

## From the Chair

Welcome alumni and friends to the 2005 edition of the *G-Hawker*. As Department Chair I would like to express my gratitude for your support of the Department of Geology. Working with so many loyal and supportive G-Hawks over the last year has been heartwarming, and it has been a great pleasure meeting so many of you at our various G-Hawk receptions. If you would like us to organize a G-Hawk reception in your city, please do not hesitate to contact me.

I continue to be impressed at just how successful the alumni of the Department of Geology truly are. You are our best good-will ambassadors, flying the flag of G-hawk excellence around the world. Over the last year, many of you were very generous with your time and funds, supporting the Department and its students financially and by providing advice and contacts. Your efforts are greatly appreciated by all of the faculty and students of the Department.

Since the last edition of the *G-Hawker*, much has happened in the University and in the Department. By next year, we should have a new Dean, a new Provost, and a new director of the Kansas Geological Survey. Interest in the Geosciences is very high right now. We teach more than 2000 KU students each semester and have many great undergraduate majors. We also have been fortunate to have our numbers of graduate students increase recently by 20-30%. The faculty and students are amazingly productive, publishing close to 60 peer-reviewed papers last year, hundreds of abstracts, and receiving many grants. Employment opportunities for our students are really heating up as well. It is a good thing that we recently have increased our numbers of students, because we have just doubled the number of companies interviewing students in our Department, and they are competing actively to hire large numbers of G-hawks. It certainly feels wonderful to have so many recruiters compliment us on the quality of our students and the depth and breadth of their education.

In addition to growing the numbers of students, the size of the faculty has increased recently, and looks like it will continue to do so at an unprecedented rate. Just this year, we hired two new faculty members. Mike Taylor integrates geomorphology, structural geology and tectonics. Mike complements our already strong tectonics group. David Fowle studies microbial ecology in the context of geologically important systems. Dave builds onto a new area of geobiology, which complements our programs in paleontology, sedimentary geology, and hydrogeology. We currently are searching for six more faculty members to add to the Department: three half-time faculty who will integrate the KGS and Department more thoroughly; a distinguished professor in sequence stratigraphy; a distinguished professor in invertebrate paleontology; and an assistant professor in paleobiogeochemistry.

With such growth and success in the Department of Geology come major challenges. Under the leadership of Scott Adams, the Geology Associates Advisory Board has added 14 new members to help us make this transition to a larger department and to have increased impact on students and on the Geosciences. In the last meeting of the Board there was plenty of excitement about the future. The Board has identified that its most important challenges are helping the Department accommodate a larger faculty with more space needs, increased field course offerings, increased usage of technology, and larger numbers of students. As a temporary measure to deal with this growth, the Department will be spread out in four widely dispersed buildings as of next year. I am very optimistic that, with your help, we will meet these challenges head on and move the Department and all its current and future G-Hawks into a new level of success and influence in our field.

Bob Goldstein, Chair



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*Bob Goldstein as Lawrence of Lawrence co-leading an AAPG field trip to Spain with Evan Franseen. See Collaborations article, p. 13.*



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## Faculty and Staff: Academic Year 2005-2006

### FACULTY

- ROSS A. BLACK**, Associate Professor; Ph.D., University of Wyoming, 1990; geophysics, reflection seismology.
- J. F. DEVLIN**, Associate Professor; Ph.D., University of Waterloo, 1994; hydrogeology/contaminant transport.
- ROBERT H. GOLDSTEIN**, Merrill W. Haas Professor and Chair; Ph.D., University of Wisconsin, 1986; sequence stratigraphy, diagenesis, fluid inclusion studies of carbonates.
- LUIS GONZÁLEZ**, Associate Professor; Ph.D., University of Michigan, 1989; stable isotopes, carbonate geochemistry, and diagenesis, paleoclimate.
- STEPHEN T. HASIOTIS**, Associate Professor; Ph.D., University of Colorado at Boulder, 1997; paleontology, ichnology, sequence stratigraphy, terrestrial paleoecology.
- ROGER L. KAESLER**, Professor of Geology, Director and Senior Curator, Museum of Invertebrate Paleontology, and Director, Paleontological Institute; Ph.D., University of Kansas, 1965; micropaleontology, paleoecology, quantitative morphologic studies.
- DIANE KAMOLA**, Associate Professor; Ph.D., University of Georgia, 1989; sequence stratigraphy, basin analysis, clastic sedimentology.
- BRUCE S. LIEBERMAN**, Associate Professor; Ph.D., Columbia University, 1994; paleontology, Cambrian radiation.
- GWENDOLYN L. MACPHERSON**, Associate Professor; Ph.D., University of Texas at Austin, 1989; hydrogeology.
- ELIZABETH McCLELLAN**, Associate Professor; Ph.D., University of Tennessee-Knoxville, 1993; igneous and metamorphic petrology, structural geology.
- CARL D. McELWEE**, Professor; Ph.D., University of Kansas, 1971; physical hydrogeology, geophysics.
- JENNIFER ROBERTS**, Assistant Professor; Ph.D., The University of Texas at Austin, 2000; microbial hydrogeology.
- DON W. STEEPLES**, McGee Distinguished Professor and Vice Provost; Ph.D., Stanford University, 1975; shallow seismic reflection, crustal analyses, and microearthquake recording.
- DANIEL STOCKLI**, Assistant Professor; Ph.D., Stanford University, 1999; thermochronology, structural geology.
- MIKE TAYLOR**, Assistant Professor; Ph.D., University of California, Los Angeles, 2004; neotectonics and continental deformation.
- GEORGE TSOFLIAS**, Assistant Professor; Ph.D., The University of Texas at Austin, 1999; geophysics, hydrogeophysics, ground-penetrating radar.
- WILLIAM R. VAN SCHMUS**, Union Pacific Resources Professor; Ph.D., University of California at Los Angeles, 1964; geochemistry, meteorites, geochronology.
- J. DOUGLAS WALKER**, Professor; Ph.D., Massachusetts Institute of Technology, 1985; structural geology, geochronology, tectonics.
- ANTHONY W. WALTON**, Associate Professor; Ph.D., University of Texas at Austin, 1972; sedimentology of siliciclastic and volcaniclastic rocks.

### MUSEUM OF INVERTEBRATE PALEONTOLOGY

- JILL KREBS**, Collection Manager; B.A., English, University of Kansas, 1968.

### EMERITUS FACULTY

- ERNEST E. ANGINO**, Emeritus Professor; Ph.D., University of Kansas, 1961; geochemistry.
- LOUIS F. DELLWIG**, Emeritus Professor; Ph.D., University of Michigan, 1954; structural geology, geology of evaporites.
- WAKEFIELD DORT, Jr.**, Emeritus Professor; Ph.D., Stanford University, 1955; geomorphology, Pleistocene geology, archaeological geology.
- PAUL ENOS**, Emeritus Distinguished Professor; Ph.D., Yale University, 1965; carbonate geology.

- WILLIAM W. HAMBLETON**, Emeritus Professor; Former Director – KGS; Ph.D., University of Kansas, 1951.
- WILLIAM MERRILL**, Emeritus Professor; Ph.D., Ohio State University, 1950; sedimentology, stratigraphy.
- RICHARD A. ROBISON**, Emeritus Professor; Ph.D., University of Texas at Austin, 1962; paleontology.
- ALBERT J. ROWELL**, Emeritus Professor, Senior Curator, Museum of Invertebrate Paleontology; Ph.D., Leeds, 1953; quantitative methods in geology. Paleontology, Antarctic geology.

### PALEONTOLOGICAL INSTITUTE

- MIKE CORMACK**, Information Specialist; Ph.D., Philosophy, University of Kansas, 1999.
- JILL M. HARDESTY**, Assistant Editor; B.A., French; B.S., Secondary Education, University of Kansas, 1988; M.A., Art History, University of Kansas, 1992.
- JANE L. KERN**, Assistant Editor; M.S., Music, Boston University, 1966.
- JILL W. KREBS**, Assistant Editor; B.A., English, University of Kansas, 1968.
- DENISE MAYSE**, Office Manager; B.S., Business Administration, Mars Hill College, 1980.

### SUPPORT NUCLEUS

- TODD BOWERS**, Programmer, 2003-present.
- STEPHANIE BRICHAU**, Post-Doctoral Associate in Tectonics, 2004-present.
- JENNA COKER**, Office Manager, 2001-present.
- YOLANDA DAVIS**, Student Affairs Manager, 1998-present.
- ELIZABETH K. GRAVATT**, Administrative Assistant, 1998-present.
- SALLY HAYDEN**, Research Assistant, 2004-present.
- JONATHAN HENDRICKS**, Post-Doctoral Associate in Paleontology, 2005.
- BRENA MAUCK**, Post-Doctoral Associate in Microbial Ecology, 2003-present.
- RACHEL MOORE**, Post-Doctorate Associate in Paleontology, 2005.
- LINDA PADDOCK**, Laboratory Technician, 2005.
- IAN J. ROWELL**, Information Specialist, 1981-present.
- LISA D. STOCKLI**, Laboratory Manager, 2001-present.
- GWETHALYN WILLIAMS**, Front Office Assistant, 2002-present.
- LINDA PADDOCK**, Laboratory Technician, 2005.

### COURTESY & ADJUNCT FACULTY

- JAMES M. BUTLER**, Senior Scientist, KGS.
- TIMOTHY R. CARR**, Senior Scientist, KGS.
- JOHN H. DOVETON**, Senior Scientist, KGS.
- GISELA M. DRESCHHOFF**, Principal Investigator.
- EVAN K. FRANSEEN**, Senior Scientist, KGS.
- LEE C. GERHARD**, Principal Geologist, KGS.
- JOHN GOSSE**, Associate Professor, Dalhousie University.
- JOHN W. HARBAUGH**, Professor Emeritus, Stanford University.
- LEONARD KRISHTALKA**, Director, Natural History Museum & Biodiversity Res. Ctr.; Professor, Ecology & Evol. Biology.
- ROLFE MANDEL**, Senior Scientist, KGS.
- LARRY D. MARTIN**, Professor, Ecology & Evolutionary Biology; Sr. Curator, Natural History Museum & Biodiversity Res. Ctr.
- MICHAEL T. MEYER**, Hydrologist, USGS.
- RICHARD MILLER**, Associate Scientist, KGS.
- KIRSTEN P. NICOLAYSEN**, Assistant Professor, Kansas State University.
- SUSAN E. NISSEN**, Assistant Scientist, KGS.
- MARIOS A. SOPHOCLEOUS**, Senior Scientist, KGS.
- EDITH TAYLOR**, Professor, Ecology & Evolutionary Biology; Curator, Natural History Museum & Biodiversity Res. Ctr.
- THOMAS N. TAYLOR**, Distinguished Professor, Ecology & Evolutionary Biology; Curator, Natural History Museum and Biodiversity Res. Center.
- W. LYNN WATNEY**, Senior Scientist, KGS.
- DONALD O. WHITTEMORE**, Senior Scientist, KGS.

## Opening the Gateway for Minorities to Pursue Careers in the Geosciences

KU Department of Geology faculty members have embarked on a program to encourage strong Latino students to pursue careers in the Geosciences. This program, initiated by Luis González and Bob Goldstein (Professors in the KU Department of Geology) targets undergraduate students of the University of Puerto Rico at Mayagüez, Puerto Rico's only geology program. It has been funded partially thanks to efforts by ExxonMobil representatives Lawrence Walker, Bob Stewart, and Carlos Dengo, and now has been expanded to include the University of Arizona.

You might ask, why would our Department, which has been very successful in recruiting excellent graduate students, embark on such an endeavor? The answer lies in the nature of our field and our Department's long-term goals. In the United States, Hispanics and African Americans make up 25 percent of the population but only 5 percent of the geoscience degrees granted in this country (AGI). It is clear that our field does not adequately include a large segment of the population, and that, there are large numbers of excellent students just waiting to be turned on to the geosciences. Thus, we have started this diversity initiative, not only because it is the right thing to do, but also because it is an opportunity to recruit some of the nation's best students into our program and into the geosciences.

Undertaking such an initiative might seem like a daunting task without a focused target of opportunity. One target exists at the University of Puerto Rico at Mayagüez (UPRM). Faculty at Mayagüez have been active in a well-funded K-12 outreach program that has a direct impact on over 3,000 students yearly. This



*Attendees of joint field seminar to Puerto Rico in Cueva Lirio, Isla de Mona, Puerto Rico.*

has led to one of the largest undergraduate geoscience programs in the United States, and that program is nearly 100 percent Latino. These students get excellent educations from talented faculty, but many lack the opportunity or motivation to pursue graduate degrees and employment on the mainland. Quite frankly, the program at UPRM is the best target of opportunity in the United States for encouraging talented Latino undergraduate students to advance in our field.

In this initiative, the KU Department of Geology is trying to break down barriers to career development for a large number of students, to train strong Latino students at the advanced level, and to provide excellent students ready for employment. To make it all happen, KU faculty have embarked on a number of activities aimed at making this initiative work and have planned many others for the future.

The first activities were aimed at acclimating and educating the UPRM students. In January, Bob Goldstein and Luis González traveled to Puerto Rico to kick off the initiative. They co-taught a course on carbonate diagenesis for an excellent group of UPRM students and met with UPRM faculty, the Dean of

## Department News

Sciences from University of Arizona, and representatives from ExxonMobil. The trip ended with a great party at one of the UPRM professor's beach house, where UPRM students and KU faculty really got to know one another.

In May, Luis González of KU, and Hernan Santos and Wilson Ramirez of UPRM co-led an excellent adventure (field trip) for KU and UPRM students. This could have been an expensive endeavor for KU students, but support from ExxonMobil made it quite inexpensive. Such experiences promote advanced education, but also a sense of camaraderie with new peers to de-emphasize cultural differences. The field trip concentrated on the geology of Puerto Rico and Mona Island. It gave students an excellent learning opportunity, but also provided an opportunity for KU and UPRM students to live together, work, and interact over a period of a week. KU and UPRM students came back enthusiastic and full of stories. If you want to hear a good one, try the one about the thirteen-mile hike on Mona Island, the poisonous trees, the fish and lobsters caught fresh off the boat, or the human-sized mosquitoes.

In July, Bob Goldstein, Luis González, and KU student Stacy Rosner traveled to San Juan to present research talks and to meet with UPRM students and faculty at the Caribbean Geological Congress. All UPRM students do undergraduate thesis projects and most were presenting at this international meeting. This event provided a great opportunity for Luis and Bob to recruit students, for the students to see the high quality of KU research, and to continue social interactions and cultural cross-pollination. About 300 attended the Congress, and our diversity initiative was a big hit. Luis and Bob were interviewed by Puerto Rican television and a piece about the initiative aired soon after the Congress.

Upcoming events are more invited talks and short courses taught at UPRM by KU faculty George Tsoflias and Steve Hasiotis, and a joint field trip to New Mexico and West Texas. If funding levels will allow, we intend to continue similar activities and to take the next steps in the initiative.

We have pretty lofty future goals for expansion of this initiative, and if we accomplish just a small portion of them, we will have made quite an impact. In the future, we intend to ease potential graduate students

from UPRM into the environment on the mainland through short research internships with KU faculty. These 1- to 3-week research internships will be offered to UPRM students on a competitive basis. Direct assistance for UPRM students at UPRM is also planned. Funding of additional education and advising for UPRM students will make them more successful in applying to and succeeding in graduate school. If we are able to identify enough funding, that graduate school will be KU. We hope eventually to be able to fund at least one new UPRM student per year as a research assistant in the M.S. or Ph.D. program at KU. The research assistantship will go to the most exceptional student acceptable to the KU program from UPRM each year, ensuring that at least one gifted UPRM student may continue on to advanced studies each year. Other excellent UPRM students competing for the assistantships are likely to be admitted with other forms of support from KU. There have even been discussions on sharing our weekly colloquium series with UPRM through Internet video conferencing capabilities. Bob Goldstein is working to identify funds to equip a lecture room in Lindley Hall to do just that, making the connection between the two programs relatively seamless and regular.

Although it has only just begun, the Department of Geology's diversity initiative has taken some major steps forward and appears to be making an impact. It will take time and resources, but for our Department and our field, it appears to be right on target.



*KU Ph.D. student Vionette DeChoudens (left), alumna of the University of Puerto Rico at Mayagüez with Hernan Santos, current professor at the University of Puerto Rico at Mayagüez. Photo taken at G-Hawk reception at GSA in Salt Lake City.*

## What's New with Faculty

### Ross Black

#### Associate Professor of Geology

The highlight of my year was the Ph.D. dissertation defense of Brian Macy. Brian's work on anisotropic imaging in VTI media is by far the most sophisticated work done thus far by a student in the Geophysics Group. Brian was registered for close to a million years as a graduate student at KU. As many of you know, Brian and I cut a deal with Phillips in about 1996, allowing him to use their supercomputing capabilities for his dissertation research, which they also supported monetarily. This morphed into him having an office in Bartlesville with their imaging group, and by 2001, he had already been named Outstanding Young Scientist for Phillips worldwide. At any rate, his work on developing migration and velocity model building tools that allowed a seamless geological, geophysical, and engineering model to move through the entire E&P workflow impressed me the most. However, his tools and techniques to estimate real-world anisotropy parameters within that environment were probably just as important scientifically.

### Rick Devlin

#### Associate Professor of Geology

This past year, two undergraduates working under my supervision completed their honors theses with distinction. Natalie Burris completed a study comparing laboratory mixing methods for the study of reaction kinetics of groundwater pollutants on iron. In addition to producing the thesis, she presented the work at the G-Hawker Symposium last fall, at the SACNAS national conference in Austin, Texas last October, and co-authored a journal article for the *Journal of Environmental Engineering*. Natalie began her graduate work at New Mexico Tech this fall.

Melissa Marietta completed a study evaluating a method of distinguishing sorption from reaction in pollutant transformations on iron. Her work was presented in poster form at the GQ2004 International Water Quality Conference in the summer of 2004, as a podium presentation at the G-Hawker Symposium last fall, and at the national ACS meeting in San Diego last March. Melissa's work also earned her the student paper award from the Omaha/Kansas City chapter of the AEG. Melissa is currently in Costa Rica on a study abroad program, but she will return to KU in the spring to complete the courses for her B.Sc. She is considering remaining at KU for graduate studies.

One of my Master's students, Michelle Dambacher, has also completed her work and submitted her thesis to her committee for review. Although the committee has yet to

express its opinion, I believe that Michelle did an extraordinary job generating managing and interpreting a large data set, all within the two years of her degree. Along the way, she introduced some novel experimental techniques to study the longevity of reactive barriers for groundwater remediation. Her study examined the effects of water composition on granular iron permeability and reactivity. The experiments were conducted under conditions that permitted unprecedented control on the measured parameters without constraining flow to a single pathway. Michelle presented her work at the G-Hawker symposium last fall, in poster form at the GSA last November, and as a podium presentation at the AGWSE meeting in San Antonio in April. She has a job waiting for her with a well-known consulting firm in California, beginning at the end of October this year.

I enjoyed working with Natalie, Melissa and Michelle immensely and am sad to see them leave. They, on the other hand, seem quite glad to be finished. I hope it isn't something I said. Meanwhile, work continues for Meagan Davidson (B.Sc. student), Kathy Baker (M.Sc. student), Brett Engard (M.Sc. student shared with Carl McElwee), Mike McGlashan (George Tsoflias' student but an important collaborator on a project we are sharing) Peter Schillig (new M.Sc. student) and Bei Huang (Ph.D. Student) as they grapple with problems ranging from reactions with iron to assessing aquifer heterogeneity and groundwater velocity variations.

This past year also saw Bob Goldstein bravely appoint me as the chair of the graduate admissions committee, where I served with Luis González, Dan Stockli, and Steve Hasiotis. Building on a system begun when I served on the committee with Doug Walker, we developed a methodology to assist in the ranking of incoming graduate students. The faculty approved the system, which seems to work quite well. I give credit to the new system, but much of that credit also belongs with Yolanda Davis, who adapted to the changes with her characteristic smile, and had a lot to do with the success.

NSF has been generous over the past year. In addition to an REU to fund Melissa's work, and the ongoing CAREER award I receive, they awarded me a generous supplemental grant to extend the permeability vs. reactivity investigations beyond granular iron systems and into biological systems. This award will fund Peter Schillig and Mike McGlashan as they undertake a geophysical/hydrogeological assessment of flow changes in a bioremediating petroleum plume. This project affords a rare and long-awaited opportunity for George Tsoflias, Jennifer

Roberts and me to work together. The first publications from this work will be realized this fall with presentations by Mike, Peter, George and I at the 50th Annual Midwest Groundwater Conference in Urbana, Illinois, the AIH/AEG annual meeting in Topeka and the AGU in San Francisco.

Two other good news items bear mentioning. After four years and untold department dollars my green card arrived. I've tried it and it works; I was not stopped at the border the last two times I crossed. Also, as of July, I am tenured at KU. It was wonderful to receive the news and doubly so because Steve Hasiotis was awarded tenure at the same time. We celebrated together at a party last spring.

### **Robert H. Goldstein**

#### **Merrill W. Haas Professor and Department Chair**

The past year has been one of the busier of my 20 years at KU. Taking on the role of Department Chair, while still teaching and doing research, has kept me hopping, but overall, it has been a highly stimulating and enjoyable year. I can honestly say that at the end of each day as Department Chair, I typically feel like I have accomplished something that will help the faculty, students, or Department as a whole, and that feeling has been quite rewarding.

The research I am doing with Evan Franseen on stratigraphy of carbonates during icehouse times has yielded some important results recently. Juli Emry's thesis on the Pennsylvanian of eastern Kansas is yielding a new understanding of the build-and-fill model for sequence architecture. Chris Johnson's thesis work was published in *Sedimentology* this year with an important paper on the 3D controls on deepwater carbonates. Evan and I continue to go to Spain each year, doing more fieldwork and leading a field seminar for AAPG.

Research on predicting the porosity evolution of carbonate rocks also has been a highpoint this year. Ph.D. student Anita Csoma and I published our ideas on linking diagenesis and sequence stratigraphy in a paper on *Diagenetic Salinity Cycles*, which we believe should make quite an impact. Govert Buijs completed his Ph.D. work and came up with important results on how porosity evolves in extensive shelf carbonates and in settings underlying evaporites.

It has been an eventful, stimulating, and rewarding year. I may look a little bleary-eyed if you see me, but it does not mean I am not having fun!

### **Luis A. González**

#### **Associate Professor of Geology**

The last year was a very busy and productive one. My students, colleagues, and I presented papers at the Geological Society of America meeting in Denver and the American Geophysical Union meeting in San Francisco. In

January Bob Goldstein and I taught a short course in diagenesis and fluid inclusions at the University of Puerto Rico at Mayagüez. In the summer, master's student Stacy Rosner, Bob Goldstein, and I presented papers at the 17<sup>th</sup> Caribbean Geological Conference held in San Juan Puerto Rico.

In May, I led a regional field geology class to Puerto Rico with the main focus on carbonate deposits ranging in age from modern reefs to late Cretaceous rudist buildups. We also took time to look at the tectonics and volcanic activity of the northeastern Caribbean and examined late Cretaceous to Eocene plutonic and volcanic deposits and extensive turbidites now exposed in central Puerto Rico. The class also served as part of our ExxonMobil-funded initiative to increase the number of Latino students pursuing graduate degrees in geosciences (see story page 3). Several undergraduate students and faculty from the University of Puerto Rico at Mayagüez joined us during the trip. Thanks to the ExxonMobil contribution the trip could be offered at no cost to KU and UPR students.

Remodeling in my Nichols Hall laboratory was completed in January and installation of the first mass spectrometer was initiated in January. In July, I took delivery of the second mass spectrometry system that was installed in early August. As of the date of this report, the W. M. Keck Paleoenvironmental and Environmental Stable Isotope Laboratory is functional, and students and colleagues are generating stable isotope data in-house.

Once laboratory remodeling was complete, my students finally were able to resume research activities. Vionette DeChoudens (Ph.D.) is making excellent progress in her experimental work on aragonite-calcite precipitation. Mike Bruemmer (Ph.D.) is working on the chemostratigraphy of three Pennsylvanian cyclothems in transects and recently generated the first data ever on the carbon and nitrogen isotopic composition of the organic matter in Pennsylvanian cyclothems. Stacy Rosner (M.S.) has completed radiometric dating of Venezuelan stalagmites and is now generating high-resolution carbon and oxygen isotopic series on the stalagmites. Aisha Al-Suwaidi (M.S.) and Emily Tremain (M.S.) are both working on different approaches to the paleoenvironmental and paleoclimatic reconstructions of the Albian Cedar Mountain Formation in central Utah. Aisha is conducting detailed analysis of paleosols and high-resolution chemostratigraphy of the Ruby Ranch Member, while Emily is using the phosphate oxygen isotopes of vertebrate fossil assemblages to reconstruct the details of the paleohydrology in parts of the Mussentuchit Member. This Fall (05) Marina Suarez (Ph.D.) and Celina Suarez (Ph.D.) joined our Cretaceous research group; both will be using various geochemical techniques applied to the paleoenvironmental reconstruction of the youngest members of the Cedar Mountain Formation in central Utah.

## **Stephen T. Hasiotis**

### **Associate Professor of Geology**

I had a very busy 2004-2005 academic year, and a successful research summer of 2005. This academic year (2005-2006) is also shaping up to be eventful. I was promoted with tenure this past spring to Associate Professor. I thank my colleagues and the University of Kansas for giving me a chance to be part of one the best geology departments in the country. I was also very fortunate and honored to win the coveted van Sant Geology Excellence Award from the Department, awarded to me at the Spring Banquet. Thank you very much Jan and Mary van Sant for creating this award.

Three of my students graduated last spring: Daniel Hembree (Ph.D.), Brian Platt (M.S.), and Debra Jennings (M.S.). I am very proud of them, as they were a very productive group. Together, we produced 12 manuscripts from their theses and dissertation, of which nearly all have been submitted. Two have already been accepted for publication in *PALAIOS* and *JSR*. Daniel went on to do a post-doc at Ohio University, Brian Platt has stayed on to do a Ph.D. with me as a newly chosen Self Fellow, and Debra has gone to Baylor to do a Ph.D. with Steve Driese.

I presented several papers at the Geological Society of America National Meeting in Denver, American Association of Petroleum Geologists Meeting in Calgary, the International Meeting of Fossil Insects, Arthropods and Amber in Pretoria, South Africa, and co-led a field workshop on fluvial-lacustrine systems in the Simpson Desert, Australia. This fall (2005), my students are presenting at the upcoming annual meeting for GSA (Salt Lake City).

I co-taught field camp with Dr. Roger Kaesler in the summer of 2005 to learn the ropes for the summer of 2006. Roger has put together such a smooth-running and knowledgeable three weeks at field camp that I will have to fill some very large shoes when he retires! We roasted Roger at the Field Camp Reunion for our alumni at the camp itself. I led a field trip to the outcrop of the Upper Jurassic Morrison Formation to discover the traces of life preserved in the fluvial-lacustrine.

In the summer of 2005 I did field work with Mary Kraus (University of Colorado, Boulder) in the Lower Eocene Willwood Formation in the Bighorn Basin. We have found new and interesting trace fossils that show that soil biota play a major role in soil formation and relate important information about soil moisture not preserved by the other soil features. I also worked at the University of Kansas Ecological Research Station, just east of Lawrence, on trace-making soil biota. My most exciting research this summer was working with modern trace-making biota and their traces in sedimentary successions of Lake Eyre in the Simpson Desert, Northern Territory, Australia. This research was

conducted in conjunction with the field workshop on fluvial-lacustrine environments in the Simpson Desert run through the Australian School of Petroleum at the University of Adelaide, headed up by Dr. Simon Lang. We documented many preliminary associations between organisms, their traces, the spatial and temporal distribution of soil moisture and water, sedimentology, and the landscape.

During the spring 2005 and fall 2005 semester I presented colloquia at Colby College, Louisiana State University, Iowa State University, University of South Carolina, and the University of Minnesota Duluth. I gave short courses at Louisiana State University, the University of South Carolina, and ExxonMobil Exploration Company in Houston, Texas.

## **Roger L. Kaesler**

### **Professor of Geology, Curator of the Natural History Museum, and Director of KU's Paleontological Institute**

This has been a very exciting year. I have continued teaching Prehistoric Life, Paleontology, and Introductory Field Geology. The summer of 2005 was my last summer at field camp, and I shall miss it a lot. In the future, the first course at camp will be in the very able hands of Steve Hasiotis, who has already spent two summers there working with the students and me.

Except for the type specimens, the museum collection of invertebrate fossils has been moved out of Lindley Hall and into much better and more spacious facilities in the building on West Campus formerly occupied by the KU Printing Service. Several other collections of the Natural History Museum will be moved to the printing-service building, too.

The Paleontological Institute staff has been very busy. We published the second volume of the revision of the sponge *Treatise*, which at 872 pages plus front matter is the largest *Treatise* volume ever produced. We also published a slim volume on the charophytes, and by the end of the summer or shortly thereafter we expect to submit to the printer the fifth, penultimate volume on the brachiopods.

I have had three magisterial students finish their work in the past year or so. Kristen Myshrrall worked on brachiopods from the Coal Creek Limestone Member and made some interesting discoveries about the effects of influx of terrigenous mud. Jennifer Castle studied taxonomy, biodiversity, and ecology of freshwater ostracodes from the Baker Wetlands just south of town—possibly an endangered site because of plans to extend the Southwest Lawrence Trafficway through it. Julie Retrum completed her work on taxonomy and paleoecology of Permian freshwater ostracodes from the Speiser Shale. Her work was made difficult by the fact that Permian freshwater ostracodes are the most beanlike creatures on earth—except perhaps for the

beans themselves—being almost entirely without diagnostic features. Julie is staying on for doctoral work and is studying several aspects of Pleistocene freshwater ostracodes from Fossil Lake, Oregon.

I received my 40-year pin from the University in May, 2005, and plan to retire in mid-August 2006.

## **Bruce Lieberman**

### **Associate Professor of Geology**

This fall I was on sabbatical at Yale University where I was a visiting professor, Department of Geology and Geophysics, Yale University and a visiting curator, Division of Invertebrate Paleontology, Peabody Museum of Natural History. Funds were provided by the Yale Institute for Biospheric Studies and the Yale Peabody Museum. It was a productive sabbatical, but it's great to be back at KU. Joining me shortly after my return was a new postdoctoral fellow Rachel Moore, who received her Ph.D. from the University of Bristol (U.K.). She is a highly qualified paleobiologist and the worldwide expert on the study of fossil horseshoe crabs, and she is doing some exciting research in my lab studying rates of evolution and mechanisms of fossil preservation. One honor I received this year was being appointed a Fellow of the Paleontological Society. I also found out the good news that my National Science Foundation grant was funded to study Burgess Shale type soft-bodied faunas from the Middle Cambrian of Utah. It will provide funding from September '05-'07 to focus on the ecology, evolution, and taphonomy of these enigmatic fossils. I hope to be able to interact with Emeritus Distinguished Professor Dick Robison on this project as he is an expert on these type of fossils. Finally, I have had the opportunity to take several exciting trips to give research talks. I don't have time or space to list them all but the high point was being an invited session chair, introductory speaker and discussant, for the session *What is evolution?*, during the World Summit on Evolution, held in the Galapagos, Ecuador, June 9-12, 2005. They paid all my expenses, which always makes it more fun, and it was my first time visiting Ecuador. The islands are spectacular, and it was awesome to visit some of the sites Darwin had visited and see sea lions and marine iguanas lying on the beach next to the Av. Charles Darwin. Being the only attendee from Kansas at the World Summit on Evolution created many opportunities for humor. Another enjoyable invited research talk came the week before when I was invited out, again all expenses paid, to speak at the Palaeontological Institute and the Institute of Systematic Botany at the University of Zürich in Switzerland.

## **Gwen Macpherson**

### **Associate Professor of Geology**

#### **Director, KU Plasma Analytical Laboratory**

I continue my career-long research at the Konza Prairie LTER site near Manhattan, Kansas, both ground-water chemistry and ground-water flow in the shallow limestone aquifers there. I also still run, single-handedly, the KU Plasma Analytical Laboratory, and it is still going strong, despite dated instrumentation (only important so far as instruments can't "talk" as fast as new computers, and so can't talk to new computers at all). "In the world there is nothing more submissive and weak than water. Yet for attacking that which is hard and strong nothing can surpass it." — *Lao-Tzu, BC 600, Chinese Philosopher*

## **Beth McClellan**

### **Associate Professor of Geology**

#### **Laboratory Coordinator**

Geol. 103 lab coordination has been especially interesting in the past year. We've encountered many new challenges and rewards with the introduction of a new lab text last fall semester. At the same time, the graduate teaching assistants began using Blackboard, an online "course management system," and have now dragged me kicking and screaming into the new technology era. But not to worry, we still use real, not virtual, rocks, minerals, and maps! In the spring I was delighted to teach a special topics course in Metamorphic Petrology, one of my favorite subjects. The highlight was the class field trip to the southern Appalachian Mountains, where we traversed the Blue Ridge of east Tennessee, western North Carolina, and northern Georgia. We also spent an afternoon at the University of Tennessee, touring the electron microprobe lab and talking with experts on Appalachian geology. My research into the tectonics of the Norwegian Caledonides continues, with Master's student Michael Benjamin. I have also worked closely with several colleagues on tectonics of the southernmost Appalachians, and co-led a field trip, "Exotic Terranes in the Southernmost Appalachians," after the spring SEGSA meeting.

## **Carl McElwee**

### **Professor of Geology**

#### **Chair, Promotion and Tenure Committee**

Environmental Geology continues to grow with an enrollment of over 80 for the spring semester of 2005. With so many natural disasters causing so much death and destruction during the last year (Dec 26 Tsunami and Gulf Coast hurricane damage in particular), it is critical that we have an informed public that can make intelligent decisions about their interaction with the natural environment, about locations for housing, and about the kind of lifestyle they

will lead. We are offering this course at the Edwards Campus this fall and I have an enrollment of 37. We are reaching out to the Kansas City area and hopefully the class will continue to grow in popularity at the Edwards Campus. I also continue to teach core courses for the hydrogeology program including Physical Hydrogeology and Field and Lab Hydrogeology. This semester I am teaching the Field and Lab Hydrogeology course to 5 graduate students, including hydrogeologists, geophysicists, and engineers. This is a fun course to teach for a number of reasons; but one reason is that I get to introduce them to my research on determining hydraulic conductivity distributions. We have completed one year of research on our three-year project funded by SERDP (Strategic Environmental Research and Development Program – DoD, DoE and EPA). The project is concerned with measuring hydraulic conductivity distributions using high-resolution slug-testing and tomographic methods. It has been a challenge, since we had to design and fabricate much of the specialized equipment. However, the summer fieldwork has produced a number of good data sets; and, the initial processing indicates that we are imaging the hydraulic conductivity distribution between source and receiver wells. The fall and winter months will be spent trying to coax as much information out of the data as possible. On a personal note, I was able to spend two weeks this summer in Vietnam visiting my daughter, who is doing research on minority groups there.

### **Jennifer Roberts** **Assistant Professor of Geology**

It's been another busy year in the world of bugs on rocks (i.e. Geomicrobiology). I had an NSF proposal to Biogeoscience successfully funded and in March started fieldwork in Panama with new Ph.D. student, Ezra Kulczycki, investigating microbe-mineral interactions in tropical soils. In June, we hosted two undergraduate students from Allegheny College for a summer research program in the Geomicrobiology Lab. We also welcomed new Ph.D. student, Paul Kenward, who will be delving into the mysteries of microbial dolomite for his dissertation research. In July, I headed to Bemidji, Minnesota, to do fieldwork at the USGS Toxic Substances Site where we are studying the microbial ecology associated with petroleum contamination of a shallow aquifer. I had help from post-doc, Brena Mauck, Paul Kenward, and Sarah Tsoflias (who is a Ph.D. student working with new hire, David Fowle). Master's students, Brian Hughes and Amanda Wilson, both successfully defended their theses and are gainfully employed.

I taught Geology 101 during Spring 2005 and spent some of the summer designing a new team-taught course in Geomicrobiology along with my colleague Rachel O'Brien from Allegheny College. The course is a hands-on approach

to experimental design in geomicrobiology, allowing students to gain experience in both field and laboratory aspects of the field. We are currently a little more than halfway through the semester and the experiment is going well, with lots of data generated thus far. We will finish up data collection in time to pack up for our big move to the Multidisciplinary Research Building in December 2005. While we will miss the cozy digs in Lindley, we're excited at the prospect of a new lab space and potential to form collaborations with researchers in complementary fields.

### **Don Steeples** **McGee Distinguished Professor of Geophysics** **Vice Provost for Scholarly Support**

The vast majority of my time for the past year has been spent on administration in Strong Hall. Thanks to the efforts of George Tsoflias and several graduate students, our research on automated shallow 3D seismic imaging has moved forward on schedule with excellent results and associated publications. Because of my administrative load, I only teach one course per year, and in the spring of 2005 I taught near-surface seismology to seven students. My professional service activity has been dominated by membership on a National Academy of Science committee examining some of the long-term stewardship and monitoring of environmental problems at Hanford Nuclear Works in Washington, the Idaho National Laboratory, and the Savannah River Site in South Carolina.

### **Mike Taylor** **Assistant Professor of Geology**

The last year has been a busy one since I was last interviewed for the *G-Hawker*. After graduating from UCLA, I went on to Caltech for a postdoctoral position and began a neotectonics project near Denali, Alaska. We used a new remote-sensing technique to image the surface displacement field related to the 2002 M 7.9 Denali earthquake. These and other observations made along the Denali fault have led to the development of a new tectonic model for the Alaska Range. The old model developed in the 1980's invokes counterclockwise vertical-axis rotation of south Alaska. In contrast, our model only requires NW rigid-block translation of south Alaska, which explains our observations made from the recent 2002 earthquake, and the bedrock geology.

A major research effort has been the continuation of my Tibet projects. With colleagues from Caltech and the University of Arizona, we have been working on a large NSF Continental Dynamics proposal. We seek to investigate the dynamics of the Indo-Asian collision zone using continuous GPS, seismology, and field-based observations of active faults. The current paradigm in plate tectonics is that deformation should not be distributed for thousands of km's

throughout the continents. However, in light of recent field observations made from the interior of Tibet, we find evidence for recent deformation that is equal to that generated along the plateau bounding faults. Thus, we believe the interior of the collision zone is capable of transient tectonic events potentially related to deformation of the mid-lower crust.

I also submitted a proposal to the Tectonics Division of NSF over the summer. Gilles Peltzer (UCLA) and I were able to document for the first time the current fault slip-rates in central Tibet using radar interferometry (Taylor and Peltzer, in review with JGR). Working with Dr. John Gosse from Dalhousie, I propose to see if these same faults are exhibiting non-steady state behavior since the Late Pleistocene (?) by determining the fault slip rates using cosmogenic dating of offset landforms.

I'm also excited to be continuing my collaborative efforts in Tibet with Dr. Dan Stockli. Since my arrival to KU, we've been laying out maps, comparing notes, planning field seasons, and formulating regional tectonic models to test. I believe we're well poised to begin a flurry of proposal submissions to NSF.

This fall has been an exciting and rewarding teaching experience thus far. I'm developing a new neotectonics course at KU, where we are studying various styles of active continental deformation. An exciting highlight of the course is an advanced mapping exercise to be conducted along the southern San Andreas Fault in California. The students will map contrasting styles of deformation that reflects the rapidly changing geometry of the San Andreas Fault. This is an active plate boundary that accommodates between 20-35 mm/yr of North American and Pacific plate motion!

## **George Tsoflias**

### **Assistant Professor of Geology**

I've just completed my second year at KU. If I were to describe the past year with a single word I'd call it "big." My research program has taken off to a very good start with a big group of seven graduate students working on various geophysical projects. We are currently investigating fracture and aquifer flow properties using ground-penetrating radar (GPR); we are developing high-resolution, three-dimensional seismic acquisition methods. We are also improving "statics corrections" for seismic exploration in Saudi Arabia. This year I received a PRF and a K-TRAN research grant as sole investigator for GPR research, and I am a co-investigator of a new NSF-funded Science and Technology Center to study polar ice sheets. My role is to develop seismic sensors for imaging ice sheets and geologic structures beneath them. This is the biggest grant awarded to a university in the State of Kansas. Teaching has also been "big." I taught the introductory geology course, Earthquakes and Natural

Disasters, with an enrollment of 790 students in 2004 and 975 students in 2005. This is the largest class in the Department of Geology and among a handful of comparable size courses at KU. Teaching such a large class has been a rewarding experience and I am looking forward to introducing many more thousands of KU students to geology.

## **W. R. Van Schmus**

### **Union Pacific Resources Professor of Geology**

When I stepped down as Department Chair, I also began a phased retirement program with the University. Under this plan, I will work half time for up to five years. I enjoyed my first year of this program, having a normal teaching, research, and service load for the fall 2004 semester. Although I had no official commitments for the Spring and Summer 2005 terms, I kept quite active on campus, following up on some uncompleted research on the Mid-continent basement and continuing research collaborations with colleagues in Brazil and Cameroon, including a couple of weeks in Rio helping some former students set up a new geochronology lab and hosting a colleague from Cameroon for most of August. I also took time to get some work done around the house (with the help of local contractors!), to do some travel with my wife, Edna, visiting relatives in Arizona, California, and Wisconsin, and to spend time on some of my hobbies (genealogy, model railroading, stamp collecting). I am back to teaching for the fall 2005 semester and trying (with Doug Walker) to keep our 18-year-old mass spectrometer running (a battle at the moment).

## **Doug Walker**

### **Professor of Geology**

I worked on a lot of different projects this year. Neotectonic studies out West with M.S. student Brad Didericksen at KU, Eric Kirby and his student Tye Numelin at Penn State, John Gosse (old KU hand now at Dalhousie), and Eric McDonald at the Desert Research Institute advanced immensely. Eric and I, along with Joe Andrew, former KU student and now faculty member at Youngstown State, have a paper coming out soon from these studies. I also was invited to give a keynote address at Dan Stockli's Penrose conference that addressed this work and other studies.

This has been a busy year on the cyber front as well. The NAVDAT database continues to develop, largely owing to the efforts of KU programmer Todd Bowers who is funded for this project. We made several presentations, attended many workshops, and have a paper in press. I also got funding for a project called EarthChem ([www.earthchem.org](http://www.earthchem.org)), a five-year effort to make a cyber-home for all igneous geochemical data worldwide. This NSF-funded work will unite the NAVDAT, GEOROC (Max Planck/Otto Hahn Institute, Germany), and PetDB (Lamont-LDEO/Columbia) databases

into a larger, seamless system. This work relies on the collaboration of the Geology Department with the KGS. At least one additional technical staff will come on board to support this research and development effort.

Field geology continues to advance with new digital techniques for data capture and visualization. I updated the mapping software to a new database for ArcGIS 9, and tested this during a graduate field course (see the discussion of KU field courses in this *G-Hawker*). We (Dan Stockli, graduate students/TAs Chris Hager and T.J. Dewane, and I) refined this further during the undergrad course over the summer. I worked with Diane Kamola over an intense week in Utah this summer getting better outcrop data (based on digital photography) aimed at sequence stratigraphy studies. This follows on the work Diane and I did before with graduate student Rebecca Scheppey.

Lastly, geochronology and isotope geochemistry work in the Isotope Geochemistry Lab (IGL) lab progressed well. The main projects this year focus on thermochronology and geochronology of rutile (an NSF-funded project with Dan Stockli and M.S. student Terry Blackburn), investigation of miocene to recent volcanic rocks from the western U.S., geochemistry and geochronology of arc rocks from Pakistan (NSF project with Shuhab Khan—University of Houston), and bison migration studies for the Holocene of the central to high plains. Students and IGL faculty collaborate on all these efforts. On the bison project, I collaborate with Chris Widga, a KU anthropology Ph.D. student, to understand bison behavior and bison-hunter interactions by looking at Sr isotopes in teeth and grasses. We track bison migration by distinct Sr zonation in native prairie grasses across the plains states (Arkansas to Wyoming, Oklahoma to North Dakota). The work and insights of lab manager/isotope researcher Lisa Stockli makes possible the tackling of all these studies; she is the key for productivity and development on the thermal side (TIMS) at IGL.

## **Tony Walton** **Associate Professor of Geology**

I continue to enjoy my teaching assignments, including Geology 101, my graduate class in sandstone deposition, volcanology, petroleum geology, and my co-taught course in oil reservoirs with Tim Carr (KGS) and Don Green (Petroleum Engineering). Geology 360, the two-week field course taught every August, is particularly rewarding. Most of the students are beginning geology majors, but the course always includes a few others from engineering, education, and geography along with some new geology graduate students with degrees in other fields. Recently, participants have included retired persons from the Lawrence area who have an interest in geology. The students learn a lot about geology, about themselves, and about their classmates.

I continue my research into groundwater alteration of basalt glass in Hawaiian volcanoes. I recently published a paper on chemical mass balance of the process and another is in press on strength of ocean islands, based upon measurements of core samples. This bears on the question of the origin of the huge landslides that surround the Hawaiian Islands and other such islands. My latest student will be investigating microbial processes of alteration of the glass. I also picked up some samples of pillow basalts from the Snake River Plain, as a preliminary to expanding my scope of work.

## **Holland Picks Up the Baton from Parks to Finish Laudon Book**

Bud Holland (B.S. '48) and Jim Parks (B.A. '48) had a long history together. They met as geology students in then department chair Lowell Laudon's office in the fall of 1942. The second semester of that year, Parks moved into the house Holland was renting on Ohio Street, just north of the Jayhawk Cafe. Both served in the Navy during World War II and then returned to KU in 1946 to continue their geology studies with Laudon. It seems only fitting then that Holland would take up a project that Parks' sudden death in the winter of this year prevented him from finishing: a biography of Laudon.

Parks had been in frequent correspondence with Holland about the project since its inception in 2000. "Jim wrote me a letter about it on the 28th of January," Holland said, "and then by noon the next day, he was gone." Parks had finished revising half of the book based on comments from an editor at the University of Wisconsin Press, the book's publisher. Holland will finish revisions and turn it over to the press, who will market it in conjunction with the Wisconsin Geology Department, where Laudon taught from 1948 until his retirement.

Holland said that Laudon had an incalculable influence on him, Parks and many other KU Geology students. "That's the primary thesis of this book. It's an account of the life of a spellbinding teacher, who was very well-liked by most and a great influence on many. It would be fair to say that probably he influenced more people to go into geology and then to go on to teach geology than almost anybody else. He taught nearly 25,000 students at Wisconsin in enormous Geology 101 classes."

Holland hopes to have the book revised by the end of this year.

### Geoarchaeological Dig Uncovers Evidence of Ancient Human Activity

In a joint project with the Denver Museum of Science and Nature, the KGS's geoarchaeologist Rolf Mandel has excavated a site just outside of Kanorado, Kansas, that may have yielded the oldest evidence of human activity ever found in the Great Plains. The horizon that was excavated has uncovered what appear to be human-fractured animal bones that date to 12,200 years.

KGS associate director Rex Buchanan said the announcement has dwarfed anything ever described on the organization's web site. "It's an order of magnitude beyond the number of hits we ever see. Obviously, this has just captured people's imagination. There was even a reference to it on Jay Leno's monologue on the *Tonight Show*." In June, Kansas Anthropological Association volunteers spent their annual dig at the highly visible site, which is right off Interstate 70 just east of the Colorado border. The ground was originally disturbed in the '60s during early construction of the roadbed.

Several characteristics make this site unique from other archaeological sites. It represents an area with evidence showing that prehistoric people returned there repeatedly, probably because of the abundance of water and hunting opportunities. Finding this number of artifacts in one place is rare simply because the population density at this time period would have been so low. Most Clovis points like the one that Mandel and fellow researchers found at the site are found washed up on gravel bars along a riverbed far from the site where they would have been dropped. "To find a Fulsom point like this in place," said Buchanan, "was a first for Kansas as well."



*Rolfe Mandel, archaeological geologist with the Kansas Geological Survey, is examining 12,300 year-old mammoth bones at the Sherman County Paleoindian site. Photograph by Travis Heying, Wichita Eagle.*

### KGS Brings State Legislators into the Field

The KGS just finished its 11th annual field conference for selected state legislators and other policy makers. This kind of experience can be tremendously helpful when the attendees go into legislative session. The groups include a wide range of decision-makers from state agencies and congressional staff, business people, to representatives from environmental groups. The KGS's Bob Sawin organizes the trips.

For two and a half days, the group is escorted by KGS staff and cosponsors to areas that decision-makers will be making policy decisions about. When the KGS first began the trips, they focused on specific topics such as water or energy, but in recent years, they've shifted to a regional approach. For example, last year attendees visited the Flint Hills because a variety of issues such as wind power were really hot topics there. This year, 45 attendees traveled to west central Kansas to examine water issues. In addition to the well-known Cheyenne Bottoms, they looked at the Cedar Bluff Reservoir west of Hays and Webster Reservoir north of Hays.

"This year we had 25 legislators in attendance—more than we've ever had," said Buchanan. "This has evolved into a great way to expose policymakers to the issues first-hand. They've been tackling the Circle K Ranch issue and the possibility of retiring water rights there to preserve water levels in the Arkansas River for a long time now. But this provided them an opportunity to actually walk down the dry riverbed. There's really no substitute for it."

Legislators are some of the busiest people in the state, but they're a prime audience for the kind of issues the KGS addresses. Where trying to bend their ear during the legislative session would be next to impossible, the KGS can easily convince these policymakers to give up several days in the summer and give their undivided attention to geologic issues. "It's good for them and good for us and our cosponsors," Buchanan said. "They not only derive a mental picture of what a location looks like, they also know who to call for more information. This is one of the best public policy initiatives the KGS has ever undertaken."

## Faculty Collaborations Yield Lifelong Friendships

It's in the hashing out of a hypothesis, a concept, an idea with another that further discoveries are made, another layer added. Shared projects grow out of such conversations. Sometimes an epiphany occurs in the laboratory, and sometime it occurs over coffee or a beer. More often than not friendships grow out of the shared research and the mutual fascination with a project. In whatever context it happens, KU Geology faculty members understand the importance of collaboration. Here are some stories from some notable faculty collaborations.

### Don Steeples and Rick Miller

Their working relationship began in 1980 when Miller began graduate studies under Steeples' guidance at the Kansas Geological Survey (KGS). They worked so well together that after Rick graduated in 1983, he decided to stay on at the KGS.

One of the first things Miller noticed and appreciated about Steeples was his straightforward, down-to-earth attitude. "When I asked if I could work with him as a graduate student, he said he had two crews working gravity and seismic out in the field, which was like putting up hay or driving a tractor all day. We both came from farm backgrounds, so I completely understood him. I also appreciated that he was willing to get his hands dirty like everyone else. He's just as likely to want to grab greasy equipment as he is to crunch numbers or write reports."

Miller grew to appreciate Steeples' intellectual rigor as well. "He has an outstanding sense of what's crucial on a project, a keen mechanical insight mixed with highly technical abilities."

Steeples enjoyed working with Miller from the beginning. "Rick's a real special breed of cat," he said. "He's one of these people that if you want him to do something you just tell him it's impossible. Then he just tears away at it. The auger gun is a perfect example of this tenacity. We needed something as an energy source that we could direct into the ground to take seismic readings from. The result was strictly his idea and creation. I was a real skeptic, but he proved me wrong."

Early on Steeples and Miller developed the rare capacity for being critical of each other's work without reservations. "We're kind of always yapping at each other's heels," Steeples said. "For example when we're buckling up for a long drive to a job site, I'd usually say, 'Do you want to drive or do you want to criticize?' That's pretty telling of our relationship. I remember too that his master's thesis was one of the most god-awful documents I ever laid eyes on, not the science but the writing. I told him so. Instead of being offended, he got help to fix it. I think that's just an indication of the type of guy he is. When I told him he was a bad writer, he worked at it until he became a good writer."

They have been invited in to each other's families as well, which was very important to Miller as a young unmarried graduate student. "Anytime we had something to discuss or work on together we went to Don's for supper with he and Tammy." When they taught short courses together in Europe, they took their wives. "My wife described the trip as 'Jed and Jethro do Europe,'" Steeples said.

Over the years, Miller and Steeples have worked together all across the U.S. and the world. Their working collaboration shows no signs of letting up. Currently, they are conducting seismic studies on a couple of sinkhole projects in Kansas, including a highly publicized one in Hutchinson.

### Randy Van Schmus and Pat Bickford

Van Schmus and Bickford knew they worked well together long before they both began teaching at KU. Sharing the same academic interest, they began a career-long idea exchange and 40-year friendship in graduate



Randy Van Schmus and Pat Bickford

school at UCLA. When Bickford took a job with the Department of Geology, he recruited Van Schmus.

Though the two had common research interests, they didn't work in the same area until the early '80s when they became jointly involved in research into the basement rocks in the area around Saskatchewan. Though their paths diverged when that work was finished and Bickford took a teaching job at Syracuse, they have continued to work in collaboration on other projects from time to time. Van Schmus said the secret to maintaining a good working relationship is to stay collegial and to follow a few simple rules. One is to not talk too much about politics. Another is to respect each other's opinions. "Most importantly though," he said, "is to take care of business. You keep competition at a minimum. You have to have your individual space, no one depending too heavily upon the other, but pursuing common research interests."

Bickford agreed. "Randy is a prince. We've worked well together because he's so smart and thoughtful, never a competitive person. In fact, I can't think of a single controversy during our work together. The hardest thing about leaving for Syracuse was the thought of giving up such a healthy friendship and collaboration with Randy. As it turned out, I didn't have to; Geology is a small world. We've continued to work together."

Van Schmus said that even though Bickford is retired and he's semi-retired, they still chat more about research than anything else. Recently, they experienced a confluence of interests again. Several years ago, Bickford became interested in the ancient Archean gneiss exposed in the Minnesota River Valley. Also, Bickford was excited by the recent discovery that there are similarly ancient rocks in Canada as well as the Superior Craton. "Randy has long had an interest in these same ancient rocks in northern Wisconsin and Michigan, so we've talked about getting together and extending this study. That's in the works now," Bickford said.

But their friendship hasn't been all work related. In fact, Bickford asked Randy to join the poker group he was in when he first arrived, a group that is still attended by Ernie Angino and Dick Robison. Also, their families have spent lots of time together over the years. Two years ago, when Kansas and Syracuse were going head to head at the national

championships, Van Schmus called Bickford and said, "We've got to have a bet on this one. Whoever loses buys dinner at GSA." When Syracuse won, Van Schmus and his wife Edna paid off handsomely, taking Bickford and his wife to dinner on the waterfront in Seattle.

### Bob Goldstein and Evan Franseen

Like Van Schmus and Bickford, the KGS's Franseen and Department Chair Goldstein were graduate students together. In the late 80s,



Bob Goldstein, Mateu Esteban and Evan Franseen (l to r) leading AAPG field trip in Spain.

Franseen came from the University of Wisconsin to visit Goldstein, who had recently taken a teaching position with KU Geology, so the two could review some of the diagenetic aspects of his dissertation. When a job opened at the KGS, Franseen jumped at the chance to apply for a job he would enjoy, all within close proximity of a good collaborator and friend.

When the Survey offered Franseen the job, he didn't hesitate to accept, excited about the prospect of continuing research he and Goldstein had already talked about. "I had some lingering questions about my research in Spain that I knew Bob could help me answer as a natural extension of his expertise. But he was also someone I knew and trusted." Goldstein, Franseen, and graduate student Maggie Mills worked together and ended up publishing a paper in *Geochimica et Cosmochimica Acta*, which got them some good press. Goldstein and Franseen have done field research together every summer in Spain since. They've also taught the Guadalupe-Sacramento Geology trip together. For the last 10 years, the two have led a continuing education field seminar in Spain for the AAPG.

Both men admit that to others the success of their collaboration may at times seem uncanny. "We read each other's minds," Goldstein said. "And we finish each other's sentences," added Franseen. "Working

with Bob has always been a pleasurable mixture of friendship and similar geologic interests. Though both of us are highly motivated, diligent, hard workers in the field, we also like to have a lot of fun.”

What differences the two do have contribute to their work success. “I like the big picture,” Franseen said. “Bob is great with the little details. In the field, there’s this really good combination of big to small that leads to conversations, ideas, new thoughts, and new twists. We look different too. When we’re working in a sunny, hot, desert area, I’m out there in shorts and no shirt. But Bob is prone to sunburn, so he wears long-sleeves, a hat with flaps, and long pants. I call him Lawrence of Lawrence.”

Goldstein said that their friendship covers every spectrum of their lives, from the professional to the personal. “We’ve shared a lot of significant events. For instance, I was in France when Evan married his wife Michele. And I was at the hospital with Michele’s parents when his son Ethan was born. Neither of her parents spoke English, so my wife Cindy and I stayed with them in the hospital helping translate medical language from English to French so they would understand what was going on.”

“Bob left at 8:00 in the morning to get something to eat and teach his class,” said Franseen, “and then he came back again. When I broke my ankle, Bob was the first one in the emergency room. We’re just really good friends. Though there have been opportunities for either one or the other to consider other positions at other institutions, we’ve both decided to stay in large part because of the great collaboration we have.”

### **Doug Walker and Danny Stockli**

Geochronologists Walker and Stockli agree they would be hard-pressed to find better colleagues. Their research interests and work habits—which they both picked up in similar “techie” schools—dovetail. Their personalities complement one another. Though the similarities certainly haven’t hurt the relationship, Stockli described



*Doug Walker and Dan Stockli working out a problem in the lab.*

the reasons that they work so well together primarily in terms of difference. “Doug is a very progressive thinker, while not neglecting the meticulous side. That’s what we have in common; we think big, but we do the nitty-gritty geochemical work to carry it out. But we’re also very different, which is helpful for me. I call him the Zen master. He’s very stoic, hard to rattle, where I might get bent out of shape a little more easily. Maybe it’s because my mother is from the Italian side of Switzerland. Anyway, we balance each other out as a team.”

Walker had high praise for Stockli’s insightful research style, which he said recently helped the two secure a two-year NSF grant to do some groundbreaking petrology and geochemistry to calibrate the mineral rutile for its properties as a thermochronometer.

“There’s been a lot of hype about uranium-thorium/helium thermochronometry for quite some time,” Stockli said. “I was involved from its infancy. That’s why I’m here.” Stockli and Walker have long been interested in the high-pressure regime because dating the cooling of many of these rocks was extremely difficult. Then during a brainstorming session, one of them said, “What about rutile? Could we date rutile?” The real advantage of using rutile as a dating technique is that it is a very common mineral found in high-pressure metamorphic rock.

The resulting proposal was ranked second highest of all NSF proposals in petrology and geochemistry in one panel, which reveals the major interest the tectonics and geochemical community had in the project. Rutile has a closure temperature of 220 degrees C. In their work with the mineral, Walker and Stockli have proved for the first time that a uranium-thorium/helium thermochronometer can be used to date rocks that have quickly cooled below 220 degrees C. They have used the method to date Kansas kimberlites as well as volcanic rocks in Arizona with excellent results. They are now calibrating the thermochronometer on rutiles from the Oman collision zone and from a German continental deep-drilling bore hole. Their work with rutile is a very high-profile discovery, and they are proud to have made it together.

“We couldn’t have made such a breakthrough if we didn’t have such a great working relationship,” Stockli said. “Most good collaborators are good friends too. We’d have to be considering the time we spend in the close quarters of the IGL lab. On the other hand, many ideas are born over coffee or beer as well.”

# Field Camps 2005

**By J. Douglas Walker – Professor and Field Camp Director**

This year has been active for the KU Geology field camps and courses. Things kicked off in January with the Advanced Field Geology course taught in California (January 2 to 14). I taught this course to four graduate students and Allen Dennis (professor and department chair from the University of South Carolina, Aiken). The course was challenging for the geology, but more so for the weather. This was the time that southern California was experiencing record rain, and the Coso Range (original site) was experiencing record snow! This course was designed to do first class geology and to refine the new computer-mapping program. Thanks to the ubiquity of Internet cafes, we were able to change project areas twice and still get great work done. We also tested the rain-hardiness of the field computers!



*In January we explored how the computers worked in the rain. (Above – Doug Walker showing Jeff Schroeder a map) and in subfreezing conditions. No problems. On this trip, one student poured a couple ounces of water out of the keyboard!*

We had our usual group heading out for the summer field courses in May and June. This year Roger Kaesler and Steve Hasiotis team-taught the first course (560) to 23 students. Included in this group were five students from other universities (Northern Colorado, Puget Sound, Tulsa, and Texas A&M). They had a great group doing work on projects around the field campsite at Cañon City, Colorado.

Roger and Steve revived some of the stratigraphic exercises from years past and put a new spin on them. Dan Stockli and I taught 561 (the second course) to a group of 19 students. I was only there for the first week, but used this time to start the students using the field computers and GIS software on a project south of Cañon City. The Department got seven new field laptops (with integrated GPS) using mostly University funds supplemented with the generous donations by alumni. The group spent the next two weeks mapping an area in western Nevada—a real research area—giving the students great experience in mapping and establishing stratigraphy in an area not previously well studied.



*Students working on stratigraphic project south of Cañon City. This project was revived for the first part of field camp.*



*KU student Emily McWilliams and University of Tulsa student Andrew Matzen mapping a fault in the Nevada field area. Emily is using one of the new Panasonic Toughbook 18s we purchased for field geology.*

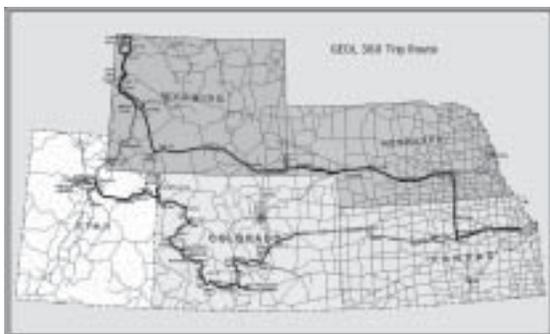


Students working on maps during the Nevada portion of 561. Dan Stockli arranged a workroom with a local geothermal exploration group. Students set up and worked in this facility during the Nevada exercise.



Students working on a project for Geology 360. Tony Walton uses many 3D visualization exercises, so the students run around with images and red-blue glasses. The three students are earth science education majors Jamie Talbott and Wendi Burke and geology major Pema Deki, from Bhutan.

Another important field course is Geology 360. This class is taught by Tony Walton and meets during the first 2 weeks of August. This year 19 students took the course and made the journey from Kansas to Wyoming, seeing a lot of good geology and doing some great projects along the way. This course is intended for undergraduate students just starting their geology courses.



The route map for Geology 360 across the country. This trip takes the students through a variety of geology and presents some great projects to them.



Roger Kaesler showing the section along Shelf Road.



Ian Rowell and Mary Ann Elliot at the field camp reunion.

The most important event in the year for the field camps is that Roger Kaesler is retiring from teaching Geology 560 and serving as the Director of Field Camps (that is why I am the one writing this article). Roger has taught the field camp for over 30 years and much of the success of the camp results from his efforts. The Department and the hundreds of students who have learned field geology at Cañon City owe him many, many thanks.

More information can be found at the Department of Geology website (<http://www.geo.ku.edu/FieldActivities/FieldMenu.html>) and at a mapping website ([http://tectonics.geo.ku.edu/mapping/mapping\\_web\\_page.html](http://tectonics.geo.ku.edu/mapping/mapping_web_page.html))

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*Ian Rowell, Rhonda Shreve, Sahudi González and Luis González at the Geology Associates Advisory Board dinner.*



*Wake Dort, Bob Mason and Beth McClellan chat at the Geology Associates Advisory Board dinner.*

## Geology Associates: Welcome from the New Chair

I'm honored to have been elected to lead the KU Geology Associates Advisory Board (GAAB), and I am committed to working closely with the Department of Geology and the KU Endowment Association to achieve the goals we have set. I also want to recognize and sincerely thank Bill Pollard for his outstanding leadership of the Board from 2000 through 2004. Among many other significant accomplishments, Bill restructured the Board to increase its effectiveness, a change that has already made a positive impact. I know I speak for all involved in KU Geology when I say, "Thanks, Bill for your efforts and dedication!"

The KU Department of Geology is among the best in the U.S. and has received much international recognition. To sustain and grow their strong program, the Department depends on support from the GAAB. Our vision is to be the Department's primary support resource on any challenge the Department faces in which an outside perspective is needed and requested. Thus, the Board's relationship with the Department is a partnership, under which we work together to achieve mutually agreed goals.

Perhaps the ultimate aim of the university is to produce well-educated graduates who are equipped

with the skills needed to become productive members of society. Toward that end, one mutually shared goal of the Department and the Board is that all students graduate with placement offers in careers or graduate schools of their choice. To succeed, the Department needs high-caliber faculty, top-notch students and an environment that will enable the faculty and students to do their best work.

The restructured GAAB supports the Department in each of these three areas, and I will say more about them in future columns. In the meantime, I'm excited and optimistic that, by working together, we will propel the Department to an even higher level of academic excellence and achievement!

– Scott Adams



Former Geology Associates Chair Bill Pollard and Steve Dixon chat at the 2005 Geology Associates Advisory Board dinner.



Dick Robison and his wife Mary at the 2005 Geology Associates Advisory Board dinner.

## Geology Associates Make a Commitment to KU Geology

In place since 1968, the Geology Associates Program has provided Department alumni, their families and others interested in our success the opportunity to provide financial assistance to the Department. Managed by KU Endowment Association, the donations have helped the Department expand programs, fund professorships and rise in the national rankings. The Department thanks everyone who has contributed, and we would especially like to acknowledge those who have been consistent donors, regardless of the size of their gifts. Because all contributions support the Department and its students, all gifts are greatly appreciated.

In this issue of the *G-Hawker*, we would like to recognize Jim and Laurie Snyder, Joel and Susan Alberts, and Jason and Nicole McKirahan.

### Jim (B.S. '58, M.S. '63) and Laurie Snyder

"I feel like everything I learned at KU, I got to apply as an oil and gas-finding geologist on the Gulf Coast," said Jim Snyder. "I got a very practical education."



He has worked as both an originator and marketer of oil and gas prospects in several public and private oil companies throughout his career, and has worked not only in the Gulf Coast areas of Mississippi, Louisiana, and Texas, but also in the mid-continent, and California. He has been directly responsible for helping clients locate and acquire more than \$600 million in oil and gas assets. Throughout his long career he has worked for Rand Energy, Keplinger & Associates, Geodyne Resources, Inc. and several other companies with oil and gas prospects along the Gulf Coast. Internationally, Snyder has drilled wells in Ecuador, Algeria, and the United Arab Emirates. He now manages Bettis and Snyder, LLC and is president of Snyder Exploration in Houston.

Among several professors who influenced Snyder, his thesis advisor and structural geology professor Louis Dellwig was the most compelling. "He fought in the Battle of the Bulge during World War II and had all these machine gun holes in him," Snyder said. "He taught an excellent, rough and practical field camp. He just wasn't your typical college professor." He and Dr. Andy Ireland, who taught stratigraphy and petroleum geology, helped Snyder gain and hone the skills he

would need to find and map literally hundreds of oil and gas prospects in the Gulf Coast for clients and investors.

"Now it's just time for me to give a little back to the people and the education that helped me so much," Snyder said. "I'm in a pretty intense drilling program right now, but I'll be through in two years and then I'll be able to contribute even more to KU Geology. The Dellwig fund for field camp and Jan van Sant's fund are very important and useful places for me to put some of the money KU helped me to make."

### Jason (M.S. '98) and Nicole McKirahan

The primary reason Jason McKirahan and his wife Nicole donate to KU Geology Associates is that KU Geology was key to setting him on a successful career path in petroleum geology. Of particular help was Bob Goldstein who offered him a research assistantship in carbonate stratigraphy after his first coursework with him. McKirahan said Goldstein not only offered countless hours of help on his thesis, on carbonate rocks of eastern Kansas, but also proved instrumental



Jason and Nicole McKirahan on vacation in the Yucatan Peninsula in Mexico, while on a tour of the Aktun Chen cave and cenote.

in his landing his first job as a petroleum geologist with Phillips right out of school. He recently took a position with Marathon Oil in Houston.

The other faculty member who greatly influenced McKirahan was Paul Enos. The fieldwork he did on Enos's modern carbonates trip to south Florida and the Bahamas has proved crucial in his current career.

"Nicole and I both feel it's really important to donate to the educational institutions we've been associated with," McKirahan said. "Not only do I feel a warm connection to KU, but I got an excellent degree there that has served me well. Those are really important reasons for us to give something back."

## Susan and Joel Alberts (B.S. '80)

Since his first days as a geology student Joel Alberts has admired the dedication, commitment and loyalty of the Department and its staff. As an expression of thanks for the Department's



care of him and other students, Alberts and his wife Susan have made it a priority to support it with donations. "There's a long tradition of alumni donating to the Department, and it's one I plan to follow," he said.

Several professors inspired Alberts during his years in the Department. Mike Brady, Jim Eubanks, Roger Kaesler and Tony Walton all came to mind as favorites. He said there were also many outstanding graduate students during his tenure at KU, who were passionate about their work and always willing to help. "I'd also have to include my peers," Alberts said, "as I was fortunate to have graduated with an exceptional class."

Following graduation, Alberts' advisors encouraged him to pursue his interest in petroleum geology and get a start in the industry immediately, while activity was brisk due to the high oil prices of the late '70s and early '80s. Alberts said he was fortunate to have started his

career working for real entrepreneurs in the business, testing a variety of geologic concepts with the drill bit.

Alberts has enjoyed a career in oil and gas exploration that has allowed him to apply cutting-edge technologies, such as 3D seismic and horizontal drilling, to conventional reservoirs. "Leveraging these tools is exciting, a real challenge and a great opportunity to continue learning," he said. Since the late '90s, Alberts' focus has moved toward more unconventional resources, tight sands, coalbed methane and especially gas shales.

## Are You a G-Hawk, a Geology Associate, or Both?

Names and labels can be confusing, and so we thought it worthwhile to discuss two of them you may have heard in reference to yourselves, **G-Hawk** and **Geology Associate**. You are all G-Hawks! All students, alumni, and friends of the KU Department of Geology belong to the large family of G-Hawks, over 1,500 strong; hence the name of our annual magazine, *The G-Hawker*. The Geology Associates program is the fundraising and advisory aspect of the Department of Geology. While all those involved in that program are G-Hawks, Geology Associates are those G-Hawks who have made a financial, advisory, or time commitment to the Department and its students. Interestingly, some G-Hawks and Geology Associates are not even alumni; some are spouses of alumni or former faculty members; and some corporate sponsors fit into the Geology Associates category as well. Geology Associates, and the Advisory Board of the Geology Associates, partner with the Department in helping it achieve its goals.

Geology professor and former Department chair Tony Walton, who coined the term Geology Associate, explained the need for the clarification. "We want people to know that we think of all alumni and Geology students as part of our bigger family of G-Hawks whether they have chosen to be part of the Geology Associates program or not. We love them all."

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Thomas L. Hall  
Donald E. & Marjorie E. Hattin  
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Hamilton C. Perkins  
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Kristina & Jeff Watabe

## Hollis Dole Hedberg Memorial Lecture Fund

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Joseph R. Pierson, Jr.  
George D. & Barbara C. Stanley

## Roscoe G. Jackson II Graduate Research in Geology

Roscoe G. Jackson II



Mary Brady, Larry Brady, and Ron Wallace at the Geology Associates Advisory Board dinner.



Stuart Grossman and Dan Merriam at the Geology Associates Advisory Board dinner.

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*Timothy Brandt of the KU Alumni Association, and Randy Van Schmus at the Geology Associates Advisory Board dinner.*



*Robert Williams, Eva Prather, and Brad Prather at the Geology Alumni Associates Advisory Board dinner.*

## Geology Life Associates

Many of these individuals have contributed to funds established by the University of Kansas Endowment Association to provide support for various special purposes and activities of the Department. The category of Geology Life Associate has been established to provide special recognition in gratitude to those Associates who have donated \$5,000 or more since the Geology Associates program was formed in 1968. This list will be published in each issue of the G-Hawker in order to repeatedly convey our thanks for the generosity of these men and women.

Note: If you do not see your name here and believe it should be, please contact Bob Goldstein (gold@ku.edu) or Liz Gravatt (egravatt@ku.edu) so that we may correct our records.

Diana Bandler & Scott D. Adams  
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### Davis, Prather Win Haworth Awards

#### John Davis, B.S. '61

John Davis considered it quite an honor to have been selected as the Academic Haworth Award since two of his closest associates at the KGS, John Harbaugh and Dan Merriam, were past recipients.

When the Mathematical Geology Section of the KGS was abolished two years ago, Davis left his position there for a brief stint as an adjunct statistics and environmental modeling professor at Baker University in his hometown of Baldwin. Shortly thereafter, Davis accepted an appointment with the Montanuniversität (Austrian school of mines) in Leoben, Austria, as professor of petroleum engineering. An engineering and graduate school with programs in all areas of the earth and materials sciences, the Montanuniversität is affiliated with the Colorado School of Mines and Stanford University. Fortunately for Davis, academic schedules are very flexible under the Austrian system, so he can teach classes in blocks and commute between Kansas and Austria on a monthly basis. Davis was also given a joint appointment as chief geologist with Heinemann Oil GmbH, a consulting firm based in Austria that provides contract services in the Middle East.

Davis credits many KU professors with helping him in his career. Walter Youngquist's inspiring lectures sparked his interest about geology his freshman year at KU. He also credits Ken Hamblin with turning a potentially dull stratigraphy course into a vibrant class on depositional environments. "He also was an excellent field camp instructor," Davis said. "I can still picture him, sitting at a campfire while we students drank from a keg. Being a good Mormon, Ken couldn't partake, but he got just as raucous as the rest of us by drinking copious quantities of strawberry pop!" Davis's greatest influence, however, was the KGS's Dan Merriam. "Dan encouraged good work habits, emphasized writing well, and gave sage advice on how to advance in the academic world."



#### Brad Prather, B.S. '79

Brad Prather was elated to hear he had been awarded the industrial Haworth Award for 2005 and feels honored to be listed among so many great geologists who have received it before him.

He said that his degree from KU Geology has helped him every step along his career path. "The solid grounding in critical thinking skills and the fundamentals of sedimentology, stratigraphy and structural geology I learned at KU have been vital to me throughout my career," Prather said. "I often think back on my undergrad days at KU as pivotal in my development as a professional geologist."

A 1981 graduate of the University of New Orleans with an M.S. in earth sciences, Brad is an internationally recognized expert on deep-water siliciclastics. He toured eastern and western Europe as a Distinguished Lecturer for the AAPG in 2001 presenting a paper entitled "Controls on Reservoir Distribution and Architecture in Slope Settings: Implications for the Global Deep-water Play".

He was the leader of the Shell Group's Special Studies and Research Teams from 1992 to 2004. Currently, he leads Reservoir Presence and Effectiveness research projects consisting of the Structural Traps and Seal Team, and the Turbidite Research Team. He also is a shore-based scientist for Shell's International Ocean Drilling Program Expedition 308. Prather has directed turbidite research for the Shell Group since 1996, creating the knowledge needed to explore for, and produce from, complex deepwater canyon and channel reservoirs that dominate the deepwater play globally. This effort ultimately resulted in the building of Shell's multidisciplinary Turbidite Research Team. He also established and quantified the lithologic composition of Cenozoic deep water systems in the Gulf of Mexico through the use of seismic facies analysis to aid in evaluation of reservoir, seal and direct hydrocarbon indicators.

Brad is the SEPM Technical Program Chair for the 2006 AAPG/SEPM Convention. In addition to his role on the KU Geology Associates Advisory Board, he is also on the AAPG's Research Committee.



Bob Goldstein presents Prather's Haworth

## **KU Geologists' Work Influences Public Policy**

It's one thing to write a letter to the editor or to a local governmental official or congressional representative to comment on the things happening around us. It's quite another to be in a position to actually influence public policy, which is exactly where many people associated with KU Geology have found themselves at various points in their careers. The decisions these geologists have made have had lasting impacts on critical local, state, national and even international policy.

### **Bill Hambleton, Ph.D. '51**

Arguably, no director of the Kansas Geological Survey (KGS) has had more long-lived influence on public policy than Bill Hambleton, who while a young geology professor at KU, joined the Survey as assistant



*The Lyons salt mine and the AEC's demonstration project in the late 1960s*

director in 1956, a title he held until 1962. He served as the Survey's associate director from 1962 to 1970 and director from 1970 to 1986.

During Hambleton's tenure, the Survey took center stage in state politics for the first time and would set a new standard for KGS involvement with policy for the rest of his career. Staff had to respond to the Atomic Energy Commission's announcement that it planned to embed canisters of nuclear waste on the site of an abandoned salt mine in Lyons, Kansas. Initially, accepting the AEC's plans seemed like a good economic boost for the state, until Hambleton's team conducted feasibility studies of the area at the request of then Governor Robert Docking, who then put the brakes on the project. Highly publicized studies

revealed the possibility of old, unrecorded and unplugged oil and gas wells in the area that could have allowed ground water to seep into the mine, become contaminated, and enter local aquifers. The Survey's unfavorable report and the resulting pressure from Kansas citizens caused the AEC to abandon their plans. Hambleton's experience with the Lyons site positioned him as one of the nation's leading authorities on radioactive waste disposal, and he served on panels and committees into the late 1970s.

Also during Hambleton's career as KGS director, he chaired a committee for the American Geological Institute, which resulted in frequent trips to Washington. He took this as an opportunity to establish close and lasting connections with Kansas Congressional representatives who would unquestionably need his guidance where geological issues were concerned. He maintained a particularly close relationship with Senator Robert Dole. "We had developed such a professional rapport that it got to the point where when there was national legislation concerning energy or resources, Bob's office would call me up and say, 'What do you think about this?'" Having these conversations was one very important way of ensuring that our people in Congress understood what would be best for Kansans from a geological perspective."

### **Lee Gerhard, B.A. '64**

Hambleton's successor at the KGS, Lee Gerhard, built on his legacy of heavy involvement with public policy. Even before arriving at the KGS, Gerhard had many policy negotiations under his belt. For example, while working as assistant state geologist of North Dakota during the energy crisis of the 1970s, Gerhard actively influenced regulation of oil, coal and gas reclamation. Among the lessons he learned was how to balance the protection of rights of landowners and business owners with the need to protect the environment. He also fought to get those with oil and gas ventures a fair price for their product. That was Gerhard's first experience with the federal government's regulatory apparatus. At the time, the Federal Energy Regulatory Commission determined the price of natural gas.

"I had to communicate to members of the Commission that if you can't give people a decent price they won't stay in the business. When a commission member came back from committee to tell me they had rejected my proposal, I would then say that I planned to tell North Dakota newspapers that the feds would rather let natural gas go to waste because it's too expensive to refine. They would go back into the meeting for a while and then return to me to say the commission had reversed its decision. Sometimes you get lucky and say the right thing at the right time. These kinds of negotiations were tricky, especially if you came from a small state like North Dakota where you aren't given much clout or protection because you don't have as many votes."

As the director of the Survey in Kansas, Gerhard found that the legislature absolutely respected honesty and forthrightness. "They didn't just help us put out the current fire. Wherever we needed to get legislative support for resource issues in the future, they always backed us." As a result, he was able to fund a study on the Dakota Aquifer, and an investigation into the decline of the Hugoton gas field, which had formerly been one of the United States' largest natural gas producing areas.

Today, Gerhard is still heavily involved in the climate change debate and in reviewing the endangered species law, and he hopes always to be involved in such discussions.

### **Ernie Angino, M.S. '58, Ph.D. '61**

Ernie Angino has found himself in many positions, both professional and elected, in which he had the opportunity to influence public policy. During Hambleton's tenure as KGS director, KU Geology Professor Emeritus Angino worked as head of geochemistry at the Survey and served as its Associate Director. He was also head of the water resources center at KU. In Lawrence, he has worked on many city and county committees and has been a commissioner and mayor as well.

All of these experiences have given him plenty of opportunity to develop his own philosophy about how to influence public policy. "You have to keep chugging away," he said. "One aspect that is hard for many people to swallow is that even though you may see a need to get a particular policy in place, many times it takes the perfect arrangements of circumstances both

in time and place to see something come to fruition. That can be enormously frustrating if you aren't up to the challenge."

### **Bill Fisher, M.A. '58, Ph.D. '62**

Though he's spent his career influencing public policy, KU Geology alumnus Bill Fisher said he had no formal training in it. He learned by doing. Currently, director of the John A. and Katherine G. Jackson School of Geosciences at the University of Texas at Austin, Fisher spent 25 years of his career as state geologist with the Bureau of Economic Geology at the University of Texas-Austin, Texas' equivalent of the KGS. Wearing this hat put him at the center of both federal and state policy debates, particularly regarding energy. Fisher said geological surveys must remain in close communication with both government representatives and the public sector. He said, "If you're doing your job right, resolving environmental and resource development issues translates inevitably into public policy work, which can be frustrating but equally exciting."

Fisher influenced policy not only at the state level but also at the federal. He was assistant secretary for energy and minerals in the Department of the Interior during the Ford administration. That office oversaw 13 different bureaus of mines, the US Geological Survey, and the Mining Safety Administration among others. During his tenure, he was involved in a range of issues such as regulation of surface mining and oil and gas price controls. Mining accidents and safety became a hot issue for Fisher and his colleagues as well.

Currently, Fisher holds a position on the National Petroleum Council, which reports to the Secretary of Energy.

### **Hollis Hedberg, B.S. '25**

A native of Falun, Kansas, KU Geology alumnus Hollis Hedberg became one of the country's foremost authorities on stratigraphy and petroleum exploration. He was a professor at the Princeton University Department of Geological and Geophysical Sciences from 1959 until his retirement in 1971 and concurrently was Vice-President of Exploration for Gulf Oil, a position which, in the 1970s, would thrust him into one of the most important oil resource debates of the 20th century. He was involved in reviewing the Law of the Sea Treaty, which would determine international

mineral and oil administrative rights. Crafting a crucial distinction in then current practice, Hedberg recommended that the base, rather than the then-prevailing break of the continental slope be used in conjunction with the 200-mile criterion to determine the boundary of mineral and oil rights of a country with marine coastlines. In 1978, he recommended that the U.S. not sign a draft treaty with Mexico, which was based, in large part, only on the arbitrary 200 nautical miles limit rather than the base of the continental slope. Had officials signed this version of the Law of the Sea Treaty, the U.S. would have lost 25,000 square miles of prospective oil reserves. Thanks to Hedberg's actions, the Senate requested that the USGS evaluate the oil potential of the deep Gulf of Mexico. As a consequence, this flawed version of the treaty was revised, and a more universally satisfying version of the Law of the Sea Treaty was finally ratified in 1982. This important policy issue proved essential for the deepwater oil and gas plays that are all-important in current Gulf of Mexico exploration, and in debate between countries over subsea economic rights, the boundary of economic influence is still known as the "Hedberg Line."

### **Leaman Harris, B.S. '60, M.S. 63**

During his tenure with the US Geological Survey, alumnus Leaman Harris co-authored regulations governing the oil and gas industry in the outer continental shelf of North America. These new regulations, published in the 1980s, required that companies comply with an amendment to the Outer Continental Lands Act, which Congress passed in 1978. The regulations dictated that companies first had to get a permit from the USGS before exploring and that they must gather geophysical data before they drilled any wells. The raw data the companies supplied to the USGS allowed the agency to create a comprehensive map of the coastal lease sale areas and determine reasonable values for these areas.

Harris spent the last 13 years of his career as a civilian employee at Tinker Air Force Base, arranging for proper collection and disposal of hazardous waste. This job allowed him to have a significant impact on present and future management policy. "When I came there in '89 they were generating roughly 9,000 tons a year of waste," he said. "EPA was sending violations to the base. Within 10 years we had reduced waste down

to 3,000 tons per year. We had no more violations. In 2002, my last full year of working there, Tinker was recognized for having the best environmental program in the whole Department of Defense." The waste reduction manual Harris wrote for Tinker Air Force Base, one of nearly 20 bases that come under the jurisdiction of the Air Force Materiel Command, became a model for Materiel Command bases around the country, including Warren Robbins AFB in Georgia and Wright Patterson AFB in Ohio.

### **Bill Crow, B.S. '56, M.S. '60**

KU Geology Alumnus Bill Crow spent his career as a geophysicist, first with Exxon and then at several of his own companies. In this capacity, he met current Texas Congressman John Culberson many times and became a volunteer in his various political ventures. After retirement, Crow turned a long working friendship into a new career in public policy. He now is Culberson's chief of staff. Though Crow says most chiefs of staff are younger than him, his interest and long experience in the private sector make him up to the task.

Though his home is in Houston, he spends about a third of his time at Culberson's offices in Washington.



*(From left) Congressman Culberson, Bill Crow and other staff members confer during the 2005 staff retreat.*

As a Chief of Staff, Crow is Congressman Culberson's eyes and ears. "It helps that I agree with him on key issues and priorities and can pursue them heartily, take some of the research leg work out of his job." Culberson's focus is on transportation mobility in

Houston. He also wants to work with both the public and private sector to encourage science and technological development in his state, which is something Crow is excited to help him do. "You could think of me as Culberson's facilitator, or cattle prod," he said. In particular, Crow has spearheaded Culberson's initiative to create the Alliance for Nanohealth, a consortium of the following research institutions of the Texas Medical Center: Baylor, the University of Texas Health Science Center in Houston, the University of Texas medical branch in Galveston, Texas A&M, Rice, and the University of Houston. The Alliance for Nanohealth was the first multi-disciplinary, multi-institutional collaborative research endeavor aimed solely at using nanotechnology to bridge the gaps between medicine, biology, materials science, computer technology and public policy. The other initiative Crow has helped Culberson garner funding for is research into nanoenergy, which takes place at NASA's Center for Nanotechnology. At the center, work focuses on experimental research and development in nano- and bio-technologies. The Center's primary mission is to use nanotechnology to meet NASA's future needs in electronics, computing, sensors, and miniaturization of all systems. This is all building on the initial research of nanotechnologist Dr. Richard E. Smalley of Rice University, who won the Nobel prize in 1996 for the discovery of a form of carbon called fullerene or the buckyball.

### Don Steeples

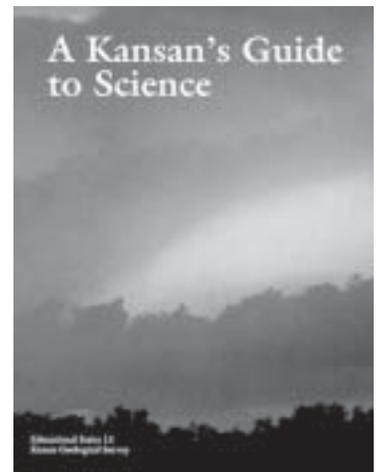
Geophysics professor Don Steeples has put his background in shallow seismic exploration to work many times in influencing public policy. In one of the most dramatic examples, he was serving on a National Academy of Science Committee that was ordered by Congress to investigate a mine disaster in Martin County, Kentucky. As a result of the study, Steeples and his colleagues recommended some demonstration projects be conducted that involved geophysical methods of finding abandoned coal mines. In 2002, little more than a year after the report was issued, America witnessed the dramatic rescue of nine men from a collapsed mine in Somerset, Pennsylvania. When asked during a hearing what they had done in response to the report Steeples and his colleagues had produced, officials with the Office of Surface Mining and Mining

Safety and Health Administration said they had done nothing. Congress gave them a directive to implement every recommendation in the report, thus protecting miners from similar disasters in the future.

### Bruce Lieberman and Roger Kaesler, M.S. '62, Ph.D. '65

For some time now, the Kansas State Board of Education has wrestled with the issue of evolution instruction. Two geology professors, Bruce Lieberman and Roger Kaesler, and several colleagues, turned their concern about the Board's move to de-emphasize evolution into a book, *A Kansan's Guide to Science*. Published by the Kansas Geological Survey in 2001, the book targets junior high and high school students and their teachers and addresses some of the false challenges to geological time, evolution and other scientific ideas. It points out that the pseudoscientific approaches to science instruction, such as those put forth by proponents of Intelligent Design, are not backed up by any actual data and, as such, amount to nothing more than "junk science."

Both men feel that each of the Board's moves to weaken scientific standards have been overtly political and patently wrong. "The energy I had for this related partly to the decision that, in moving here to teach, I had, in effect, decided to be a Kansan," Lieberman said. "I did not want to be associated with the anti-intellectual environment that others might ascribe to my state; nor did I want my children to be painted unfairly with that brush when they applied to colleges down the road." The battle with the Intelligent Design movement continues in Kansas. Faculty of the Department of Geology and Chancellor Robert Hemenway have spoken out strongly in favor of effective science teaching in Kansas.



## “Daddy” Haworth: the First Professor and Head of the KU Department of Geology and Mineralogy

By Dan Merriam (BS, 1949; MS, 1953; Ph.D., 1961)

Erasmus Haworth (pronounced Ha-Worth) was appointed Professor of Geology and Mineralogy at the University of Kansas in 1892. Several earlier appointments led to this. Chancellor J.A. Lippincott had resigned in 1889 and Regent W.C. Spangler was named Acting Chancellor. Professor Francis Huntington Snow was named President of the faculty. After another candidate turned down the position, Professor Snow was appointed Chancellor (Sterling, 1891, p. 101). An entomologist, Snow was eager for the University to build a reputation in the sciences, and to do so he hired several outstanding scientists, including paleontologist Samuel Williston, chemist E.H.S. Bailey, and Haworth. With these appointments came the modest beginning of the KU Department of Geology, even though geology courses had been taught since the University opened in 1866.

### Haworth’s Family Background

Haworth’s father was a farmer and Quaker minister. Erasmus was a fifth-generation descendent of James Haworth who had immigrated from England in 1678 to Bucks County, Pennsylvania. His ancestors left Bucks County for Vermillion County, Indiana, and then to Warren County, Iowa. His immediate family finally relocated to Cherokee County, Kansas. His mother was Matilda Folger, a native of Salem, Indiana (diZerega, 2004).

Haworth became a devout Quaker himself and a devoted family man. From his marriage to Ida Huntsman came four children, Henry Huntsman, Paul Eugene, Rose Elizabeth, and Margaret Josephine. Huntsman went on to become a successful consulting geologist in Wichita, Kansas.

In his later years, Haworth was a portly man, weighing 275 to 300 pounds and standing only 5 feet 9 inches tall. He was described not so elegantly by C.S. Griffin in his *The University of Kansas: a History*, as “a fat, hale, buff man.” (1974, p. 293) Haworth’s granddaughter Dottie gave a softer description of him as “a heavily built man with a fringe of gray hair in his later years.” (diZerega, 2004) Dottie’s pet name for Erasmus was “Grandpa Haw.”

### Haworth’s Role

“The guiding light [of the Geological Survey] in those early years was, without a doubt, Erasmus Haworth.” From *Rex Buchanan’s – To Bring Together, Correlate and Preserve*, 1989.

With Haworth’s background and interest in economic geology and his teaching experience at Penn College in Oskaloosa, Iowa, he was a natural addition to the KU science faculty and just the type of rigorous researcher and teacher Snow was looking for to put KU in the forefront in the sciences. (Fig. 1)

Haworth and colleagues Samuel Wendell Williston (biologist/paleontologist), and E.H.S. Bailey (chemist) formed the beginnings of not only the Department of Geology, but also the nucleus of the third and first modern Geological Survey of Kansas, which had been created in 1889, but remained unfunded until 1895

(Anonymous, 1988; Buchanan, 1984, 1989). The Survey had been established as a nonteaching unit of KU with Chancellor Snow as *ex officio* Director. (For a more complete history of the Survey see Schoewe, 1965 and Buchanan, 1989.)

Professionally, Haworth was one of the original fellows of the Geological Society of America, life member of the Kansas Academy of Science and KU Alumni Association, and member of Phi Beta Kappa, Beta Theta Pi and Sigma Gamma Epsilon.

According to R.C. Moore (1933a), Haworth laid the foundation for the study of geology in Kansas and in his memorial to Haworth said:

[He] takes rank as one of the foremost contributors to the development of geology in Kansas. In his writings, in the students that he trained, some of



Figure 1. Erasmus Haworth about 1887.

whom have gone to the farthest corners of the Earth, and in the personal memories that he has left, Erasmus Haworth has built for himself a monument more impressive than a costly edifice in stone, and one that will long endure.

This was indeed the highest praise that Moore could give his fellow faculty member and colleague and shows the esteem in which he held the older and more established Haworth.

Haworth was a prolific writer for the Kansas Geological Survey, publishing nearly 100 abstracts, papers, and books between 1889 and 1917 (a total of 2,955 pages according to Schoewe). His sister-in-law Hattie, Ida's sister, prepared many of the drawings and illustrations for his publications. He was an economic geologist with interests spanning all mineral resources. He reported on oil, gas and coal; lead, zinc and copper; limestone, clays, gypsum; and water. Though he reported mostly on the presence of these resources in Kansas, he also researched their reserves in Missouri and Oklahoma. His greatest single written contribution to geological studies is arguably the octavo volume, University (Kansas) Survey Volume IX, *Special Report on Oil and Gas* (1908) (Merriam, 2002).

In his youth in Galena in the Tri-State Lead and Zinc District in southeastern Kansas, Haworth had developed his interest in mining. Presumably his curiosity and interest in geology came from activities in this area as well. The lead, zinc, and coal mining had been known and exploited since the Civil War (Clark, 1970). Zinc was discovered in Cherokee County in 1872 and local smelting of the ore was introduced a few years later.

His stratigraphic interests included the Precambrian crystalline rocks of Kansas and Missouri, the Coal Measures of eastern Kansas, and the McPherson Equus beds. Interspersed with his scientific contributions were historical papers and annual reports. Geologically, he explored the life history of rivers, the physiography of western Kansas, and the topography of eastern Kansas.

He was responsible for constructing several regional cross-sections showing the relation of rock units both horizontally and vertically. From extensive field work, he produced a block-diagram and geologic map in 1896 and, in 1908, produced the first "modern"

color geological map of the state, which was a revised version of an earlier map (Merriam, 1996).

### Haworth and the Survey

Many Kansas Geological Survey volumes were either authored by Haworth or completed under his direction between 1896 and 1915. Cross-sections and maps illustrated many of them. In 1896, he published *Geology of Eastern Kansas*, which contained a comprehensive and detailed description of the geology in the eastern part of the state. In 1897, he published *Geology of Western Kansas* with the assistance of Williston, Prosser, and Logan. This volume contained descriptions of the physiography and stratigraphy of the Upper Permian, Lower and Upper Cretaceous, Tertiary, Equus Beds, and Pleistocene. In 1898, he published the *Special Report on Coal*; Williston published *Paleontology, Part I*. This was followed by Haworth's *Special Report on Gypsum and Gypsum Cement* in 1899. 1902 to 1904 produced *Paleontology, Part II* (Williston); *Special Report on Mineral Waters* (Bailey); and *Special Report on Lead and Zinc*. *Special Report on Oil and Gas* came out in 1908 and *Special Report on Well Waters in Kansas* came out in 1913, written for the lay reader after a particularly dry season. The 1915 publication, *Crystalline Rocks in Kansas* is an interesting story, written after well drillers at Zeandale and Elmdale encountered granite at a shallow depth. Haworth refused to acknowledge the presence of granite because he felt that it would condemn large areas of the state for oil and gas production. In fact, the well drillers had encountered the Nemaha Granite Ridge, which was defined and named by R.C. Moore and Winthrop Haynes in their comprehensive KGS Bulletin 3 in 1917.

All of this additional research and writing on Haworth's part was associated with how he saw his role as the State Geologist. He modeled these reports on those written by two early State Geologists, Benjamin Mudge (1866) and George Swallow (1866) (Merriam, 2002). He involved his advanced students in the associated fieldwork and supervised them closely. He surely must have used the results of their findings in his classroom teaching as well.

Moore (1933b) divided Haworth's career-long scientific explorations into four stages. The first was devoted to mineralogy and igneous petrology of Missouri. Next, he focused his interests on the

stratigraphy and aerial geology of Kansas. In the third stage, his research interests were economic geology, including oil and gas, metals, and water. Lastly, his interests became philosophical in nature.

### Haworth's Geology Department

*"So teaching to him was much more than a means of livelihood, it was the joy of awakening other minds to the beauties and the glories in which his own spirit reveled."* – From Darthea diZerega's Erasmus Haworth.

Just prior to Haworth's arrival at KU, prospective geology students had to meet course requirements in English, hygiene, mathematics, a foreign language, chemistry, botany, history, logic, psychology, surveying and zoology. Geology and mineralogy had been taught at KU since the opening of the University in 1866. Francis Snow, Professor of Natural Science, taught both course offerings: two sessions of mineralogy in the student's junior year and one session of geology in the senior year. In 1874, George E. Patrick, chemist, joined the faculty and took over teaching the mineralogy course(s) and later E.H.S. Bailey and then E.C. Franklin taught the courses.

In the early days, geology and mineralogy were electives for upper class students in the science option for a Bachelor of Science degree. The courses had lectures (usually an hour a day, every day), laboratory work, and practicals. The geology textbooks included LeConte's *Elementary Geology*, Dana's *Textbook of Geology*, Dana's *Manual*, Elderhoist's *Blow Pipe Analysis*, Scott's *Geology*, and von Zittel's *Handbook*.

By 1892, when Haworth arrived at KU, the faculty had grown to 45 professors and lecturers (Taft, 1941), and he found Wendell Williston teaching geology and Ed Bailey in the chemistry department teaching mineralogy. Haworth immediately set out to offer a series of courses necessary for undergraduates to obtain a geology degree. The courses had prerequisites and almost every course met daily and was accompanied by a lab. The Department advertised in the Annual Catalogue that they had a mineralogy and geology cabinet of 50,000 specimens from Kansas and the Rocky Mountains.

Until 1903, the course work was divided into hard rock geology, physical geology, mineralogy, and

petrography taught by Haworth, and soft rock geology, historical and physiology taught by Williston. Haworth's course offerings were Elements of Mineralogy and Petrography, Systematic Petrography, Elementary Petrography, Elements of Physical Geology, and Economic Geology. In addition to the course work and lab, fieldwork was also required of advanced students. Haworth also held a course in Elements of Mineralogy and Petrography for civil engineers that met daily. Williston's course offerings were Historical Geology, Anatomy, and Physiology and Systemic Paleontology. He also taught four biology courses: Histology, Vertebrate Anatomy, Anatomy of Invertebrates, and Invertebrate Zoology. The Department's graduate course offerings included Advanced Mineralogy (Haworth), Advanced Petrography (Haworth), Dynamic Geology (Haworth), Special Work in Paleontology (Williston), and Fieldwork in Geology, Mineralogy, and Petrography (Haworth or Williston). The field course was for advanced students only and was confined to Kansas.

The Department was formed as a geology and mining department in the School of Engineering. Later, the Department of Geology was included in the College of Liberal Arts and Sciences where it now resides. The Department faculty was gradually enlarged through the years to nine by the mid-twentieth century to accommodate the additional fields added to the geological sciences. The Department began to change and modernize when R.C. Moore became chair. That change accelerated just after WWII with the return of the GI veterans, who were older and more serious students. The new chair, R.C. Moore (1933a, 1933b) had only praise for Haworth as a professor, calling him "a capable and inspiring teacher." He stated that his lectures were well-organized and illustrated and presented with good humor and that he gave graphic descriptions of his personal observations (Fig. 2).



Figure 2. Erasmus (Daddy) Haworth, probably about 1909.

## Retrospective

Since 1875, KU has had a master's program, with Haworth's Department granting nine between his arrival and 1920, the first granted in 1895.

In 1949, the Department recognized Haworth's contributions to geology, the Department and the University by creating three Haworth Awards, undergraduate, graduate, and alumni. This recognition is still conferred annually on graduates of the Department of Geology.

### Relation of the Geological Survey and the Department of Geology

The fruitful relationship between the Survey and Department developed early on when Haworth was appointed head of the Department and later designated State Geologist. Both organizations were in the same building and shared facilities. Moore was Haworth's replacement as State Geologist, and when Haworth retired as head of the Department, Moore assumed that responsibility too. Beginning with Haworth's tenure there, the cooperation between the Department and the Survey was and still is excellent and symbiotic.

### Haworth Hall, Daddy Haworth's Lasting Memorial

Because Haworth was such a favorite professor, students petitioned the Board of Regents in 1910 that the one-year-old, \$50,000 Geology and Mining Engineering building be named Haworth Hall in honor of Daddy. The name change for this building, built from Oread Limestone quarried just above Potter's Lake, was approved by the regents, an outstanding honor that illustrates the esteem that both students and the University felt for Haworth (Fig. 3).



Figure 3. Haworth on KU campus newly opened in 1909. Daddy's daughters Rose and Margaret are on the front steps.

The geology faculty was well-established by the early part of the 20th century. The Department had moved progressively westward from old Snow Hall on the southeast corner of Mississippi Street and Jayhawk Boulevard to Haworth Hall, where it had an annex in the back (Fig. 4). The annex contained the mining and ore-dressing laboratories and facilities for faculty and students (Griffin, 1974, p. 239). In 1911, a Clay Working Laboratory was built on the south end of the annex (Fig. 5).

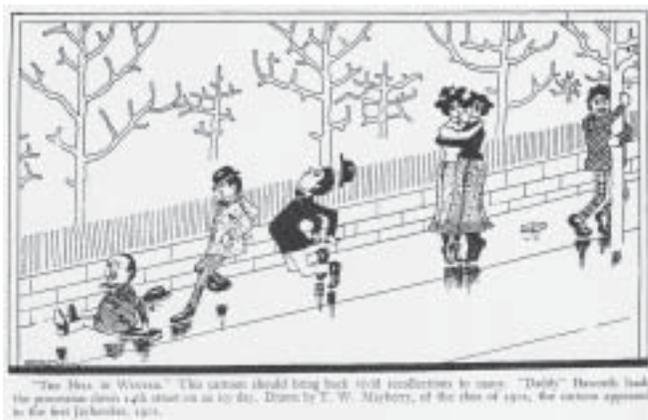


Figure 4. Daddy Haworth with students depicted going down the 14th-Street Hill in winter (cartoon by T. W. Mayberry from the 1901 Jayhawker).



Figure 5. Haworth Annex (left center) viewed from the south looking north across Mt. Oread in 1922.

In 1945, the Department of Geology moved to the newly built Lindley Hall, where it is housed now. Unfortunately, Old Haworth Hall was razed in 1970 to make room for Wescoe Hall. The current Haworth Hall is located down the hill, to the south from where the old building stood and it houses the Division of Biological Sciences.

## Haworth's Exodus from KU

So why did Haworth leave KU? By 1915, Daddy had been doing a considerable amount of consulting work in the oil and gas and water industries. He was mainly responsible for the discovery and development of the giant El Dorado oil field in Butler County and for Wichita's water supply. He had consulted on pollution and disposal problems as a member of the Kansas Irrigation Commission and was geologist for the Kansas Board of Agriculture. All of these additional responsibilities probably made him feel the need to be free from state responsibilities. In 1915, he resigned his position as State Geologist but remained head of the Department. By 1920, he was 65 years old and had been teaching and head of the Department for 28 years. The assumption is that Haworth was tired and wanted to do something else in his remaining years. The final exodus came in 1920 when Daddy severed his connection with the university to devote himself to his consulting business in Wichita. He died on November 18, 1932 at the age of 77.

Daddy's final resting place is alongside his beloved wife, Ida, in the mausoleum at 21st and Hillside in Wichita (Fig. 6)



Figure 6. Haworth's final resting place in (A) Mausoleum at 21st and Hillside in Wichita of (B) Daddy and his (C) wife Ida.

## Acknowledgments

I would like to thank Del Shankel, Bill Hambleton, and Rex Buchanan for reading a preliminary version of this manuscript and offering suggestions for its improvement. Barry Bunch, KU archivist, kindly provided information from the University Archives. I would also like to thank Warren Corman, University Architect, for providing information on university buildings and verifying some of my statements. Darthea (Dottie) diZerega is thanked for information on her grandfather. James D. Merriam deftly digitized the illustrations, and as always, Janice Sorensen helped with the literature search in her inexplicable and efficient way.

## Resumé of Daddy Haworth's Life

1855, born 17 April in Belmont Township, Warren County, Iowa  
1866, moved to Cherokee County, Kansas

- 1876, matriculated to the University of Kansas; worked his way through college as a janitor
- 1881, graduated with a B.S. at KU
- 1883, accepted a teaching appointment at Penn College in Oskaloosa, Iowa
- 1884, received his M.S. degree from KU with a thesis entitled *A Contribution to the Geology of the Lead and Zinc Mining District of Cherokee County, Kansas*
- 1888, granted a Ph.D. from Johns Hopkins University with a dissertation on *A Contribution to the Archean Geology of Missouri*
- 1889, married Ida E. Huntsman
- 1892, resigned his position at Penn College and accepted a professorship and head of the Department of Geology and Mineralogy at KU
- 1894, became *de facto* State Geologist and Director of the University Geological Survey (the 3rd Kansas Survey)
- 1914, resigned his position as Director of the Geological Survey but retained chairmanship of the Department
- 1920, resigned his position at KU to enter the consulting field full time.
- 1932, died 18 November in Wichita, Kansas, at the age of 77.

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## Degrees Awarded December 2004-May 2005

### Graduate Degrees

Daniel I. Hembree Ph.D.  
*"Biogenic Structures of Modern and Fossil Continental Organisms: Using Trace Fossil Morphology to Interpret Paleoenvironment, Paleoecology, and Paleoclimate"*

Brian Keith Macy Ph.D.  
*"Ray Tracing and Parameter Estimation for Anisotropic Depth Imaging"*

David Barnes Bradley M.S.  
*"The Kinematic History of the Coaldale Fault and Its Implications for the Mina Deflection, Nevada"*

Juan Pablo Centeno M.S.  
*"Exhumation and Incision History of the Torngat Mountains, Northern Labrador, Canada, Using Apatite (U-Th)/He Thermochronology"*

Daniel Howard Chaikin M.S.  
*"Sedimentology of the Triassic Bianyang Formation, Guizhou Province, China"*

Brian Tyler Hughes M.S.  
*"Microbial Attachment to Iron and Phosphorous Minerals Using Field and Laboratory Studies"*

Troy Anthony Johnson M.S.  
*"Stratigraphy, Depositional Environments, and Coalbed Gas Potential of Middle Pennsylvanian (Desmoinesian Stage) Coals-Bourbon Arch Region, Eastern Kansas"*

Brian Frederic Platt M.S.  
*"Ichnology, Sedimentology, and Paleopedology of the Upper Jurassic Morrison Formation, Bighorn Basin, Wyoming with an Emphasis on Paleoenvironmental Interpretation and Vertebrate Trace Fossils"*

Heather C. Ross M.S.  
*"Utility of Multi-Level Slug Tests to Define Spatial Variation of Hydraulic Conductivity in an Alluvial Aquifer, Northeastern Kansas"*

Paul Daniel Vincent M.S.  
*"Frequency-Domain Least-Squares Filtering of Data from Square-Tubing-Mounted Geophones"*

Edward Louis Washburn M.S.  
*"Paleotopography and Sea-Level Controls on Facies Distribution and Stratal Architecture in the Plattsburg Limestone (Upper Pennsylvanian), NE Kansas"*

### Undergraduate Degrees

James T. Lyons B.A.  
 Janet Lee Patchen B.A.  
 Nha Yang B.A.  
 Abdullah AbdulRahman AlQahtani B.S.  
 Hamdan M. Alharbi B.S.  
 Natalie Lynn Burris B.S.  
 Christopher Cole Carey B.S.  
 Michael Wayne Christie B.S.  
 John P. Desmond B.S.  
 Robert C. Eslick B.S.  
 Jack Allen Garven B.S.  
 Adam Linden Kueker B.S.  
 Nicholas Matthew Maciaszek B.S.  
 Noah Michael Stimac B.S.  
 \*Kelly Marie Wooten B.S.

\*Graduated with Departmental Honors

## **STUDENT GRANTS AND AWARDS**

- Aisha Al-Suwaidi** ➤ Research Grant, given by the Geological Society of America: \$1,500
- Terrence Blackburn** ➤ Research Grant, given by the Geological Society of America: \$1,500  
➤ Winner, Graduate Student Division of Sigma Xi paper competition
- Matt Brown** ➤ Scholarship, Given by the Kansas Geological Foundation: \$1,100
- Vionette DeChoudens** ➤ Karst Research Grant, given by the Cave Research Foundation: \$500
- Terrence Dewane** ➤ Scholarship, given by the Geological Society of America: \$1,000
- Marty Dubois** ➤ Jules Braunstein Memorial Award for 2003 American Association of Petroleum Geologists best poster session, along with colleagues Alan Byrnes, Evan Franseen, and W. Lynn Watney
- Natalie Givens** ➤ Scholarship, given by the Southwest Section of the American Association of Petroleum Geologists: \$1,000  
➤ Scholarship, given by the Dallas Geological Society: \$1,000  
➤ Scholarship, given by the Desk and Derrick Association: \$1,500  
➤ Scholarship, given by Encana: \$3,000
- Christian Hager** ➤ Research Grant, given by the Geological Society of America: \$1,500
- Kimberly Kissing** ➤ Undergraduate Research Award, given by the KU Honors Department: \$1,200
- Emily Laut** ➤ Elected to the Golden Key Honor Society  
➤ Elected to the Phi Beta Kappa Society
- Qi Lianshuang** ➤ Fourth Place in the American Association of Petroleum Geologists student paper competition special poster session for “Geostatistical 3D Reservoir Modeling of Mississippian St. Louis Carbonate Reservoir Systems, Kansas”
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- Marcello Minzoni** ➤ Postgraduate Grant, given by the International Association of Sedimentologists: \$1,000 Euro
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➤ Scholarship, given by the Kansas Geological Foundation: \$550
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- Kit Tincher** ➤ Research Grant, given by the Geological Society of America: \$1,500

## 2005 Honors Banquet

The Department of Geology faculty and students met for the annual Honors Banquet on April 30, 2005. Some of the following honors, fellowships, scholarships, and awards were announced:

### **JAN F. & MARY VAN SANT GEOLOGY EXCELLENCE AWARD**

Stephen T. Hasiotis

### **ERASMUS HAWORTH HONOR AWARDS**

#### **Outstanding Undergraduate Student**

Emily A. Laut

#### **Outstanding Master's Student**

Brian F. Platt

#### **Outstanding Ph.D. Student**

Daniel I. Hembree

### **SUMMER SUPPORT**

#### **August L. Selig Summer Research Grant**

Aisha Al-Suwaidi	Michael Benjamin
Michael Bruemmer	Michelle Dambacher
Bradley Didericksen	Marcello Minzoni
Julie Retrum	Benjamin Rocke
Stacy Rosner	Jon Smith
Jeffrey Schroeder	Emily Tremain

### **GRADUATE SCHOLARSHIPS**

#### **Angino Geochemistry Scholarship**

Vionette DeChoudens

#### **Lloyd Henbest Scholarship**

Jon Smith

#### **Frederick T. Holden Scholarship**

Terrence Dewane	Bradley Didericksen
Nazim Louni	Benjamin Rocke

Jeffrey Schroeder

#### **Bill & Carolyn Holland Scholarship**

Steve Schurger

#### **H. A. & Elsie Ireland Scholarship**

Michael Bruemmer	Natalie Givens
------------------	----------------

Jessica Ludwig

#### **Roscoe G. Jackson II Scholarship**

James Adamski	Terrence Blackburn
Beth Johnson	Nathan Winters

#### **Ralph C. Lamb, Jr. Geology Fund**

Sarah Tsoflias

#### **Leo M. & Harvy M. Orth Water Resources Scholarship**

Brett Engard

### **Joseph Patterson Scholarship**

Christian Hager	Michael McGlashen
Julie Retrum	

### **James A. & Rowena E. Peoples Scholarship**

Gerard Czarnecki	Jonathan Jarvis
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### **UNDERGRADUATE SCHOLARSHIPS**

#### **Dean A. McGee Scholarship**

Cody Buller	Jacqueline Grunau
Mark Hadley	Jared Jevons
Kimberly Kissing	Amber Lyons
Melissa Marietta	Emily McWilliams
William Scriven	James Snow
Alec Waggoner	

### **Ray P. Walters Scholarship**

Keith Beisner	Robert Brewer
Travis Glauser	

### **GEOLOGY 360 SCHOLARSHIPS**

#### **Frederick T. Holden Scholarship**

Nicole McDaniel	William Scriven
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#### **Lehman Scholarship**

Christopher Bieker	Pema Deki
Travis Glauser	Chen Kwan Yee

#### **Joseph Patterson Scholarship**

Rebecca Totten

### **FIELD CAMP SCHOLARSHIPS**

#### **Bradley Memorial Scholarship**

Randy Ackerman

#### **Louis F. & Bets Dellwig Field Camp Scholarship**

Keith Beisner	Cody Buller
Brady Johnson	Amber Lyons
James Snow	Alec Waggoner

#### **Imogene Herndon Scholarship**

Emily McWilliams

#### **Joseph Patterson Scholarship**

Mark Hadley	John Jarvis
Kimberly Kissing	Jeremy Watson

## Everyone Loves a Party

G-Hawks know how to have fun and that fun grows exponentially when you get a large group of them in the same room. Since last year's *G-Hawker* went to press, the Department of Geology has tried hard to provide opportunities for G-Hawks to get together with old friends and to make new ones with four well-attended G-Hawk Receptions.

### GSA '04

Everyone loves Denver and the mountains, and the recent GSA annual convention brought out a flock of G-Hawks. The party there was attended by more than 50 alumni and friends of the Department of Geology. It



*Jerry Hodgden, Paul Enos, Carol Enos, and Pat Bickford at the GSA Annual Convention.*

was particularly fun in that so many alumni had an opportunity to meet a large group of current students from the Department. If the GSA annual convention is in your area in coming years or if you are attending the meeting, expect us to be there. There is no need to attend the meeting to attend the reception. Just come on by.

### Houston '05

Other than the Lawrence-Kansas City area, our greatest concentration of G-Hawks is in the Houston area. In February, Bob Goldstein and Liz Gravatt escaped the cold in Lawrence and headed for the warmth of Texas to put on a party for about 70 friends and alumni of the Department. It was a great group, who effectively gobbled up a large amount of Mexican food and depleted the stocks of the bar. Bob Goldstein caught everyone up on the doings in the Department



*Marios Sophocleous, Dan Merriam, Will Gosnold and Allen Macfarlane at GSA.*

and unveiled party favors for the entire group, the new G-Hawk lapel pin (R. C. Moore edition). Look forward to another such event this winter if you are in the Houston area.



*Nathan Winters, Kit Tincher, Patrick Brand, and Terry Blackburn at GSA.*

### Field Camp Reunion '05

"There's no place like Cañon City... There's no place like Cañon City" (attributed to Dorothy after finishing KU's field camp). In June, between the two sessions of field camp, there was an extended G-Hawk Reception held in Cañon City Colorado. With 40 in attendance, the first night was a roast of Roger Kaesler, to celebrate his many years of teaching field geology and his upcoming retirement. The next day invited attendees to go on geologic field trips in the area

## Alumni News



*Jane Stotts and Ann Walton at the field camp reunion.*

led by Tony Walton and Steve Hasiotis. The event culminated in a barbecue at the field camp, and included alumni and friends of the Department, neighbors, and all of the current students. By the end of the night, we were all feeling satisfied with stomachs full of barbecue and ears full of various field camp stories.



*Tony Walton leads an alumni field trip at the field camp reunion.*

### AAPG '05

A sizeable flock of G-Hawks flew north this summer to Calgary, to attend the AAPG annual convention and to roost at the G-Hawk Reception. With 50 in attendance, it was a fun time with many alumni meeting up with friends they had not seen in years. As you can imagine, we overstayed our

welcome at the hotel and they eventually had to shoo us out of the room, an hour after the birds should have flown. As with all of these receptions, there is no need to attend the meeting to attend the reception. Just come on by.



*Jeri and Roger Kaesler at the field camp reunion.*

Look for events this year. The Department is already planning upcoming G-Hawk Receptions in Oklahoma City, Houston, and at GSA in Salt Lake City and AAPG in Houston. If you would like to help us organize a G-Hawk reception in your area, please call or e-mail Bob Goldstein (gold@ku.edu; 785-864-2738) or Liz Gravatt (egravatt@ku.edu; 785-864-5628).



*Joel Alberts, Clay Roark, and Steve Hasiotis at the G-Hawk Reception at the AAPG in Calgary.*

## 1942

ALLEN, CHARLES M., 7821 W. 76<sup>th</sup> St., Tulsa, OK 74133. BA '42. Retired as geologist with Phillips and now do independent consulting.

LEY, ROSS H., 6335 W. NW. Hwy. #1211, Dallas, TX 75225. BS '42. Considering my age of 84, I'm in relatively good health but don't walk as well as I used to. My oldest granddaughter is starting her fourth year at the University of Kansas Medical School where I was stationed in 1943-44 as a 22-year-old lieutenant in charge of the Army Specialized Training Program for the medical students who had chosen the Army. Taught ROTC at KU in 1942-43 before ending up in Dutch New Guinea in 1945-46. Haven't been active in the oil business since 1990.

SWAIN, FREDERICK M., 1625 E. River Terrace, Minneapolis, MN 55414. PhD '44. Retired Professor - University of Minnesota. My web site shows recent activity: <http://www.geo.umn.edu/people/profs/swain.html> Downloadable files are linked to this web site.

## 1945

HAYWARD, O.T., 7820 Tallahassee, Waco, TX 76712. BS '45. I graduated from KU, June of 1945 with a BS in petroleum engineering—a botched together degree to substitute for what was then called geological engineering--, a program dropped in 1944 or 45. According to my calculations that was 60 years ago. Of course there has been amazing change in geology, yet some of the problems that appealed to me then still exist waiting to be solved or at

least messed around with even today. One that has appealed to me for at least the past 50 years as a peripheral interest—but always there when I want it—is the geomorphic evolution of the Lampasas Cut Plain. It's a particularly beautiful landscape with what is obviously a complex structural history and geomorphic evolution. It is further identified with outstanding and well-distributed barbecue joints and suitably isolated coffee and pie stops. In my intent there is no anticipation of a scholarly publication—or any publication at all—it is just there when I need it, and it never disappoints. I recommend to every geologist, particularly with a field background—that they set aside a problem similar to this with no anticipation of ultimate publication—but just for deep contentment when that becomes desirable. Try it. You'll like it.

## 1946

STEGER, MAZZIE LANE, 12384 Grandee Rd., San Diego, CA 92128. BA '46. I'm looking forward to receiving this year's *G-Hawker*. It's always welcome news.

## 1947

CARLOS, DON F., 722 W. Kenneth Rd., Glendale, CA 91202-1449. BS '47. Vice President, Getty Oil Co.

GILKISON, D.C. (GIL), 3700 Watonga #1618, Houston, TX 77092. BS '47. Have continued to live in Houston since 1947, however, I make frequent trips to Kansas to visit my brothers and sister. My youngest daughter

received her Geology degree from Texas University and after a brisk stint in the oil business became an ecology geologist. Still have pleasant thoughts of the Department of the 40's and try to keep in touch with everyone through the *G-Hawker*. I'm still enjoying good health attributable to genes, not clean living.

## 1948

HOLLAND, JR., F.D. (BUD), 2303 8<sup>th</sup> Ave. N, Grand Forks, ND 58203-2969. BS '48. Now retired 16 years, Mardi and I took a 60<sup>th</sup> wedding anniversary Diamond Princess cruise up the inland passage from Seattle to Skagway in July after I revised and resubmitted Jim Parks' biography of Doc Laudon to the University of Wisconsin Press copy editor, following Jim's unfortunate death on Jan. 29, 2005. The book should come out in 2006.

MCBEE, JR., WILLIAM (BILL), 8519 E. 33 Pl., Tulsa, OK 74145. MS '48. Research leading to publication. Geological oral presentations to Kansas Geological Society (3), Oklahoma City, Ardmore, Tulsa (3), and West Texas Geological Societies.

MEEK, JOHN W., 2304 Grandview Dr., Plano, TX 75075-8349. BS '48. Retired from Onyx Exploration and Production.

MEEK, MARILYN, 7021 Verde Dr., Kansas City, KS 66109. BS '48. Retired in 1991 from the Boy Scouts. Leading a quiet life.

## 1949

FAIRCHILD, PAUL W., 110 Calypso Dr., Lakeway, TX 78734.

# ALUMNI NEWS

MS '49, BS '47. Retired petroleum geologist.

GREER, WILLIAM J., 13635 Butterfly Ln., Houston, TX 77079-7020. BS '49. I'm still in good health and climbing 14-ers from my Colorado house (Estes Park).

HALL, H.H. (HUB), 836 N. 1917 Rd., Lecompton, KS 66050. BS '49. Retired oil finder.

MANN, RAYMOND KEITH, 12507 Indian Wells Dr., Houston, TX 77066-2306. BS '49. Ray achieved octogenarian status last year and added another year in August. Delores and he will be moving to a new house a little farther out in the "burbs" this fall. At that time, their address will change from Houston to the quaint sounding town of Tomball, Texas.

## 1950

ALLEN, C. ROGER, 4219 Wimbledon Dr., Lawrence, KS 66047. BS '50. Busy keeping healthy. Holding at seven grandchildren, one of which attends KU as a math major. We also have one great-grandson.

LAMMONS, JAMES M., 4910 Charade Dr., Houston, TX 77066-2625. BS '50. Retired geologist.

MITCHELL, PORTER H., 9977 South Falconcreek Dr., Highlands Ranch, CO 80130. BS '50. Still enjoying retirement. Have always appreciated the opportunities that my geology degree offered me. During the Korean War, I was a multiplex operator as an enlisted man and a photomapping officer after getting a direct commission. After the war, I worked 31 years for Mobil as a development and

exploration geologist. Have fond memories of KU's summer field camp near Cañon City.

THALMAN, ALBERT L., PO Box 900, Newcastle, OK 73065. BS '50. Retired petroleum geologist.

TYLER, ALBERT N., 10808 Carissa Dr., Dallas, TX 75218. BS '50. Retired Manager of Geology of Sun Prod. Co.

## 1951

ADAMS, WILLIAM L., 4404 Ridgehaven Rd., Ft Worth, TX 76116. BS '51. Retired, former Chairman & CEO Union Pacific Resources.

DAVIS, STANLEY N., 6540 West Box Canyon Dr., Tucson, AZ 85745. MS '51. I am in reasonably good health and enjoy extended visits to our cabin in the White Mountains of Arizona. Since the cabin is at an elevation of 8,200 feet, it affords relief from an extra hot summer in Tucson. I continue with research and writing having just finished a study of the distribution of bromide in potable ground water. This was in cooperation with scientists at Los Alamos National Laboratory. Also, my wife and I have completed a book-length history of hydrogeology in the United States.

FLOTT, ELGIN L., 1105 Timberlane Dr., Sabetha, KS 66534. BS '51. Retired from insurance and geology.

JONES, RICHARD K., 305 Asbury Rd., Lafayette, LA 70503. BA '51. Korean War started in June of '50, while I was attending field camp in Colorado. I was

allowed to graduate then entered army in '51 and served as a Platoon Leader & Company Commander in Korean War. Worked as a surface geologist in Egypt for three years for Continental Oil Co. Left Conoco after 11 years and have been in independent geology in Louisiana for the last 40 years. Enjoying life here and still checking some oil deals from time to time. My two daughters are geologists living in Maine and Virginia.

JONES, ROBERT L., 22725 N. Dusty Trail Blvd., Sun City West, AZ 85375. BS '51. Retired and moved to Arizona in 1994. Presently serving as director of PORA (our quasi government) because Sun City West is an unincorporated area. I'm the Commissioner of the Arizona Oil and Gas Commission. I'm also vice chairman. I'm a Commissioner on the Maricopa County Planning and Zoning Commission. I'm also, active in three singing groups and one symphonic band.

TAPPAN, GEORGE, 3618 Highgreen Dr., Kingwood, TX 77339-2627. Retired – International Exploration. Very busy trying to keep up with the many activities of the young families.

## 1952

BEU, VIRGINIA I. & ROBERT D., 30 Hillcrest Dr., Weaverville, NC 28787. (Virginia) BS '52; (Robert) MS '52, BS '50. We are still enjoying retired life in North Carolina. Very busy with keeping up with grandchildren and children; bridge (Ginny); golf (Bob); College for seniors at UNCA; and travel.

1949 - 1952

1952 - 1955

CARLSON, WILLIAM (BILL) A., 11257 West 26<sup>th</sup> Pl., Lakewood, CO 80215-7102. MS '52. Nothing really to report. Just glad to be alive, active and in reasonably good health.

HAYNES, EDWARD H., 93 Oakbrush Dr., Pagosa Springs, CO 81147. MS '52, BS '51. Still in Pagosa. Enjoyed the KU summer field camp reunion! Off to Alaska to play Grandpa this summer.

SQUIRES, DONALD, 34 Davey Place, South Hobark 7004, Tasmania, Australia. MS '52. Retired – Paleontologist.

## 1953

ADAMS, CURTIS E., 1255 W. 5175 S., Riverdale, UT 84405. BS '53. My wife, Dony, and I are enjoying our golden years here in Utah (Ogden area). I am 80 and she is 74. We are in good health. I am an elder in the Presbyterian Church and on the facilities committee. We like to travel. We just got back from the Oregon coast. I carry a rock hammer in my trunk and geology highway maps in my briefcase. When my wife drives, I keep track of the formations along the roadside. I am a charter member of Sigma Gamma Epsilon, an honorary earth scientist's fraternity. Dr. Ireland, Dr. Dreyer, and others I don't remember helped in my initiation, which was at night and very much like the old quail-hunting ruse. I really would like to have attended the Cañon City summer camp reunion last year as I attended camp there some 40 years ago. Will continue on net.

ARMSTRONG, JERRY D., 1513 Cottonwood Ln., Greenwood Village, CO 80121. BS '53.

Partner in BSA Exploration.

## 1954

BIGELOW, JR., NELSON, PO Box 2353, Augusta, ME 04338. MA '54. I've been operating this computer business for almost 15 years, and have been having more fun than in any job I've ever had. A possible exception might be running a refraction seismograph crew for Maine State Highway Commission (later Department of Transportation) in the late '60s that involved setting up the crew, installing the equipment, and working out procedures for the interpretation of the data.

DOUGLASS, M.R. (BOB), 42 Shadow Lane, Destrehan, LA 70047. MS '54, BS '52. Still active. Currently building a small E & P Company (VADA Energy LLC.)

MALONE, DON, 164 S. Fountain, Wichita, KS 67218. Six children, all professionals (medicine, engineering, management); 26 grandchildren, most recent born May, 31 '05. Beautiful little girl. One great grandchild, also handsome little boy. Involved in church-related volunteer work.

NICHOLAS, RICHARD (DICK) L., 3813 Grenville Dr., Charlottesville, VA 22903. MS '54. Still living in the foothills of the Blue Ridge Mountains in Virginia. Keep active in tennis, historical research and Civil War history. Visit the State Geological Survey nearby from time to time to have coffee and conversation with the geologists. Named our county road Grenville to reflect the age of the rocks and geological province on which we live.

RITCHIE, A. SCOTT, Ritchie Exploration, Inc. PO Box 783188, Wichita, KS 67278. BS '54. Oil producer/operator.

TOUGAW II, LAWRENCE M., 7925 W Layton Ave. #302, Littleton, CO 80123. BS '54. Retired - contract engineering.

## 1955

DENNY, L.M. (MICK), 3509 Shell Ave., Midland, TX 79707. BS '55. Owner – LM Denny Consulting. Same old consulting since 1983! Love the oil prices. Lee (wife) still in the real estate business since 1964! Three sons grown and gone on with their own lives. Five grandchildren. All in Texas.

SCHWARZ, KENNETH, PO Box 226, 202 Monroe St., Sackets Harbor, NY 13685. Graduate work 1954-55, then mandatory military service in USAF 1955-58. Enjoying retirement. Went to 50<sup>th</sup> Reunion at Notre Dame last year and planning on good time at 50<sup>th</sup> wedding anniversary this December. Four children, seven grandchildren plus one more due in February. Good health, good wife, good times, good life! Wish this for everyone!

SWITZER, JOHN W., 4910 W. 69<sup>th</sup> Terr., Prairie Village, KS 66208. BA '55. Retired from the photography department, *Kansas City Star*.

THORDARSON, WILLIAM, 1453 Belfort Ln., Mt. Pleasant, SC 29466-8103. Non-degree grad student '53-'55. Retired hydrologist in the U.S. Geological Survey.

# ALUMNI NEWS

UNDERWOOD, JR.,  
PRESCOTT, 749 Idaho Ave.,  
Sheridan, WY 82801. MS '55, BS  
'51. Older daughter Sandra now a  
resident of Bozeman, MT and a  
Ph.D. candidate for doctorate at  
MSU in volcanology (subject, St.  
Helens, OR).

## 1956

BOKER, THOMAS A., 13800  
Plantation Way, Edmond, OK  
73013. Wife: Judy. Four children,  
five grandchildren. Career: W.S.  
(Oklahoma, Texas), oversee  
Guatemala, Cuba, Spanish Sahara.

ENOS, PAUL, 1825 Castle Pine  
Ct., Lawrence, KS 66047.  
Retirement from KU in 2003 was  
to give me time to finish a lifetime  
of projects in progress. So far they  
are still works in progress, but  
collaboration with students resulted  
in a paper at GSA last November  
and one in Croatia in September.  
These destinations keep wife Carol  
(Ed '57) from spending excessive  
time on her Shakespeare projects.  
Meanwhile, it's great to have  
grandchildren (5), aged 3 to 11, for  
playmates.

HODSON, WARREN G., 2710  
Newmarket Cir., Tallahassee, FL  
32309-2600. MS '56, BS '53. I  
enjoy reading the *G-Hawker*  
immensely.

## 1957

BEAVER, HAROLD R., 4332  
Beekman Dr., Nashville, TN  
37215. BS '57. I sold my  
engineering company. I still  
produce oil and gas from two fields  
I operate in east Tennessee. Any  
time anybody is through Nashville  
give me a call.

KLEIN, GEORGE D., 17424 W.  
Grand Pkwy., Suite 127, Sugar  
Land, TX 7747-2566. MA '57.  
George D. Klein, MA '57. I still  
work as a consulting geologist.  
One of my clients and I discovered  
the highest producing oil well in the  
northeast quadrant of the USA  
(defined by the Mississippi River,  
KY-TN Border projected east, the  
Atlantic Ocean, and the Canadian  
Border). I also chair the Matson  
Award Committee for the 2006  
annual AAPG Meeting in Houston,  
TX, serve as an AAPG Delegate  
(for Houston), and keep busy in  
other ways.

MARTIN, DONALD D., PO Box  
6159, Albuquerque, NM 87197-  
6159. BS '57. In 2004, I received  
the honor of being installed in the  
National association of  
Homebuilders Hall of Fame in  
Washington, DC.

SANDERS, DONALD T., 33  
Sunny Hill Dr., Madison, CT  
06443. MS '57. Princeton  
University Press published my  
book *Earthquake in Human History*  
(written with Prof. Jelle de Boer of  
Wesleyan University) in December  
2004, just days before a powerful  
earthquake and tsunami ravaged  
low-lying coastal areas of  
Southeast Asia. A review in the  
*Wall Street Journal* described the  
book as "a splendid geographical  
and cultural survey of how the  
unquiet earth has altered our sense  
of nature and ourselves." Yes, the  
timing was fortuitous, and sales  
have been brisk—but this is  
certainly not a way that anyone  
would ever want to sell a book. De  
Boer and I wrote the earthquake  
book as a companion to *Volcanoes*  
in *Human History*, which  
Princeton published in 2002. Many  
thanks.

## 1958

DICKSON, WILLIAM R., 2609  
Lee Anna Dr., West Plains, MO  
65775. BA '58. Jenn and I are  
another year older. Neither of us  
moves quite as fast as we used to  
and have to turn the TV volume up  
a little but as I tell her and others  
the alternative to growing old is  
just not acceptable yet. I volunteer  
at our local hospital thrift store  
about three hours each morning  
and for the year 2004 I was named  
volunteer of the year. I also got a  
presidential citation for over 500  
hours in 2004 as a volunteer. I  
really do appreciate the *G-Hawker*  
and all the articles and the news.  
Thanks to you Liz.

DuBAR, JULES, 2700 Thrush Rd.,  
Charlottesville, VA 22901-8815.  
PhD '58. Seem to be in good  
health but still slowed by old back  
and leg problem—some progress  
but slow. My family: daughter, two  
grandchildren (Selena 12, Ariana  
9), and husband Heber, as well as  
son Scott DuBar who lives with us  
while attending college. All the  
family including wife, Susan, doing  
okay. The family was here a  
month. My book *Never Piss into*  
*the Wind* is selling around the  
country and some over seas. I am  
still working on other books  
including *Conversations with*  
*Ratu* (my Balinese cat).

HANCOCK, H.K., 2134 Bryce  
Ct., Grand Junction, CO 81503. BS  
'58. Continuing to enjoy retirement  
in Western Colorado and eastern  
Utah. At this stage in life, who  
could ask for more than a 12-  
month field season, a good running  
'47 Jeep, and endless mountaintop  
geology waiting to be done in the  
San Juans and Canyonlands?

1955 - 1958

1958 - 1960

KLAPPER, GILBERT, 1010 Eastwood Rd., Glencoe, IL 60022-1125. MS '58. I am continuing research on Devonian conodonts.

LOOMIS, DONALD E., 342 W. Davies Ave. So., Littleton, CO 80120. BS '58. Donna and I have lived in the Denver area over thirty years. We have four married sons and seven grandchildren who all live in the metro Denver area. Holidays at our house can get crowded. Since we have "retired" Donna and I stay busy—she teaches botanical illustration at the Denver Botanic Gardens and I continue doing consulting in geophysics. I have kept an office up until this time, but I think I'm ready to shut things down and become a full time gardener and collector.

## 1959

ADAMS, DON J., 17130 Post Oak Hollow, Spring, TX 77060. MS '59, BS '58. Nothing new. I got tired of five-day work weeks. No time at home or with the grandkids. Besides I got tired! Looking forward to R&R, grandkids, and travel. I certainly enjoyed the Cañon City experience and meeting new friends. Especially enjoyed seeing friends from long ago and staff.

HAGGARD, JERRY L., 1248 E. Victor Hugo Ave., Phoenix, AZ 85022. BS '59. After graduation from KU, I spent two years in the U.S. Army and then worked in the Department of Defense in Washington, D.C. while attending law school at American University Washington College of Law, graduating with a J.D. in 1964. I served on the staff of the

Congressional Public Land Law Review Commission supervising its studies of the public land mining laws until 1970 when I moved to Arizona, where I have practiced mining law and represented large and small mining companies.

JOHNSTON, PAUL, 512 Turner Rd., Emporia, KS 66801. MS '59, BS '57. Retired – professor of geology, Emporia State University.

KITLEN, LARRY W., 2302 Horseshoe Bend, Temple, TX 76502. BS '59. Very active in the local Elks Lodge and doing volunteer work at the V.A.

McMANUS, DEAN A., 4545 Sand Point Way NE, #808, Seattle, WA 98105. MS '56, PhD '59. In June of 2005, Anker Publishing Company published my book about how I changed my teaching from lecture and examination to cooperative learning and student projects. The title is *Leaving the Lectern*. In October, I visited the KU campus at the invitation of the Graduate School, the Center for Teaching Excellence, and the Department of Geology to discuss the book.

O'CONNOR, HOWARD G., 4223 Wimbledon Dr., Lawrence, KS 66047-2034. MS '59. My son, Robert, lives and works in Lawrence. My daughter, Peggy, (R.N.) works at a hospital in Tulsa and her husband teaches family practice medicine at the University of Oklahoma at Tulsa. At 82, I have slowed down a bit but still manage to keep active with the Endacott Society (KU retirees), a weekly writing class taught by Diane Lazzarino (KU journalism), enjoy my six grandkids and am planning an October trip to Ireland.

REESE, DALE O., 6816 Roundrock, Dallas, TX 75248. MS '59. Petroleum Geologist.

## 1960

ADAMS, LARRY W., 12080 E. Nann Road, Athol, ID 83801. BS '60. Semi-retired civil engineer. Still working part-time, via Internet and plane, as principle engineer with Kendall/Adams Group, Inc. (a geoenvironmental consulting firm). Also spending time in 20-acre "ranch," mending fences, irrigating grazing pastures for our own and up to nine boarded horses, repairing ranch building, etc. Our household presently includes my wife (Alde), one daughter, and her four and five-year-old girls and fifteen-year-old son, plus another granddaughter. We also have three miniature horses, four cats, and two dogs.

DODSON, BARBARA J., 1306 N. Northshore Blvd., Wichita, KS 67212. BS '60. Pursuing hobby interests in retirement and loving it. Blessed with 13 grandkids and 2 great grandkids. Plan some volunteer activities in the future.

JEFFRIES, HENRY, 752 W 22<sup>nd</sup> St., San Pedro, CA 90731. BS '60. Traveling for pleasure while looking for a new home site after 40 years in the Los Angeles area.

MICHELSON, JAMES E., PO Box 194, Hazelhurst, WI 54531. MS '60. Retired and live in northern Wisconsin and south Florida.

ROSS, DAVID A., 53 Green Pond Rd., E. Falmouth, MA 02536. MS '60. Retired oceanographer. Retirement is still fun. Recently

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published my 60<sup>th</sup> article on science and fishing. My book *The Fisherman's Ocean* went into its 4<sup>th</sup> printing.

## 1961

ANGINO, ERNEST E., 4605 Grove Dr. Lawrence, KS 6604-3777. PhD '61, MS '58. Retired professor. Time moves on. Granddaughter now a high school freshman. I completed second bypass operation and heart-valve repair on March 23, '05. Old parts are giving out, but "modern medicine" allows me to continue. Interest in Western lore and history continues and I continue to get requests for talks on these topics from regional groups. Study on Antarctic Postal Meter History underway, hopefully will be completed in '06. Completed term on City Planning Commission in May 2005, now just relaxing!

GROSSMAN, STUART, 5627 Jackwood, Houston, TX 77096. PhD '61. Retired - micropaleo (biostratigrapher).

HAYS, JAMES K., 9337 S. College Ct., Tulsa, OK 74137. MS '61. President of Sullivan & Co. - exploration & production.

LINEBACK, JERRY A., 506 S. Lawrence, Scranton, KS 66537. MS '61, BS '60. Still cleaning up hazardous waste in Kansas through the Voluntary Cleanup and Property Redevelopment Program at KDHE. In February, 2005, Ms. Carol Harlow and I became engaged in San Francisco, CA. Current plans are that she will join me here in Kansas in October 2005. Since meeting, we have literally traveled from one end of the country to the other. She is a graduate of Barnard College and

Yale. An environmental scientist by training, Carol is currently working as a development officer for a nonprofit organization in San Francisco.

SIEGEL, FREDERIC R., 4353 Yuma St. NW, Washington, D.C., MD 20016. PhD '61, MS '58. I retired from George Washington University more than five years ago. Since then I finished research that was published in 2000 and 2001 and a book on Environmental Geochemistry in 2001/2002. Also collaborated in the Italian translation of the book and the addition of examples from Italy and a fine appendix for a 2004 publication. Felisa and I have four grandchildren, two granddaughters (14 1/2 and 6 1/2) and two grandsons (10 1/2 and 7 weeks) at this writing. Each one is special and brings high energy into our lives. Our daughters live in Atlanta and Upper Manhattan, so we either fly on a plane or drive for frequent visits to them, or they do the same to visit us. Some of our friends have moved into condominiums, but we are in the same house (although with many renovations) since 1967. Our children and grandchildren know the house well and are against us moving out. And I like to have a yard ... and sit on the deck with a beer listening to the birds, watching the squirrels on the chestnut tree, or harvest a tomato crop, which is great this year. Part of my time has been used to write three childrens books, which have not yet been published. I want color illustrations but written against a backdrop of my own field experiences (*The Hunt for the Bronze Meteorite* and *Inside the Earth: The Cave Explorers*). A fourth titled *Noa Visits The Petting Zoo* is in the works. I bake

my own bread and make killer challah, top-notch focaccia, and great New England bagels. I still have a bagel recipe Margaret Angino sent me in 1964 after I went to work in Argentina and complained to the Anginos that I missed the bagels. As I've gone over papers and photos I found some items that I sent to Liz Gravatt. The notes from R.C. Moore's "Geological Development of the World," with all of the papers written by the 18 members of the class, were terrific to go over. This was a heady group of 18. And there were slides of an R.C. Moore field trip in September of '58 ... archival stuff. I was last in Lawrence in '65 but hope to visit with friends there soon.

## 1962

EMERY, PHILIP A., 4475 C.R. 25, Mt. Home, AR 72653. MS '62. I worked with USGS in Nebraska, Colorado, California, Kentucky, and Alaska. Served as District Chief of Kentucky and Alaska as well as USGS Director's Rep. for Alaska. While living in Arizona, I did some part-time college teaching and consulting in Arizona and Colorado. I'm teaching a course on water and the environment this fall at Arkansas State University at Mt. Home. Janet (former KU Geology Department Secretary) and I just returned from Alaska after visiting our son David and family. I'm a member of a local writers group (Yes, we folks down her can read and write-and also we are not fussing about evolution). I've been writing about small-town Kansas.

HARRIS, LEAMAN D., 2214 Hummingbird Ln., Edmond, OK 73034. MS '62, BS '60. I serve on the advising board to the Natural

1960 - 1962

1962 - 1964

History Museum and Biodiversity Research Center in Dyche Hall at KU and promote my Biodiversity Scholarship Fund housed at that institution. Over the past year, I have served as an Op-Ed Correspondent to my home town newspaper *The Edmund Sun*. My column entitled "Its Just My Opinion" appeared weekly in the viewpoints section of that paper (edmondsun.com, go to Archives and search my name: leaman harris). Writing has become a favorite hobby. I recently completed a history of my high school graduating class complete with biographies if all 30 of my classmates, as well as a history of the town, Cunningham, Kansas, and its public school system. My wife Judy is retired from the University of Oklahoma Health Sciences Center, but, with a partner, now runs a small business that promotes breast-feeding for new mothers. Daughter Sarah, and son Douglas live in Edmond. Oldest son Sam is plant engineer at a Purina Pet Food factory in Ft. Dodge, Iowa.

KEIM, JACK D., 3804 Stockade Ct., Lawrence, KS 66049-2144. BS '62. Retirement keeps one busy, but I sure do enjoy it. Discipline is still part of life; however the "retirement clock" isn't nearly as important or watched as the "job clock." I miss coworkers from the Paleo. Institute (Home of the Treatise)-but *not the work*.

LaMONTAGNE, KIRSTEN (KISE) KRUEGER, 408 Deadman Gulch Rd., Golden, CO 80401. BA '62. Working part-time at a fine arts/crafts store in Cherry Creek North. Doing extensive travel: recently Russia, China, Vietnam, Cambodia, and Eastern Europe. In the near future, India and Egypt.

No cruises while I can still walk and talk.

MAXWELL, JOSEPHINE (MILDRED) MERRILL, 6911 W 52 Pl., Apt 2A, Mission, KS 66202-1542. BS '62. Moved two years ago from big house in Kansas City to a four-room apartment in Mission, KS. Never did do any Geology - mostly was a substitute teacher or early childhood teacher. Have three grandchildren. One a student at Johnson County Community College, one an LPN nurse at Shawnee Mission Medical Center, one a junior at KU, and haven't heard lately what his major is. He changes frequently. He likes languages and history and likes to spend free time in France. Have three daughters, one a middle school teacher in Portland OR, one a legal secretary in San Francisco, CA, one, a letter carrier in Merriam, KS. I can't find anything now that I've moved. Hope to locate photos taken at field camp in 1948 and would love to share them with other '48 campers (when and if I ever find the photos). I would enjoy e-mail messages from others. P.S. Still have my g-pick, the handle is falling apart.

POOSER, WILLIAM K., 8521 S. 99th E. Ave., Tulsa, OK 74133. PhD '62. Retired - Occidental oil & gas, oil & gas exploration.

## 1963

REAMS, MAX W., 6 Castle Coombe Dr., Bourbonnais, IL 60914. MS '63, BS '61. Structural changes have placed me as the Chair of the Dept. of Physical Sciences. Through the roof enrollments keep me hoping to fill faculty positions. Teaching is a

great life. There is always something new. Carol and I enjoy grandchildren and speaking at marriage retreats. Our volunteer work in premarital counseling with students and chaplain activity at retirement facilities keeps me from being bored!

VAN SANT, JAN F., 1207 Lashbrook, Houston, TX 77077. PhD '63, MS '58. Starting my 10<sup>th</sup> year in "retirement" and continuing as executive director of the AGI Foundation raising contributions for earth science education programs. The middle and high school curricula are really taking off and are used now in 49 states and many large school districts like Los Angeles, Chicago and elsewhere. Major funding now is for professional development for elementary teachers, who have little science education but are required to teach certain topics in earth science. We are continuing to build an important endowment named after our fellow G-Hawk, Bill Fisher. The W.L. Fisher Congressional Geoscience Fellowship that supports a Fellow each year working on "the Hill". Contributions honoring Bill's many geoscience achievements are welcomed.

## 1964

KRAUSE, HANS, 48 Cardinal Dr., North Kingstown, RI 02852. MS '64. I divide my time between Rhode Island and Venezuela. In Venezuela I do consulting. In Rhode Island I'm the self-appointed president of the Rhode Island Oil & Gas Producers Association. This spring I took a break from these time-consuming activities and walked 500 miles across northern Spain, from the

# ALUMNI NEWS

French Pyrenees to Santiago de Compostela. Not much oil there but lots of fun!

OJALA, GARY L., 8435 Willowdale Dr., Garden City, ID 83714. MS '64. Retired – consulting economic geologist.

VINCENT, DOUGLAS A., 1050 Diver Mansion, Yukon, OK 73099. MS '64, BS '62. Back to being single again. Wife passed away in November 2003. I moved back to Yukon, Oklahoma in December 2004. Keep busy with church activities and substitute teaching. Am looking for more part-time work and enjoy traveling.

## 1965

NIVEN, DAVID, 99 Raptor Pt. Rd., Golden, CO 80403. BS '65. Geology instructor, Adjunct Professor. Have decided to devote full time (what ever is left) to skiing rivers in the West and golf. Will still do an on-line course, but closed the classroom door for the last time in May. Was able to do the Dolores in southwest Colorado for the first time in years in June. We finally had enough water for this lovely desert gem. Wife and I are traveling a lot. Was enjoyably confused by the geology in Northwest Ireland this July.

## 1966

BUCHWALD, EDWARD (ED), 13192 Cannon City Blvd., Northfield, MN 55057. PhD '66. Our first grandchild (Theodore Buchwald) was born December 24, 2004. Of course he is the handsomest and smartest child in all New England if not the entire East Coast. Cynn timer and I continue to enjoy retirement spending time

visiting our children and sailing. I have been consulting with The Science Center at Maltby Nature Preserve in Randolph, Minnesota, where we are attempting to create world-class academic programs for K-12 in which children actually act as scientists in a field setting. That is, they create testable hypotheses, do field observations and experiments, reduce and evaluate data, and report their findings. We are limiting the investigations to deal only with the hydrologic cycle (of course that is hardly a narrow specialty!). Our cooperative programs meet the National Science Education Standards as well as the science standards of the State of Minnesota. We hope our model will eventually spread to other regions of the state and nation. Cynn timer and I also act as volunteers with the National Park Service at Agate Fossil Beds National Monument in Nebraska. There we have garnered a \$12,000 grant to create science education outreach programs for rural Nebraska children. Children will make natural history observations at their home schools and carry our suggested scientific inquiries relating to the natural history and fossil history of Agate Fossil Beds. Then in the fall of 2006 we expect to have a scientific meeting at Agate attended by Nebraska school children who will give the results of their research projects in oral papers and poster presentations. If all goes well there will also be some visiting academic and government scientists to interact with the children as colleagues in scientific inquiry. I will keep you posted as to our progress on both projects. Recently, I had a great exchange of correspondence with Dean McManus (PhD KU, 1959) who

claims to have been inspired to change his way of teaching and to write a book about it as a result of hearing me describe the way I have taught at Carleton College during my 35-year career there. I have related to you elsewhere the data attesting to the fact that Carleton Geology is arguably the most successful undergraduate geology program in the USA. It was a wonderful affirmation to have Dean write about how he changed his pedagogy as a result of hearing my talk!

FRANKS, PAUL C., 2720 S. Cincinnati, Tulsa, OK 74114. PhD '66, MS '56. Still doing consulting in environmental geology, chiefly ground water quality in Iowa.

REID, SUE ANN TOMLINSON, 1000 W Storey, Midland, TX 79701. BS '66. I am still in Midland, Texas working in the oil & gas industry. Most of my work is with fusulinids and carbonates. Much of my work is concentrated on evaluation of well cuttings, with cores a very welcome addition. I am a past President and Honorary Life Member of both the West Texas Geological Society and Permian Basin Section of SEPM.

SAUERACKER, PAUL R., 1728 Sycamore Ave., Merrick, NY 11566. MS '66. Just celebrated our 40<sup>th</sup> wedding anniversary. Three wonderful grandsons. Minerals Technologies, a New York Stock Exchange listed company, should reach one billion in sales this year.

## 1967

BRADY, LAWRENCE L., 913 West 28<sup>th</sup> St., Lawrence, KS 66046. MS '67. I am still working as a senior scientist at the Kansas

1964-1967

1967 - 1974

Geological Survey, but I have started phased retirement (half time) with full retirement planned in 2007. I have been active for a number of years with the Energy Minerals Division of AAPG, and I am presently active with the KU Geology Associates Advisory Board. Mary and I continue to enjoy Lawrence, and we are pleased to have developed a career with the KGS.

SCOTT, ROBERT W., RR 3 Box 103-3, Cleveland, OK 74026. PhD '67. During June 2005, I collaborated with Dr. Ann Molineaux at the Texas Memorial Museum at the University of Texas at Austin to host the Seventh International Congress on Rudists. About 45 cretaceous carbonate specialists came from 16 nations. I continue my research on cretaceous stratigraphy in the Western Interior and the Gulf Coast.

TURNER, BRIAN B., 6747 Lane Dr., Warrenton, VA 20187. PhD '67. I am preparing to enter my 4th and 5th professions after geology, law and RF Engineering. I've set myself up to do gunsmithing in my home and have acquired the necessary federal, state, and local licenses. I've also been accepted to enter seminary in February 2006 with the ultimate objective of being ordained as an Anglican Catholic Priest in about three years.

## 1969

GOGEL, TONY, 9904 Cherokee Lane, Leawood, KS 66206. MS '69, BS '68. Took separation package from ARCADIS in June 2006. Now associated with Bascor Environmental, Inc., a small environmental consulting firm, on

half-time basis. Enjoying the extra hours to undertake long-awaited projects and a little traveling. Moved to Kansas City (home) in February 2004. Two children and three grandchildren are in Kansas City, and it's fun to spoil them. Mike, our oldest remains in Phoenix. Family all doing well, and life is good.

## 1972

HAKES, BILL. Ternan House, North Deeside Rd., Banchory AB31 5YR, Scotland. MS '72, PhD '75. (See Holdoway, Katrine '72, below)

HOLDOWAY, KATRINE, Ternan House, North Deeside Rd., Banchory AB31 5YR, Scotland. MS '72, PhD '75. We have been living in Aberdeen for 11 years. Our daughter Anna is 14 and getting a good Scottish education. Bill is working as the reservoir geologist for Britannia, a major UK gas field, and Katrine is involved with regional geological studies for Northwest Europe and beyond.

LAYMAN, ARCH H. (CHIP), 640 Knighton Hill Rd., Rock Hill, SC 29732. BS '72. Retired from US Air Force after 26 years, last assignment was Ramstein Air Base Germany where I was the Deputy Director of Communications, Computer and Information for Headquarters US Air Force Europe. I spent 11 years in Europe: Italy, Greece, Turkey, England, and Germany. Have been teaching Junior ROTC in high school for five years. I am looking forward to the time when I can spend time in Italy and France. One of my fondest memories of KU is drawing muscle patterns of ostracodes for Dr. Kaesler.

## 1973

DART, JR., STEPHEN W., 27545 Shady Slope Ln., Rocky Mount, MO 65072. MS '73. Vice President of Geologic Data Systems.

TOWNSEND, VICKI BRYANT, 13902 Briarplace Dr., Houston, TX 77077. BA '73. Homemaker and volunteer in public schools.

## 1974

LISTER, KEN, 1021 Amelia Dr., Long Beach, CA 90807. Ph.D. '74. Recently promoted to Senior Project Advisor and just got back from a visit to Ithaca, NY, where daughter Amelia is a student at Cornell University Law School, and Washington D.C., where son Jacob is a student at American University Washington College of Law. Also on the trip were son Evan, a student at the University of California at Irvine, and Carina.

SPENCER, MARY ALICE SOULE, 1001 Senora Ave., Billings, MT 59105. MS '74. I continue to be a docent at Yellowstone Art Museum. This summer I was part of the faculty of Rocky Mountain College's Art Academy for children 8-16. Last fall I was one of about 40 artists to decorate a full-size bighorn ram to be used as a fundraiser for restoring the old railroad depot. (This is similar to the Jayhawk project in Lawrence). The rams will be auctioned in September 2005. My husband John, an ISU alum, continues to be active in a volunteer organization that builds and promotes greenway parks along the Yellowstone River. The group is also cooperating with the state Audubon organization in

# ALUMNI NEWS

developing an environmental education center for local school children. He's serving his second term as president. I am also still very active with calligraphy, attending state and national workshops, and doing commission work for customers in Billings. We have discovered the pleasure of train travel. Now if the President doesn't manage to kill off Amtrak...!

## 1975

ADAMS, SCOTT D., 5200 Locust St., Bellaire, TX 77401. MS '75, BA '73. Married to Diana Bandler Adams (BS Geology, 1973) who is actively engaged in quilting and metalsmithing hobbies. Scott is the current Chair of KU Geology Associates Advisory Board. His primary hobbies continue to be guitar playing and building. Sons, Evan and Travis, have left home. Evan lives in Scottsdale, Arizona, and works for the Vanguard Group. Travis is currently on military duty in Tikrit, Iraq.

PENLEY, GARY, 2899 Cottonwood Lake Dr., Divide, CO 80814. MS '75. Retired from petroleum geology. Karen and I are living high (9,200 feet elevation) in the Colorado Rockies. She continues to paint, and I continue to write. Book number four, *A River to Remember*, is not yet published. Number five, as yet untitled, is underway. I still miss hunting for oil and gas, but life is good; in fact, it's wonderful.

## 1976

COCHRAN, MICHAEL H., BS '76. Have worked as environmental geologist for KDHE for 29 years. Board of Directors

member of the Ground Water Protection Council, a national organization of injection well regulators. Geology section of KDHE is responsible for regulating deep waste disposal wells, salt solution mining wells, hydrocarbon salt cavern storage wells and water wells. Wife, Susan K., is a softlines manager at Sears in Topeka. We've been married for 22 years.

HAFNER, ROBERT, 1205 Lake Louise Dr., Gretna, LA 70056. BS '76. Earth Science teacher in New Orleans.

## 1977

GEARHART, DALE, 4409 Perry Ln., Fort Worth, TX 76140. BS '77. I retired in May and have been going back and forth to Kauai. Will build a home in Kalaheo probably starting this winter. Chris is in GS at San Diego State. Lisa is working off/on. Laura is a sophomore at TCU. Jere and I were married 25 years ago in August. She was promoted to 3rd degree black belt this past summer. After negotiations fell apart with JRZ Enterprises in Mexico last year, we sold our private company, Rockbit International, to Cherington Capital out of Cambridge, Massachusetts, this past spring. I have been fixing our home up to sell in Fort Worth and following the stock market this past summer. \$60 oil is good news for KU geology graduates. I hope it holds for their benefit.

KAUFMAN, MARY BEE, PO Box 226, Cantwell, AK 99729. BA '77. Artist/Photographer – Kaufman Photography.

KILIAN, RANDALL K., 1102 W

36th St., Hays, KS 67601. BS '77. I have been looking for oil since May 1977 and enjoy every minute of it. My son Justus, graduated from KU School of Business May 2005 and is currently employed by ARC of Dallas. My daughter, Kaase, is currently a junior at KU, living in the Chi Omega sorority and majoring in Communications. My wife and I are looking forward to traveling in the future with the "Flying Jayhawks."

KLEIN, JOHN, 8030 Sunlight Peak, Littleton, CO 80127. BS '77. Managing Director - Forest Oil Corp.

WREATH, MICHAEL J., 409 Imperial Dr., O'Fallon MO 63366. BS '77. Executive recruiter.

## 1978

CARNES, JOHN C., PO Box 2569, Wimberlet, TX 78676. BGS '78. Son Chance will be a KU freshman this fall. Great reason to come to visit more.

DEUBEL, DARRELLA, 4230 Worcester Dr., Fairfax, VA 22032. Grad School '73-'75. We have lived in Northern Virginia for eleven and a half years now. Tom (*see below*) works as a requirements analyst on government contracts. He is active in Toastmasters, serving as president of one of the clubs where he is a member. He is a deacon at Reston Presbyterian Church and active in many church activities, including a part in the Christmas play. Darrella has been the office manager at RPC for the two years. During the past year she has also taken on some of the work of financial secretary. She is still interested in crafting, but

1974 - 1978

## 1978 - 1983

doesn't have much time for it anymore. They both enjoy square dancing-getting back into it two years ago after a hiatus of about 20 years. It's great exercise and a great way to meet people. They vacationed in Hawaii, in Feb. '05 with a group of 59 square dancers. They began square dancing in Lawrence with two clubs 30 years ago.

MATHEWS, WILBERT L., 4907 E. Laureldale, Houston, TX 77041. MS '78, BS '75. I retired from ExxonMobil on 29 September 2004 and began consulting work. I accepted the position of Angola General Manager for Welltec A/S. I temporarily relocated to Cape Town, South Africa while I expand the company's business into Angola. I will eventually live and work in Angola (again). I will also be responsible for other West Africa business development. Other than working and traveling I try to golf as much as possible.

REYNOLDS, DANIEL M., 9106 Autumn Chase, Wichita, KS 67206. MS '78, BGS '76. AAPG DPA MidContinent Advisor-2005. Sipes National Foundation President-2004.

SMITH, JERRY, 550 W. Central, #1006, Wichita, KS 67203. BS '78. Independent petroleum geologist.

## 1979

ENGLEMAN, MARY, 18 Lakeside, Wichita, KS 67207. MS '79, BA '76. Andy Kemmer (husband) and I still have Canyon Energy, Inc. Live in Wichita and still enjoy getting out of town whenever we can! We just sent our oldest, Dodge, off to Stanford where he is a member of the golf

team, and have a daughter Callie (sophomore) and a son Riley (5th grade) still at home.

JORDAN, DAVID P., 5220 Cobble Creek Rd., Salt Lake City, UT 84117. BS '79. Consulting petroleum geologist.

WALLACE, RON, 3650 Garrards Crossing, Roswell, GA 30075. MS '79. Holly and I are doing well. We spend our free time at our log cabin in North Georgia or taking one of our dogs to assistance living facilities, senior citizen facilities, or children rehab facilities. I'm finishing my last year on the National Executive Committee for American Institute of Professional Geologists. Holly and I and our three dogs enjoyed the KU field camp reunion.

## 1980

HARRIS, RICK, 1232 W. 114<sup>th</sup> Ct., Tulsa, OK 74037. BS '80. Consultant.

THOMPSON, JIM, 85 Royal Wood Rd., Valparaiso, IN 46385. BS '80. President of TEI.

SPENCER, TIM, 119 E. Buckthorn Rd., Derby, KS 67037. BS '80. Looking forward to another exciting school year with two sons at KU and daughter going into high school.

## 1981

BLADES, ELIZABETH, 56 Norske Trail, Allenspark, CO 80510. MS '81. Divorced, remarried and moved to Colorado. New husband Lee Skinner (my high school crush!) and I have bought a log home in Allenspark, elevation 8,500 feet, population

circa 300. Rocky Mountain National Park is our "back yard." We're blissfully happy! Six grown children between us—my two sons are Matthew, age 23, at Syracuse University in the Maxwell School of International Studies graduate program; son Andrew (age 20) a sophomore at Clarkson University studying aerospace engineering. Life is good!

BRADY, DOUG, 129 Canterbury Lane, Crossville, TN 38555. BS '81. Geologist for the state of Tennessee.

FERGUSON, CHARLES A., 2541 W 36<sup>th</sup> St., Tucson, AZ 85713. BS '81. Research scientist – Arizona Geological Survey.

## 1983

ANDERSON (HARRINGTON), HEATHER, 8316 Botsford Ct., Springfield, VA 22152. BA '83. There's never a dull moment at our house! With a two-year-old and a five-year-old somebody is always doing something. We recently moved, now we're closer to work and in a great neighborhood.

FRANZ, RICHARD H., 12210 Spottswood Dr., Riverview, FL 33569. MS '83. I have been teaching earth/space science, chemistry, and physical science at Bayshore High School for 17 1/2 years. This followed a short stint in O & G with Chevron USA in Denver, Colorado, where I spent time in both exploration and development. I love to travel back west (CO, UT, NM, WY...) during summers if money is available. Like to participate in dinosaur digs and rock hound fieldtrips. Collect rocks, minerals, and fossils. Avid

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reader of natural science, fiction, philosophy, and religion.

KOPASKA-MERKEL, DAVID C., 1300 Kicker Rd., Tuscaloosa, AL 35404. PhD '83. My eldest daughter is still studying sociology (in Swedish) in Finland. Lillian is about to enter eighth grade and pulled her first all-nighter (playing computer games) last night. My wife Sheila spent the summer learning to rebuild antique windows and making a screened porch (from a deck). My health continues to improve, although I am no closer to walking, and I am still studying the Sand resources of coastal and offshore Alabama. I contributed to a major publication on Carboniferous trackways that just came out last week (PDFs at [www.alabamapaleo.org](http://www.alabamapaleo.org)). The book contains what is probably the most extensive collection of photographs of fossil trackways available, but that will change when a companion CD-ROM Atlas is released, probably next year. This coming January, I will publish the 20th anniversary issue of my science fiction and fantasy poetry magazine, *Dreams and Nightmares*. Look for my work in Isaac Asimov's Science Fiction magazine soon.

## 1984

BENNETT, DEB, PO Box 411, Livingston, CA 95334. PhD '84, MS '77. The news this go-round is that I'm now a staff member at Vindolanda, a Roman-era fort and well-known historical and archaeological site on Hadrian's Wall in Northumbria, northern England. The site is enormously productive of bone, both from wild and domestic animals. I have been having fun teaching my British

colleagues the joys of wet-screening their back-dirt, and they in turn have taught me a good deal about how archaeologists use site maps and stratigraphy. What a "fine" eye they do have. Anyone who wants a copy of the 2003/2004 site report can get it from [www.vindolanda.com](http://www.vindolanda.com). The report is "preliminary" in the sense that work there has been ongoing since the 1920's. However, it also represents less than six months from digging up the bones to beautiful color photos embedded in a substantive study of taxonomy, morphology, and interdisciplinary forensics. This I think is a great thing!!! Besides my six-week yearly residency at Vindolanda, I've also been very busy teaching horse anatomy and horsemanship (how can the one be understood without the other?) in the UK, Iceland, New Zealand, Australia, Canada, and the US. Trips in 2006 are planned also for Denmark and Brazil. I'm also working on a couple of video projects and planning to publish my decade-long study of dental pathologies in fossil and recent equids with Mike Voorhies of University of Nebraska geology staff. I remain happy, busy, and grateful for my KU education. I was on campus for a week in June. Had not been back to visit in nine years, and it was great to see everyone. Visit my web site at [www.equinestudies.org](http://www.equinestudies.org) for more about what's going on.

## 1985

BYRNES, STEPHEN, H-129 Jalan Karyawan 9, Taman Guru, 25150 Kuantan, Pahang, MALAYSIA. BS '85. I've lived

in Malaysia for 12 years now. I'm married with five children. I've been at the International School for six years and have both administrative and teaching duties (including teaching earth science).

CONNELLY, BRUCE E., 2456 NW Quimby St., Portland, OR 97210. BS '85. Product marketing for Nike, Inc.

DEUBEL, TOM, 4230 Worcester Dr., Fairfax, VA 22032. MS '85, MBA '78. See Deubel, Darrella above.

DAVIDSON, JOEL K., 2325 Free State Ln., Lawrence, KS 66047. BS '85. I completed the Kansas Environmental Leadership Program in 2005. Our Applied Leadership Project focused on creating awareness of conservation and protection, and preservation of the Delaware River Watershed. I have served on the Kansas-Lower Republican Basin Advisory Committee for the past three years. Additionally, I have served as a Quality Systems Auditor for NIST/NVLAP since 1988.

ROARK, CLAY, PO Box 2939, Wichita, KS 67201. Vice President of Exploration & Development, Koch Exploration – Canada Corp.

SEEBER, MIKE, 23 Candle Pine Pl., The Woodlands, TX 77381. MS '85. I'm still at Anadarko. I manage all of APC's Geologic and Engineering software and data. Becky, Kelly, and Kristina are doing great ... AND we survived hurricane Rita!

1983 - 1985

## 1986

MELLAND, JAMES E., 410 N. Maxwell, McPherson, KS 67460. Non-degree '86. Petroleum engineer and geological consultant; owner, Melland Engineering.

ZELL, MARY G. 1709 Breezy Ct., Round Rock TX, 78664. MS '86. After 21 years in the Midwest, we've moved to the South with our 12-year-old daughter, and are practicing TSL-Texan as a second language.

## 1987

BLACK, BRIAN ALLEN, 3050 Chelsea Lane, Acworth, GA 30102. BS '87. Had we world enough, and time,... Already the summer's gone, Kieran has reached 4, Analise has passed 2, and I've yet to crack open Bertrand Russell's *History of Western Philosophy*! Still coding away-closest I came to geology lately was a trip to Ruby Falls (limestone caves in Tennessee with a waterfall at the end, luckily it wasn't in flood!), though, heading to Maine, end of August, so I'll have a chance to gander at some schist, phyllite, and glacially modified terrain (when I'm not gazing in deep reminiscence at the spangled waves and listening to the soothing cadences of Casco Bay). Not much new to report on this end. I still haven't gotten back West to visit and say *Gruss Gott* and take a peek at the changes back at Old KU. After 20(!) years, I'm sure there have been a few ... Feel free to surf on by at <http://gwxp.sytes.net/theblackweb/index.aspx> It doesn't get updated all that often, but hey Rome wasn't built in a day either. Hope all is

well with our scattered Tribe, chin up, eyes to front, and enjoy!

HURT, ANNA M., 22206 N 160<sup>th</sup> St., Basehor, KS 66007. BS '87. Sr. Engineering Geologist, Alpha-Omega Geotech, Inc. Just moved in May to our dream home in Leavenworth County, two and a half acres, a pond, and creek.

STATON, MIKE, 6040 53rd Ave. NE, Seattle, MA 98115. MS '87. Washington Operation Manager/ Principal Geologist - SLR International Corp.

## 1988

KALIK, ANDREW J., 6512 Gretchen Ln., Dallas, TX 75252. MS '88. MA-Education, University of Phoenix, 1/2004. MBA-University of Texas at Dallas, 5/1995. Wife: Diane. Sons: Hutton (born 8/1997), Bently (born 2/2002). Passion/Obsession: 2nd home in Point Roberts, Washington.

## 1990

KEEFER (DICKE), STEFFANIE, 2439 East 23<sup>rd</sup> St., Tulsa, OK 74114. MS '90, BS '85. I help out with science activities at the kids' school and help fight the good fight so that we in Oklahoma can continue to evolve.

## 1991

ROBB, ALBERT J. III, 4206 Countryheights Ct., Spring, TX 77388. MS '91. Upstream/GSC Security Liaison with ExxonMobil Global Security. We repatriated from Venezuela in December 2004 and are settling into the Houston area. Rylan, our year old (born in Venezuela) is growing like a weed,

and he already seems to have a great curiosity of the natural world. In my current position with ExxonMobil, I am the liaison between our corporate security organization and the upstream businesses worldwide. On the personal side, I remain active in vertebrate paleo research and have published two papers recently, one addressing Cretaceous vertebrates from New Jersey (*Mosasaur*, v. 7, pp. 75-88, 2004) and the other on Miocene fish from Venezuela (*JVP.*, v. 24, n. 3, p. 104A, 2004).

WOJCIK, KRZYSZTOF M., 3315 Brinton Trails Ln., Katy, TX 77494. PhD '91. Petroleum geologist with Shell International Exploration & Production.

## 1992

ANDERSON, WILLIAM T., 3095 Bird Ave., Miami, FL 33133. BA '92. Married to Barbie Freeman. Up for tenure this year, I hope all goes well. Research projects include: paleolimnology in Central Florida (St. Johns River basin); Isotope-dendrology in cypress trees in Everglades, and Big Cypress; and near shore N-cycles with marine plants and POM. My first student defended his MS in geosciences last July.

GERSTENBERGER, MATT, 350 S. Madison Ave. #123, Pasadena, CA 91101. BS '92. I finally got around to doing my PhD after ETH-Zürich and finished in 2003. I am currently finishing up my Post-Doc at the USGS where I am working in short-term earthquake hazard and earthquake hazard testing methods. By the end of the year I will be back in New Zealand working for GNS in Wellington. I can't wait!

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YOULE, JOHN, 1278 Fox Hill Dr., Longmont, CO 80504. MS '92. After an eight-year world tour with Apache Corp., I resigned my position as Exploitation Manager for Apache Canada, and joined up with some of my old Kansas compatriots to start a new E & P company focus on Kansas. The family is pleased to be back in the states. Jack (age 10) lives for sports of all types, and Bridie (age 13) lives for books. Maura achieved her Yoga teaching and Master Reiki certificates and begins teaching classes in both this fall.

## 1993

CATTANEO, PETER K., 160 Washington St., Manlius, NY 13104. BS '93. Still working in the Earth Science Department at Syracuse University. Lake Malawi Drilling Project, Lake Bosumtwi Drilling Project. Finished a large multi-channel seismic survey on Lake Albert in Uganda. Take a look at our web sites: [Rifts.syr.edu](http://Rifts.syr.edu) and [malawidrilling.syr.edu](http://malawidrilling.syr.edu).

## 1995

CUNNINGHAM, KEVIN, US Geological Survey, 3110 SW 9<sup>th</sup> Ave., Fort Lauderdale, FL 33315. PhD '95. Geologist.

LUCZAJ, JOHN, 2788 Nicolet Dr., Green Bay, WI 54311. MS '95. Last September (on Labor Day), Betsy and I had a baby girl, Jennifer. She is just wonderful! We've also had the opportunity to move back to Wisconsin, and I am now a new earth science faculty member at UW-Green Bay. If anyone wants to contact us, please call or see our web site at

[www.luczaj.net](http://www.luczaj.net). We'd love to hear from you.

## 1996

BERGMANN, BRYAN, 2304 Melody Ln., Waukesha, WI 53186. MS '96. Diana and I are doing well. In October 2004 our daughter, Erica, was born. Our son, Joseph, is 2. The kids are a lot of work, but they're a lot of fun too! The majority of the work I do is still for the Wisconsin DOT.

LINDGREN, EDWIN (ED), 3911 W 100<sup>th</sup> Terr., Overland Park, KS 66207. MS '96. Junior geologist with Burns & McDonnell Engineering Company, Inc.

STEINLE (BOYD), ANDREA S., 7181 McIntyre Ct., Arvada, CO 80007. MS '96, BS '90. Petroleum Geologist with EnCana Oil & Gas, Inc.

## 1997

EVANS, KEVIN R., 1733 S. Fairway Ave., Springfield, MO 65804. PhD '97, MS '89. Assistant Professor at Missouri State University.

WILLIAMS, NATHAN D., 2928 Wyandot St., Denver, CO 80211-3821. BA '97. At the present time, I am working and living in the Gobi Desert of Mongolia for QGX Limited. I am helping with the research, looking for coal deposits in the Gobi Desert (Baruun Noran). QGX Limited is a Canadian-based mineral exploration company that has been exploring for mineral deposits in Mongolia since 1994.

## 1998

ASHABRANNER (HAMPTON), LISA, 3518 Bradford, Houston, TX 77025. MS '98. Married to Don Ashabranner, three children, Vivian (5), Audrey (3) and Maxwell (2).

BALZER, VAUGHN, 5248 SW Secher Ln., Corvallis, OR 97333. MS '98. Mined land reclamationist - Oregon Department of Geology.

## 1999

BAKER, GREGORY S., 1412 Circle Dr., Knoxville, TN 37996-1410. PhD '99. I recently left SUNY Buffalo and have joined (as of August 2005) the faculty in the Department of Earth & Planetary Sciences at the University of Tennessee as the Jones/Bibee Endowed Professor of Geophysics. We've sold the old house in Buffalo, got a new one in Knoxville, and Carrie and I are still in the process of unpacking—although we did leave our snow shovels behind!

CARPENTER, DOUGLAS W., 8218 W. 124th St., Overland Park, KS 66213. BA '99. Design Technician with George Butler Associates.

FRANKLIN, STEVE, 3133 N. Doris Ln., Appleton, WI 54911. MS '99. Chemistry teacher, Appleton West High School.

PORTER, JACOB L., PO Box 0047, Great Bend, KS 67530. BS

1992 - 1999

'99. Geologist/Engineer for Carmen Schmitt, Inc.

SCHLOTTERBECK, BETH, 4720 Prytania St., New Orleans, LA 70115. MS '99. Geophysicist with Shell.

**2000**

CUNDIFF, JESSICA, 10 Wendell St. #21, Cambridge, MA 02138. MS '00. Paleontologist, Dept. of Invertebrate Paleontology, Museum of Comparative Zoology, Harvard University.

JOHNSON (WHITMER), JILL, 2805 Clairboro Rd., Jacksonville, FL 32223. MS '00. Project Hydrologist, Geosyntec Consultants.

MCVAY, LIZ, 209 S. Claremont, Super Creek, MO 64054. MS '00. Hydrogeologist. President – Envision Group, LLC.

**2001**

BEGAY-JACKSON, DEIDRA KIM, 503 Richview Ct., Houston, TX 77060. MS '01. Please welcome a new addition to the Jackson family. Keenan Naalzheehi Jackson was born on June 17, 2005 at 4:45pm. He weighed in at 9 lbs., 11 oz., 20". This new addition brings joy to me and my family of three other children, Bryauna, Alexis, and Rashaun. Bernee is my husband's name. I was recognized as an Outstanding Mentor for 2004-2005. I am the chairman for the AWG Minority Geoscience Scholarship Program. (FYI deadline is mid-May every year)=>please visit [www.awg.org](http://www.awg.org) for details.

BUSH, LISA, 15604 W 151<sup>st</sup> Terr., Olathe, KS 66062. BS '01. Staff Geologist – Environmental Resources Management.

DAVIS, PATRICK, 300 10th Ave. Ste. B-107, Seattle, WA 98122. BA '01. Things are going well in Seattle. I just bought my first house and am very excited about it. Best wishes to Adrian Berry, Kyle Spikes, Kato Dee, Sarah Suntee/Darby, Dr. Bob, Dr. Doug, Dr. Kaesler and all that helped me get where I am today.

DEE, KATO TSOSIE, 419 Towhee St., Fort Collins, CO 80526. MS '01, BS '97. I have begun my third year with MFG Inc. in Fort Collins as a geochemist. Project work has taken me to Texas, Washington, Nebraska, and Colorado. In addition to my work with MFG, I am enjoying my adjunct geology instructor position at the Front Range Community College Larimer campus. Free time is spent in the mountains with my wife (Blythe) and dogs!

**2002**

HEATH, W. SCOTT, 2931 South Dinwiddie St., Arlington, VA 22206-1405. MA-Museum Studies '02, MS '01. The big news is that I married my long-time sweetie Michelle Beissel on August 21, 2004. In March, '05, I started my new job with ILE and am enjoying it immensely.

PRINCE, ANDREA, 4213 W. 54<sup>th</sup>, Roeland Park, KS 66205. BS '02. Currently I am serving as Chairperson of the Kansas City/Omaha Section of AEG. I have also accepted a three-year term as a young member of the

Transportation Research Board, Exploration, and Materials Classification committee, which is overseen by Bob Henthorne of KDOT. I have had the opportunity to work on a number of exciting projects this past year, including the design of a new dam in western Kansas, a large surface development over mined space, in addition to several challenging geotechnical investigations. I am constantly grateful for my KU geological education and continued contact with KU and KGS.

**2003**

ANDERSON, ALLYSON K., 313 Graceland, Houston, TX 77009. Nondegree. I'm finishing my term as national president of the Association for Women Geoscientists in late September and hope to become more involved with local volunteer work here in Houston. I presently work as a petrophysicist at ExxonMobil. I work primarily in offshore, deep-water systems.

BUTEL, NICK, 1510 East 13<sup>th</sup> St., Lawrence, KS 66044. BS '03. Geologist/Geophysicist.

HAMBLIN, CURSTIN BAKER, 13881 W. 138th St. #205, Olathe, KS 66062. Leasing manager.

HIEMSTRA, ERIK, 9012 Heely Ct., Bakersfield, CA 93311. MS '03. Geologist, ChevronTexaco. This year I was married to Christina Pulliam who graduated from the Department of Geology in 2001 before getting her MBA in 2003. We met each other at KU's field camp in the summer of 2000.

KELLY, KARA, 213 Delaware St., Apt. 108, Kansas City, MO

# ALUMNI NEWS

64105. MS '03, BS '99. I returned to KU and received my master's in Museum Studies (Geology Track) in May of 2003. I worked with the museum collection at Mesa Verde National Park, and I am currently the Archives Technician at Union Station/Kansas City Museum in Kansas City, MO. Cheers to all my KU friends!

KOZUCH, MARIANNE, 2511 NW 6<sup>th</sup> St., Gainesville, FL 32609. PhD '03. Chemist at the Center for Environmental and Human Toxicology, University of Florida.

PYLE, JULIE. 4831 Edgerton Ct. #708, Raleigh, NC 27612. BS '03. Field Technician with CreoSonics, Inc.

## 2004

CLARK, JENNIFER, 906 N. Fieldstone Dr., Lawrence, KS 66049. MS '04. Environmental Scientist at Kansas Division of Emergency Management.

DILLETT, PETER, 4323 Pebble Creak Dr. Apt C, Bakersfield, CA 93312. MS '04. My wife Rachelle and I are still in Bakersfield,



Jessica Ludwig and Natalie Givens

enjoying life in California. We are in the process of building a house and spending a lot of time with our fellow 'Jayhawk transplants' (Jason Cansler, Erik & Christy Hiemstra, Ed Washburn and Jonathan Lange). Work is going well, as I have been drilling some wells, making some oil. I also have had the opportunity to work with cutting-edge technologies. I hope all is well in Lawrence and that everyone in the Department has a safe, successful year.

JOHNSON, TROY, 4550 S. Columbia Pl., Tulsa, OK 74105. MS '04. As of early September 2005, Amy and I were literally in the process of moving again, this time in the opposite direction from Houston to Tulsa. As some of you know, I was hired by Unocal and worked there for about 10 months after completing my thesis in 2004. In April 2005, Chevron announced that it was acquiring Unocal. We decided that this was a great time to explore other opportunities, and Tulsa-based Samson Resources was another company that I had an interest in during the final months at KU. To make a long story short, I am now an Associate Geologist

for Samson's Arkoma Basin team. Coincidentally my supervisor, Kevin Morris, is a fellow KU Geology alum (class of '81). I definitely enjoy the fast-paced style of Mid-continent development, yet still miss the magnitude of operations in the Gulf of Mexico. Most importantly, my wife and I look forward to living in Tulsa and enjoy being closer to family and friends.

JONES, SUSANNE, 183 City Place Dr., Apt. C, Lockport, LA 70374. BS '04 (Petroleum Engineering), BS '01. Field engineer with Schlumberger.

VINCENT, PAUL, 1115 Le Green St., Houston, TX 77009. MS '05. BS '03. After graduating this spring, Stacie and I moved to Houston to begin a job with Chevron. I have been designing and contracting seismic surveys for business units in the company; Stacie has continued working in the field of International Education.

## 2005

GARVEN, JACK A., 3822 Idalia Ave. El Paso, TX 79905. BS '05. Natalie and Jack married August 2005 in Wichita, KS.



Melissa Marietta and Mustapha Zater

MORRIS, NATALIE, 3822 Idalia Ave. El Paso, TX 79905. See Garven, Jack

2003 - 2005

## Memorials

**M. Ira Dubins**, M.S. '48, died June 3, 2005 in Cumberland, Maryland. He received a B.S. in chemistry from Tufts before attending KU for a degree in mineralogy. He also earned a Ph.D. from Boston University. He was a captain in the Army Air Force. After leaving the service, he taught at Foxboro High School in Massachusetts, Castleton College in Vermont, and Northwestern University in Chicago. He then went to the State University College in Oneonta, New York, where he taught for 30 years. He retired at age 70. His wife Barbara and son Bruce and a granddaughter survive him.

**Jerry Ewers**, B.A. '42, B.S. '47, died May 31, 2005 in Denver. His wife Marjorie Dinsmore Ewers and their four children survive him.

**James E. (Jim) Guinotte**, B.S. '48, died May 10, 2005 in Chanute, Kansas. He had a long career in crude oil and natural gas drilling and production throughout the mid-continent. His sons Jim, John, Joe, and Tim and his daughters Mary, Aimee, Alison, and Nancy survive him. He also leaves 22 grandchildren and two great-grandchildren.

We recently learned that **Hugh Heidrick**, B.S. '52, died in November of 2002.

**Michael Andrew Jordan**, B.S. '66, died March 16, 2005. After receiving his degree from KU, he attended the University of Texas-Austin, where he earned an M.A. in 1970 and a Ph.D. in geology in 1978. Jordan taught geology and earth science at Indiana University, Purdue at Indianapolis, Western Michigan University, St. Edward's College, Lamar University, the University of Texas-San Antonio, and the University of Texas-Austin. For the past 25 years, he taught geology at Texas A&M-Kingsville, formerly Texas A&I. His wife Janis, his daughter Laura, and his son Stephen survive him.

**Jewell Keroher**, B.A. '41, died March 27, 2005.

**Norman Newell**, B.S. '29 and M.A. '31, died in Leonia, New Jersey, on April 18, 2005 at the age of 96. While at KU, Newell helped defray his tuition by playing in jazz bands. He then attended Yale University and in 1933 received his Ph.D. in geology. He joined the staff of the American Museum of Natural History in 1945 as curator. He served as Dean of the Council of the Scientific Staff at the Museum from 1966 to 1967 and was academic advisor to Columbia University graduate student Stephen Jay Gould who said of him, "Everything I do, as long as I live, will be read as his legacy." Throughout his life, he was outspoken about the importance of public understanding of evolution and the threats creationism caused academic freedom and science education. Many of these ideas he expressed in his 1982 book, *Creation and Evolution: Myth or Reality*. He retired from the museum in 1977.

**Wilbert "Bert" Odem**, M.S. '53, died February 15, 2005 at his home in New Orleans. A native of San Antonio, Texas, Bert was a naval aviator during World War II. He earned a bachelor's degree at Notre Dame before he attended the University of Kansas. He worked for 25 years as a petroleum geologist at Chevron's New Orleans office where he directed exploration in the Gulf of Mexico. Following his work at Chevron, Bert worked as vice president of exploration with Equitable Petroleum and then as an independent consultant to the oil industry with his friend Robert Kline. He retired in 1992. Bert leaves his wife Ellen O'Brien, and his nine children, Peggy, Willie, Mary, Sarah, Danny, Jennifer, Nancy, Sylvia, and Leslie. He also leaves 15 grandchildren.

# ALUMNI NEWS

**James Parks**, B.A. '48, died suddenly on Sat., Jan. 29, 2005. At the University of Wisconsin, he was awarded a Ph.D. in Geology in 1951. He continued his education with a postdoctorate year at Edinburgh University in Scotland on a Fulbright Fellowship. He was a research geologist with several oil companies before taking the position of Professor of Geology at Lehigh University in Bethlehem, PA. After his retirement, Jim and his wife moved to Kentucky, where he remained active in several projects including developing computer programs and writing. He was completing a biography of Lowell Laudon at the time of his death. (See story on page 11.) He is survived by his wife, Joyce, a son, Joel, and stepson, Steve. He had three grandchildren.

**Rankin Woodward "Woody" Paul**, M.S. '70, died August 17, 2005 in Lawrence, Kansas. He received his bachelor's degree from Wooster College and was a captain on a B-24 bomber in the U.S. Air Force during World War II. In addition to his career as a consulting geologist, Paul taught geology, astronomy and meteorology at Penn Valley Community College in Kansas City, Missouri. For a time, he also hosted his own TV cooking show. His son Craig and daughter Gretchen survive him.

**Charles Pitrat**, B.A. '49, died April 30, 2004 in Florence, Massachusetts. He was a member of the Geology Department faculty from 1956 to 1964. After leaving KU Geology, he joined the geology faculty at the University of Massachusetts.

**Holly C. Wagner**, who studied geology at KU in the mid-1950s, died September, 28, 2005. Following graduation with a bachelor's degree from UCLA, he worked for the U.S. Geological Survey and the Corps of Engineers. He returned to UCLA to get a master's in geology and continued his work with the USGS. He came to Kansas on a cooperative program between the KGS and the USGS and, during that time, completed all but his dissertation toward a Ph.D. in geology. He later taught geology in Japan for the International Institute of Mineral Resource Development. At age 75, Wagner completed his Ph.D. from the University of Leicester in England at the encouragement of the KGS's Dan Merriam, who was then on the Leicester faculty.

**Thomas Waller**, Ph.D. '74, died in Topeka, Kansas, October 24, 2004 after a long illness. A Native of Port Arthur Texas, Dr. Waller earned a B.S. in geology from Sul Ross State University and an M.S. in geology from Baylor. He taught geology at the University of Mississippi and at the University of Texas-Arlington. After 15 years as a geology professor, he and his family moved to Wichita where he took a position as exploration geologist with Texas Oil and Gas and later Koch Industries. His wife Patsy and his sons Thomas and John survive him.

# ALUMNI NEWS



# Looking for Lost G-Hawks

Almost 300 former geology students are listed below, and they're all lost—as far as the alumni data base is concerned. Please look over this lost list and see if you recognize anyone among the missing. If you have news about these former students: their addresses, names changes, employer name and address or death notices, please let us know. We'd love to retrieve them from the land of the lost.

## 1932-1940

Frank H. Alexander, BS'40, MEng  
Ralph E. Hinkel, BA'32  
Frank Wood Jones, '32  
Charles S. Rohrer, BS'34, MEng  
Howard Winn, BS '39

## 1941-1950

Ted Beaver, BS '50  
Herbert F. Buchholtz, BS '50  
Robert M. Castator, BS'49  
James D. Chappell, BS'41, M Eng  
William M. Foster, BS '53  
Albert J. Hanners, '43  
Walter L. Hurt, '48  
Robert James Mann, '45  
James N. Mueller, BS '49  
Ernest E. Pelzer, '50  
Arne Huntus Pokky, '50  
George H. Spivey, '50  
Cleo E. Vague, BS '51

## 1951-1960

Neal R. Alleman, BS'52  
Roger Arbour, '60  
Allen N. Bates, '57  
Charles E. Beardslee, '60  
William L. Brown, MA'54  
John Vincent Combi, '56  
Victor C. Cope Jr., BS'56  
Anthony E. Corcoran, BS '64  
Darrell E. Davis, MS '59  
Thomas L. Downs, BA'56  
Robert John Emmanuel, '51  
James Ray Fasbender, '54  
William Gordon George, '57  
Randall Kay Graber, BS'52  
Lewis Donald Gurman, '60  
Julian W. Hawryszko, MS'57  
Robert W. Heil, BS'59  
Lonnie J. Hopkins, '59  
George R. Huebner, BS'57, MEng  
Gerald Arlo James, '54  
William K. Johnston, '56  
Robert H. Kuckelman, BS'53, MEng  
Jean Lacasse, '60  
Donald Lee Lamar, '53  
Arthur David Lapadat, '60  
Arthur A. McGinnis, BS'51, Meng  
James E. Michelson, MS '60  
Jack Morelock, '55  
Mary Jo Moyer, BA'57  
Fred Charles Myers, Jr., '51  
Jesus Ojeda Rivera, '59  
Dale Romaine Olson, '54  
Reed H. Peterson, '51  
George W. Plant, BS'52  
Homer U. Ries, '51  
Herman Ewers Simpson, '59  
Charles J. Sloanaker, MS'51  
John Willis Strickland, '51  
Robert Lowell Tedrick, BS'60  
Verna Mae Torres, '60

Patricia (Morgridge) Tucker, BS '56  
Ivo George Vonderwell, '59  
Dwight E. Waddell, '59  
Kenneth Dean Wahl, '58  
Ned Wellborn, BS'53  
Jay D. Whiteford, BS'54  
Wayne P. Wright, BS'51  
William A. Wycherley, '54

## 1961-1970

Ibrahim Abd El Wahid, MS'63  
Klaus Bandel, '66  
Jimmie Dean Bowman, '61  
Eugene O. Bowser, '61  
David S. Brumbaugh, '68  
Dean K. Bryson, '63  
Earl H. Budke Jr., '68  
John J. Coble, '68  
Anthony E. Corcoran, BS'64  
David E. Epp, BS'63  
Faramarz Frouzan, '63  
Robert Jacob Garrecht, '64  
Karl Lesley Geller, '67  
Carolyn Lee Griffin, '68  
Reginald V. Hicks, MS '62  
Peter W. Huelsenbeck, '64  
John Huh, BA '68  
Suresh M. Jamkhindikar, PhD'69  
Philip M. Knighton, '66  
Robert Clement Koch, '64  
Miriam Larson, BS '69  
Paul Lerner, '64  
Tommy R. McKellar, MS'62  
Mustafa A. Mitwalli, '61  
Adam Morawski, BS '77  
Harry W. Mueller III, '68  
Theodor Neague, '69  
Tomohide Nohara, '67  
Albert F. Noonan, '70  
Jin Sang Oh, '67  
Yacoub Ahmad Qandil, BA'59, MS'61  
Charles G. Roberts, '69  
Richard Harvey Roda, '63  
Luis R. Rodriguez, MS'65  
Malcom B. Roy, MS'66  
Tyson D. Runnels, BS'69  
Dennis Wayne Slater, '69  
Paul Lewis Steineck, '63  
Bruce Allan Thompson, '61  
Thomas L. Teer, '69  
Howard C. Thornton, Jr., BA'67  
Clyde T. Williams, BA'62  
Milo E. Wynne, BS'61, MS'62

## 1971-1980

Yacoub Y. Alhajji, '74  
Gholamhosien Bangali, '73  
Faustin Bangole Yenvou, BS'75  
Annette C. Bee, BS '71  
Carlos A. Belfort, '71  
Bipinkumar Bhatt, '74  
J Dennis Brewer, '80

Jean M. Bridges, BS'70, MS'74  
Andra D. Cohran, '72  
Roy E. Cox, '76  
Jafar Dirin, '73  
Maria B. Edwards, '74  
Abdurrazak A. Endisha, BS'79  
Susan L. Fezie, '76  
James Hontos, '73  
Dale D. Hudson, BS'74  
Daniel T. Jenkins, '76  
Edward L. Leanhard, BS'79  
Sandra R Malmberg, '80  
James E. Mathewson, '75  
Stephen McGie, '79  
Marvin B. McKinney, '73  
J. Peter Mills, MS'65, PhD'74  
Adam Morawski, BS '77  
Francois R. Nguene, MS '78  
Yaw Ntiamoah Agyakwa '79  
Adeleke Odutola, BS'72  
Kyle D Parker, '80  
Robert E. Plump, BGS'75  
Maryette Hanson Rogers, '75  
Sigfrido P. Santiago, '72  
David F. Schmidt, '76  
Takeshi Setoguchi, '71  
Ali Seyraffian, MS'78  
Lyle R. Silka, '74  
Betty Jean Socha, '76  
Benja Songsirikul, MS'78  
Robert H. Teifke, MS'72  
Elizabeth Trainor, '75  
Michael C. Whisler, '80  
Robert S. Woods, '78  
David T. Wilson, BS'73  
Leonard L. Woolsey, MS'71

## 1981-1990

Talat Younis Abdullah, MS'84  
Zulkifly Ab Rahim, BS'85  
Keyvan Aliabadi, '89  
Gregory Bown Andersen, '82  
Cihat H. Basocak, '81  
Victoria Bennett, '90  
Barbara Biggers, '85  
Carol Dixon Brinton, '81  
Jeffrey A. Burk, '84  
Mehammed A. Busifi, BS'82  
Cmdr. Randall S. Butler, BGS'81  
Miguel Andrew Camacho, '87  
Edward Le Carper, '85  
Scott Dennis Coon, '83  
Randy Louis Corey, '81  
Bruce A. Cox, '82  
Richard James Cox, '81  
Troy Randal Curran, '85  
David C. Daniel, '82  
Rodziah Haji Daud, BS'86  
Pablo Alfonso Delgado, '86  
Ute Doring, '90  
Mary Wier Dossett, '83  
Rene Christine Elwood, '81  
Brett Edward Engel, '83  
Howard R. Feldman, '90  
Usama M Fergiani, '82

Eric D. Goldman, '86  
Mark Wayne Grommesh, '82  
Alexander Hagens, '89  
Donald H. Harrison, Jr., '81  
Jason C. Heath, '90  
Dennis G Hitz, '81  
Chris R. Hoffman, BS '83  
Hann Chen Huang, '80  
Steve Kuoyi Huang, '82  
Dan R. James, '82  
Robert M. Joeckel, '86  
Jeffrey Lee Jones, '89  
Susan C Kent, '81  
David Alan Kvam, '82  
Chung-Yao Lui, MS '81  
Mastura Abdul Malik, BS'86  
Jeffrey Scott McCoy, '83  
Andrea Lou McEachern, '82  
Kevin Earl McFarland, '82  
Kamal T Moghadam, '85  
Muftah Giuma Mohamed, '83  
Ali Muftah Mshirab, '82  
Russell King Murphy, BS '83  
Soheila Nasser, BS '83  
Rebecca D. Oswald, '83  
George C. Outlaw, '83  
Mitch R Powers, '90  
Reyes Jacobo Quesada, '86  
Thomas G. Ready, MS '85  
Kim G Rightmire, '87  
Charles E. Schabel, '82  
Richard Wayne Sturgeon, BA '90  
Monsef A. Swedan, BS'81  
Chandra D. Tiranda, BS'88  
Milos Velechovsky, MS '85  
Michael A Wheeler, '84  
Stephen E. Wiseman, '81  
Di Zhou, PhD'85  
Mark Hamilton Ziegler, '81  
David Ross Ziemer Jr., '83  
Timothy J. Zolnowski, '81

## 1991-2000

Todd Alan Campbell, '91  
Tyan-Ming Chu, PhD'96  
Aaron W. Cox, '95  
Jerry Cutshaw, BS '00  
Lisa Beth Hampton, MS '98  
Joseph John Keeling, '92  
Gale Leanos, '94  
Margaret S. Mills, MS '92, PhD '94  
Marc A. Romito, BS'98  
Stephanie Ann Ruegnitz, '92  
Rebecca L. Scheppy, MS '00  
Alan Wade, MS '92

## 2001-2005

Niel J. McCune, BS '03  
Mohammad A. Abdullah, BS '05

# Coming Events

## **AAPG 2006**

**April 9-12 – Houston, TX**

Alumni reception on Monday, April 10, 2006. See convention program for specific time and location.

## **GSA 2006**

**October 22-25 – Philadelphia, PA**

Alumni reception on Monday, October 23, 2006. See convention program for specific time and location.

## **AAPG 2007**

**April 1-4 – Long Beach, CA**

Alumni reception on Monday, April 2, 2007. See convention program for specific time and location.

## **GSA 2007**

**October 28-31 – Denver, CO**

Alumni reception on Monday, October 17, 2007. See convention program for specific time and location.

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