](http://www.myres.org).

Ph.D. candidate **Liz Hajek** was awarded the Norman H. Foster Memorial Scholarship from the Rocky Mountain Association of Geologists (RMGA) Foundation this past summer. The \$2,500 award, which is given to one master's and one doctoral student each year, will go toward school -and research-related expenses. At the recent RMAG annual awards luncheon, Hajek was able to meet Foster's wife and daughter. "It was really cool to meet Dr. Foster's family," Hajek explains, "they're not geologists, but have an appreciation for it, so it was fun to try to explain my research to them."

Hajek's Ph.D. project involves using fieldwork (in the Hanna Basin, Wyoming), experimental stratigraphy (from the St. Anthony Falls Lab, University of Minnesota), remote sensing, and 3-D seismic to characterize and understand avulsion clusters in alluvial basins. Through her research, Hajek is continuing to discover that avulsion clusters constitute important stratigraphic traps in many natural gas fields located in the Rocky Mountains, and thus understanding the processes that form them and how they're distributed in the subsurface has important implications for exploration and development.

More information on the award can be found at [www.rmag.org/foundation/index.asp?content\\_id=foster\\_award&content\\_name=foster\\_award](http://www.rmag.org/foundation/index.asp?content_id=foster_award&content_name=foster_award).

**Hajek** also received the AAPG Foundation Weimer Family Grant.

The \$2,000 award will help finance her Ph.D. research. In particular, the money will help cover travel costs from going back and forth to companies in Colorado and Texas, including EOG, Cabot, ConocoPhillips, Anadarko, and others. These companies are allowing Hajek to use their 3-D seismic data from Rocky Mountain basins to map channel clusters and collect information on cluster scale and distribution in the subsurface.

Masters candidate **Lars Hansen** was awarded one of three Geological Society of America Division of Structural Geology and Tectonics Student Research Award for 2006.

Over the summer, Ph.D. candidate **Heather Jones** received the SEPM-RMS Fluvial Sedimentology Award. The \$1,000 award was based on her written proposal for her dissertation work. The proposal was titled, "Characterization and Distribution of Avulsions in Ancient Alluvial Basins."

The Annual Rocky Mountain Field Trip, in part sponsored by ConocoPhillips, started at ~1 PM on Thursday, August 1st and ended at ~6 PM on Monday, September 4th. The trip was led by **Art Snoke** and **Ron Frost**, and focused on Precambrian and Phanerozoic rocks and structural features of south-central Wyoming. We started **Day I** by driving west to the Medicine Bow Mountains, where we began the trip in drizzling rain and tried to look at dark-colored, fine-grained mylonitic rocks of the Cheyenne belt near the Green Rock picnic area. Fortunately, the weather eventually improved, and we spent the rest of the day examining various units of the Paleoproterozoic Snowy Pass Supergroup that occur north of the Cheyenne belt, including several exposures of stromatolitic metadolomite of the Nash Fork Formation that S.H. "Doc" Knight studied in detail many years ago.

That night we camped in Headquarters Park near a historic cabin that had served as the post office at Ft. Steele. We awoke on **Day II** to much better weather, but also to a thin layer of ice on all our tents. We spent the morning looking at diamictites with large granitic gneiss clasts, laminated argillites, quartz-rich sandstones, etc., and vigorously debated the depositional environment of these interesting ancient rocks—they are some of the oldest glacial deposits on Earth!

Later that day we headed west to Saratoga Valley and enjoyed a relaxing "bath" at the Hobo Hot Springs. We then traveled north to Seminole State Park where we camped at South Red Hills. On **Day III**, we made several stops in the Seminole Mountains looking at Paleozoic and early Mesozoic sedimentary rocks and Laramide structural features. We continued our travels westward and stopped at Independence Rock along the Oregon Trail for both geologic and historic purposes. That night, we camped in beautiful isolation near Tin Cup Mountain in the Granite Mountains, north of Jeffrey City. **Day IV** consisted of a hike where we examined the diverse Archean rocks and structural features of the Tin Cup area.

From the Granite Mountains, we traveled to the southern Wind River Range where we camped at Grannier Meadows. After another nice night in the mountains of Wyoming, on **Day V** we explored the metasedimentary and metavolcanic rocks of the South Pass supracrustal belt near Atlantic City and environs. About mid-day on **Day V**, it was time to head to Laramie for a hot shower, dinner without standing in line, and definitely a good night's rest. We had seen a lot of Wyoming geology and in turn had seen a fascinating slice of the Earth's geologic history as manifested in the rock record. ❖

# Rocky Mountain RENEZVOUS of Geoscience Students & Employers

## Petroleum Industry Job Fair at UW Attracts Record Number of Students

A record number of students participated in the recent fifth annual Rocky Mountain Rendezvous of Geoscience Students and Employers at the University of Wyoming.

"We maintained our record-setting company attendance reached by last year's fair, and our student attendance was way up," says **Randi Martinsen**, Senior Lecturer and rendezvous coordinator. "Most of the students came from the Rocky Mountain Region, but many came from all across the country."

The Rocky Mountain Rendezvous at UW is one of four petroleum industry job fairs nationwide sponsored by the American Association of Petroleum Geologists (AAPG), with other locations in Houston, Norman, Okla., and a rotating location in the East. The fairs' format and central locations allow students from numerous geoscience programs to attend.

"With college recruiting, generally you go to one university and most of the students you interview are from that specific university. This is an opportunity for us to interview students from many universities

including some smaller schools," says Jason Lambert, a human resources representative for Hess Corporation.

Lambert notes that the AAPG-sponsored job fairs can present a more complete experience for both employers and employees than offered by traditional university job fairs.

"(The format) allows the students to give a little more detail about their work. For example, they can discuss their thesis using a poster presentation. It's a little different than your standard college recruiting

activity and that's why we like it," he says.

Last year the fair attracted twice as many companies as in previous years, surging from 12 to an unprecedented 24. Employer interest remained peaked for the 2006 fair, a trend Martinsen says likely will continue.

"A few companies that participated last year didn't have plans to hire so they

Poster WINNERS



**1<sup>st</sup> place:** (L) to (R). Steve Sonnenberg, Anadarko and past President AAPG, Dept. Head Art Snoke and Kristin Sturtevant, from the University at Buffalo, Buffalo, N.Y.



**2<sup>nd</sup> place:** (L) to (R). Sonnenberg, Snoke, and Sammy Reed Johnson, from West Virginia University, Morgantown, W.Va.



**3<sup>rd</sup> place:** (L) to (R). Sonnenberg, Snoke, and UW graduate student Clayton Painter.





R. Ragnar Rasmussen  
(Chevron), UW alumnus

UW grad student  
Heather Jones

UW Professor  
Mike Cheadle

UW grad student  
Josh Sigler

Anadarko reps with: (L) to  
(R) UW students Josh Sigler,  
Jennifer McHarge, and Charity  
Summers.

Dept. Head  
Art Snoke

UW grad student  
Xiangyang Xie

UW Professor  
Barbara John

UW grad student  
Liz Hajek

didn't participate, but they say they'll be back. Even so, we have several companies that have not previously participated, so overall industry sponsorship is still very high," she says, adding the companies are eager to recruit new talent. "The demographics of the petroleum industry are such that 60 percent of the industry's currently employees will be retired in the next five to 10 years."

At the Rendezvous, students presented posters to show their individual strengths. Cash awards of

\$600, \$400, and \$200 were awarded to first-, second- and third-place poster presenters as judged by the corporate recruiters.

Student winners were Kristin Sturtevant, first place; S. Reed Johnson, West Virginia University (Morgantown, W.Va.), second place; and **Clayton Painter**, UW, third place.

In addition, corporate sponsors funded six \$100 honorable mention awardees and \$50 for each of the other participants.

At the event, students also met with and provided resumes to top recruiters in the earth sciences, attended field trips and short courses

and socialized with recruiters and other students. Social events included a poster reception, dinner banquet, and luncheon awards ceremony. Recruiters also presented a round-table discussion of the petroleum industry and available careers.

"You know what the price of oil is doing. Demand from places like China and India is really driving it, and we don't have the oil supplies we need," Martinsen says. "The industry desperately needs to attract young people. These fairs are really important in connecting some of the best geoscience graduates with some of the best employers in the business."

"Our company has come here (to the Rocky Mountain Rendezvous at UW) in the past and we have had success. Certainly that's the reason we continue to come," Lambert says.

The event is sponsored by AAPG and its Rocky Mountain Section and endorsed by several other professional geoscience organizations. ♦



**D**r. **Thomas Ahlbrandt** (B.A. '69, Ph.D. '73) in May of 2006, received the Meritorious Service Award from the Department of Interior in recognition of contributions to the U.S. Geological Survey in the field of Eolian sedimentology, the energy program and petroleum geology. This past June, he also joined GSL Energy Corporation, located in Denver, Colorado, as their vice president of geology. He continues as vice chairman of the United Nations Committee on harmonization of energy reserve and resource terminology, and he also serves as chairman of the Committee On Resource Evaluation (CORE) of AAPG.

**D**r. **Timothy L. Clarey** (M.S. '84) has been named the 2006 Distinguished Graduate of Bay City Western High School, Michigan, for his achievements during a combined career as a petroleum geologist (Chevron) and college professor. Clarey, the past winner of the Delta College Excellence in Teaching Award, was recently promoted to full professor at Delta College's, Geosciences Department, University Center, Michigan. He has also served as president of the Delta College Senate.

**R**obert (Bob) **H. Colburn** (M.S. '89). After getting his masters in geophysics, Colburn "morphed" into a computer programmer, specializing in seismic applications—something he looks forward to every day. He married his wife Cathy, in 1996, and their daughter Sara was born in 1997. **B**everly **Blakeney DeJarnett** (B.S. honors '83) was named in an AAPG announcement as co-leader for one of the association's 2006 field seminars. The week-long event, featuring outcrops in SW Wyoming and NE Utah, is titled "Predicting clastic reservoirs using applied sequence Stratigraphy: Understanding

the fundamental drivers of basin fill architecture."

**B**ill **Fahmy** (M.S. '88) has been named the Society of Exploration Geophysicists Fall 2006 Distinguished Lecturer.

**P**hilip **Jenny** (B.A. '60) has donated a large oil painting of a Wyoming landscape to the department. The scene features prominent bluffs of colorful redbeds. Jenny hopes that surgery in April on both knees will be successful. He intends to return to Laramie in September for the 50<sup>th</sup> reunion of his high school class.

**D**on **Lawson** (B.S. '48, M.A. '49) long active in the American Association of Petroleum Geologists, is the recipient of the 2006 Life Membership Award from the Society's Division of Professional Affairs (DPA). The award is the highest presented by the DPA. Lawson also happened to serve as president of the DPA during the 1974–1976 term.

**A**aron **S. Otteman** (M.S. '03) After completing his M.S. in December 2003, Otteman and his fiancé Shari begrudgingly made the move to Houston, Texas, where he started work for ExxonMobil. He and Shari were married in July 2004, in Pinedale, Wyoming. In April 2006 (after two years, four months, and nine days of living in Houston), he accepted a position as chief geologist for a small independent oil and gas company called Black Diamond Energy, based in Buffalo, Wyoming. He and Shari moved to Buffalo, bought their first house in May, and are expecting their first child in October, 2006. Needless to say, they are both extremely happy to be back in Wyoming.

**D**r. **Robert Scott** (Ph.D. '67) is presently participating in an International Geological Correlation Project called "Cretaceous Oceanic Red Beds." He is also teaching part-time at Tulsa University in Oklahoma.

**L**esley (**Cunningham**) **Urasky** (B.S. '90, M.S. '93) is starting her second year teaching in Rawlins. She will be teaching Advanced Placement (AP) Biology and Biology 1. She is quietly waiting for the current department head to retire so she can teach the geology class!

**J**ack **Van Mark** (B.A. '58) checked in recently with a question about the Miocene horse fossils excavated long ago on his property near Torrington. Van Mark served as administrator of Rural Electric under President Ronald Reagan, but obviously retains his basic interest in Wyoming geology.

**R**alph **Patrick Vinton** (M.S. '76). Although Vinton worked for Tenneco Oil Co. from 1976–1977, he has worked most of his life as a self-employed cow-calf rancher. He remains very interested in geology, and has a brother who is his partner in ranching, and also a geologist and part owner of North American Exploration in Utah.

Vinton also says "hi" to his professor, **Scott Smithson**.

**W**e regret to inform that alumnus **Gene J. Wiloth**, (B.S. '51), passed away on May 12, 2006.

**A** group of University of Wyoming (UW) alumni, including two Department of Geology and Geophysics graduates, recently participated in a panel discussion with other UW students and faculty on behalf of the EnCana energy company. The panel discussion, led by **Adam VanHolland** (M.S. '05) and **Paul McKay** (B.S. '76), was meant to increase student interest in working for EnCana, as well as increase faculty awareness of the company. The panel discussion was the first part of a two-day event that took place on the 22nd and 23rd of September.

Other aspects of the event included a tour of current facilities in the College of Engineering building,





the preview of future improvements made possible by EnCana's grant to UW, and an executive reception hosted by UW President Tom Buchanan, meant to highlight the partnership between EnCana and UW. In addition, four graduate students from the Department of Geology and Geophysics acted as hosts for the EnCana representatives during their time in Laramie, and joined them for a tailgate party before taking in the UW Cowboys vs. Air Force Falcons football game.

## Alumnus Robert Weimer Receives 2006 Legendary Geoscientist Award

**Dr. Robert J. Weimer** (B.A. '48, M.A. '49) has been named the 2006 Legendary Geoscience Award recipient by the American Geological Institute, presented to honor his long history of scientific achievement and exceptional service to the geoscience profession.

Dr. Weimer was born in Glendo, Wyoming, in 1926. He was part of the U.S. Navy war effort and took training in the Air Corps and ROTC Engineering Program. He met Ruth Carol Adams and married her in 1948. He received both his B.A. (1948) and his M.A. (1949), majoring in geology, from the University of Wyoming. In 1953 he received his Ph.D. in geology from Stanford University.

Professor Weimer began his career with Union Oil in Utah in 1949 and became a consulting geologist in 1954, which he remains. In 1957 he joined the faculty of Colorado School of Mines and had positions ranging from assistant professor to department head to his present position as professor emeritus. His renown extends even further due to the many students he has influenced, who then went on to



Dr. Robert J. Weimer.

productive careers in petroleum and other industries, and because of his international lectures and courses.

Weimer's long and distinguished career includes many awards. Among them are Wyoming University's Distinguished Alumnus (1982), the SEPM Twenhofel Medal (1995), AAPG's Sidney Powers Medal (1983) and Distinguished Educator Award (1996), the Hollis D. Hedberg Award in Energy from the Institute for the Study of Earth and Man at Southern Methodist University (2001) and GSA's Sloss Award (2003). He is also an honorary member of both AAPG and SEPM.

He has also been actively involved in the geoscience community in a variety of ways. Societies he has served as officer for include the American Association of Petroleum Geologist, the Geological Society of America, the Rocky Mountain Association of Geologist, and the SEPM (Society for Sedimentary Geology). There are more than 200 publications that he is either an author or co-author for.

He is truly deserving of this honor for his more than 56 years of exceptional service to the

advancement of the geosciences, his legacy of knowledge that he freely communicates to students, and the many ways he has imparted his unique information to the petroleum industry.

The legendary Geoscientist Award, established in 1999, is given periodically to a geoscientist who has a long history of sustained scientific achievement and exceptional service to the geoscience profession. The award is presented by the American Geological Institute and its Foundation. ♦

*---Thanks to all of the alumni who filled out and returned the "Alumni News Form" that was included in last spring's PROfile newsletter. We would like to invite all of our alumni to please continue to send us updates on all of your activities. Please send any updates to our editor Brendon Orr at [editor@gg.uwyo.edu](mailto:editor@gg.uwyo.edu).*

## Coming up!

### AGU

2006 Fall Meeting  
December 11-15  
San Francisco, California  
[www.agu.org](http://www.agu.org)

### AMS

January 14-18, 2007  
H.B. Gonzalez Convention Center  
San Antonio, Texas  
[www.ametsoc.org](http://www.ametsoc.org)

### AAPG

April 1-4, 2007  
Long Beach, California  
[www.aapg.org](http://www.aapg.org)

### GSA

October 28-31, 2007  
Denver, Colorado  
[www.geosociety.org](http://www.geosociety.org)

# STUDENT PROFILE — XIANGYANG XIE

::: From the Mountains of China to the Mountains of Wyoming :::

*by Brendon Orr, Editor, Department of  
Geology & Geophysics*

**P**h.D. candidate Xiangyang Xie was born and raised in the town of Xinyuan, a small, mountain community in the northwestern province of Xinjiang, China. Ironically, the town of Xinyuan is not unlike Laramie, Wyoming in most respects.

“My hometown is very similar to Laramie,” explains Xie, “it was surrounded by mountains, and we got lots of snow in winter... I find it funny that I moved far away and ended up in a place that is nearly the same. The only difference is the wind, it is much more windy here than back in my hometown.”

After graduating high school, Xie decided to go out of town to start his college education. He bid his mother, father, and sisters farewell and left for the city of Lanzhou, China, where he earned his B.S.

in geology at Lanzhou University. Soon after, he relocated to the larger city of Xi'an, where he completed his M.S. in petroleum geology at Northwest University. Xie's entire educational experience

university in Xi'an. Xie took the job, and worked at the university for five years before ultimately deciding to pursue his Ph.D. However, he was initially unsure of how and where he would continue his studies. After sending several letters to various professors both in China and the United States, Xie contacted Professor Paul Heller, and after an exchange of e-mails, they agreed to meet in China in July of 2002. Heller happened to be involved with a field trip in the area, and after their discussion, he encouraged Xie to apply to the Department of Geology and Geophysics at the University of Wyoming.

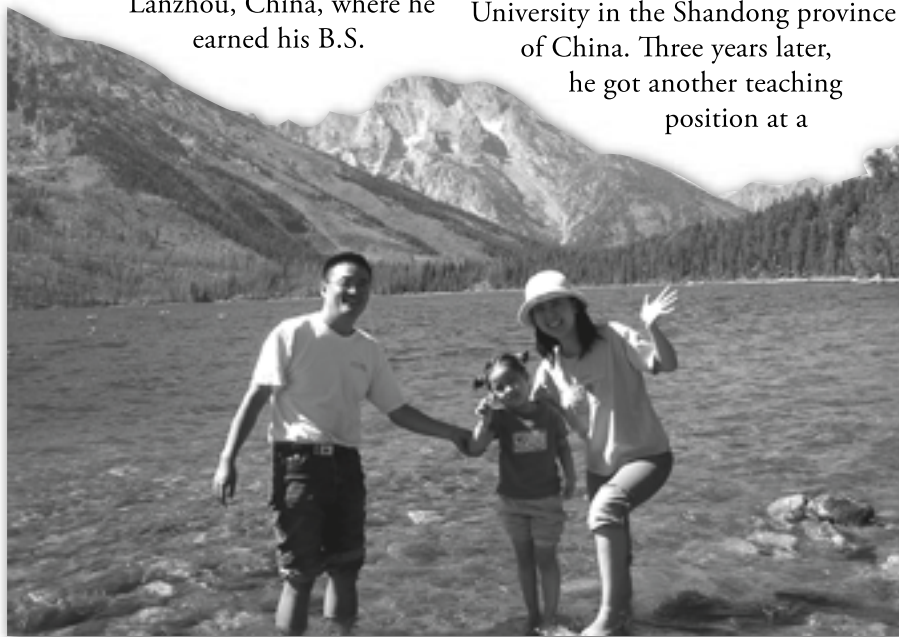
Although excited at the prospect of continuing his postgraduate education, Xie admits that he was somewhat anxious about both the cultural and geographical transitions he would have to go through, and the challenges that those transitions represented.

“English has been a very difficult language for me to learn, especially the speaking part of it,” says Xie. “I think I have been gradually learning to speak and write the language for more than 10 years now. Fortunately, my advisor and fellow graduate students have helped me pick up the language



represented the first time he had ever been to central China.

Upon completing his M.S. degree, Xie was offered a research position at China Petroleum University in the Shandong province of China. Three years later, he got another teaching position at a



**Above:** Xie on field trip to Bryce Canyon National Park, Utah.

**Left:** Xie (L), with his daughter Ziqian (M), and his wife Yixiao (R) at Grand Teton National Park.

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much better. And I am so glad I chose the University of Wyoming to pursue my degree, the department is so supportive of the students. All of the faculty, staff, and students are helpful and friendly.”

Oddly enough, learning English was not the paramount obstacle for Xie. To this day, he is still adjusting to American culinary tastes.

“Ugh, the food,” says Xie, “I remember when I first moved here, I just could not stand it... the smell was just terrible... there is too much oil in the food... and cheese is in everything. We have fast food in China, but it is seen more as a rare treat. Here in the U.S., people eat it all the time.”

Despite his initial aversion to typical American foods, Xie confesses his family has developed a soft

spot for pizza, hamburgers and spaghetti. “Sometime we even start to learn how to cook American food,” he says, “Actually some of them are pretty good when you get used to it.”

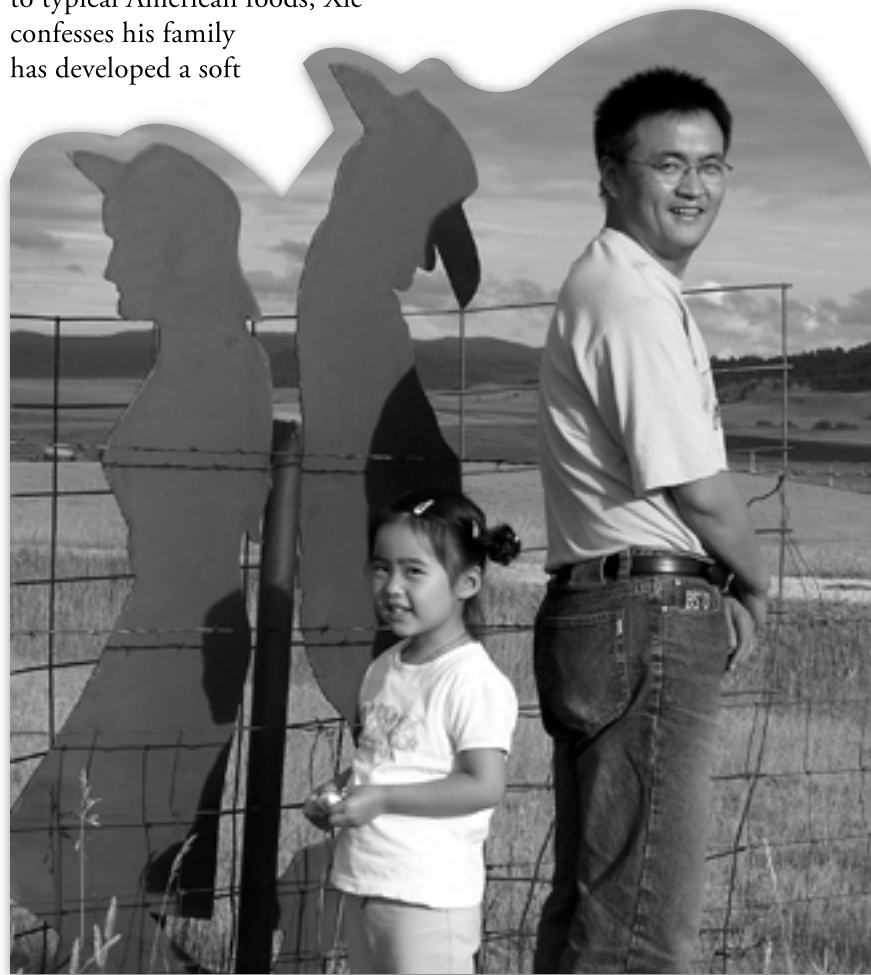
During the summers of 2004 and 2005, Xie had to travel back to China and spend ample time conducting research and collecting samples for his Ph.D. project, titled, “Intracontinental deformation and sedimentary response in Mesozoic Ordos Basin, P.R. China.” The goal of the project is to understand the range of mechanism by which intracontinental basins are formed, how different basin margin tectonic factors caused this area to subside over time, and to document the

intracontinental deformation and its sedimentary response using different sedimentary signatures in Ordos Basin, China. The project, supervised by Professor Paul Heller, and with assistance from Research Professor Kevin Chamberlain, involved 3D flexural modeling, subsidence history analysis, isotopic dating, lithofacies analysis, as well as provenance study.

This summer, Xie and 11 other students from countries such as Argentina, Canada, Italy, Poland, South America, South Korea, Sweden, and the United Kingdom, received grants from the International Association of Sedimentologists (IAS). The grants help to support postgraduates in their fieldwork, data acquisition analysis, and field excursions, and Xie hopes that the grant will help him meet his goal of completing his Ph.D. this December. He would then like to either land a postdoctoral position at a university or perhaps enter the oil industry and acquire additional experience.

In his spare time, Xie enjoys sports such as volleyball, badminton, table tennis, and hiking, as well as country music and reading. He especially enjoys spending time with his family and visiting friends from different parts of the world. ❖

*---If you are a student and would like to be featured in our PROfile newsletter, please contact our editor Brendon Orr at [editor@gg.uwyo.edu](mailto:editor@gg.uwyo.edu).*



*Modern cowboy and cowgirl, Xie (R) and his daughter, Ziqian (L) near Devils Tower.*





# PRofile

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Persons seeking admission, employment, or access to programs of the University of Wyoming shall be considered without regard to race, color, religion, sex, national origin, disability, age, veteran status, sexual orientation, or political belief.



Research Professor **Kevin Chamberlain**, Professor **Ron Frost**, and Academic Professional Researcher **Mike Meredith**, organized and led two days of field trips during a recent GSA Penrose conference in Lander, Wyoming. The conference, entitled "When did plate tectonics begin on Earth," ran from June 13–19, 2006. The two fieldtrips took place on June 15th and 17th and visited regions with evidence of some of the earliest (2.65 million years ago) plate tectonics processes in Wyoming, including South Pass in the southern Wind River Range, and the Tin Cup Mountain region of the western Granite Mountains. A total of 64 geoscientists, representing six continents and 15 countries, attended the conference. More than half of the conference attendees came from outside the United States.

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