Roster

Assistant Professors
Martin Appold (Johns Hopkins University, 1998)  
Hydrogeology
Francisco Gomez (Cornell University, 1999)  
Paleoseismology and neotectonics
Mitchell Schulte (Washington University, 1997)  
Biogeochemistry
Alan G. Whittington (Open University, 1997)  
Crustal petrology

Associate Professors
Robert L. Bauer (University of Minnesota, 1982)  
Precambrian geology
Cheryl A. Kelley (University of North Carolina, 1993)  
Aquatic geochemistry
Kenneth G. MacLeod (University of Washington, 1992)  
Paleontology and biogeochemistry
Eric A. Sandvol (New Mexico State University, 1995)  
Seismotectonics

Professors
Mian Liu (University of Arizona, 1989)  
Geophysics
Peter I. Nabelek (SUNY, Stony Brook, 1983)  
Trace-element geochemistry
Kevin L. Shelton (Yale University, 1982)  
Economic geology
Michael B. Underwood (Cornell University, 1983)  
Sedimentology
Carol M. Wicks (University of Virginia, 1992)  
Hydrogeology

Professors Emeriti
Raymond L. Ethington (University of Iowa, 1958)  
Conodont biostratigraphy
Thomas J. Freeman (University of Texas, 1962)  
Carbonate petrology
Glen R. Himmelberg (University of Minnesota, 1965)  
Chemical petrology
William D. Johns (University of Illinois, 1952)  
Clay mineralogy
A.G. Unkelsey (University of Iowa, 1942)  
Paleontology

Staff
Damon Bassett, research specialist
Linda Garrison, administrative assistant
Marsha Huckabay, administrative associate I
Carol Nabelek, research chemist
Stephen Stanton, library information specialist II
From Our Department Chair...

This past year has been a time of great accomplishments that can be attributed to the hard work and dedication of our faculty, staff, students and alumni. Highlights of our activities are presented throughout the Newsletter and reflect the spirit and excitement of teaching, learning and discovery that underlie our success.

In academia, there is little that rivals the satisfaction of hiring a new faculty member. Through our recruiting process last year, we met a number of bright and enthusiastic young scientists with strong interdisciplinary backgrounds in geological, hydrological and biological sciences. I am pleased to report that Mitchell Schulte joined our faculty in September as an assistant professor of biogeochemistry. Mitch's current research involves the organic geochemistry of hydrothermal systems. His picture and a brief biography can be found later in the Newsletter. The department has emphasized the areas of biogeochemistry and ecohydrology since the mid 1990s. The current group of researchers in these areas is composed of four faculty members (Martin Appold, Cheryl Kelley, Ken MacLeod and Carol Wicks) and will greatly benefit from the presence of Mitch on our staff.

This year we are advertising to hire a tenure-track assistant professor in marine tectonics. The ideal candidate will enhance departmental linkages among research and teaching programs in continental dynamics, neotectonics and marine geology. Preference will be given to those who study oceanic lithosphere as part of one or more of the major research initiatives within the ocean science community, such as OOI, RIDGE, MARGINS and IODP. Fields of expertise may include marine geodesy and crustal deformation, crustal evolution and fluid flow, and tectonic forcing of climate change.

As you read through the Newsletter, you will see that all of our faculty members are involved actively in research and presentations at national and international conferences that bring recognition and prestige to our department. Please join me in celebrating the promotion of three members of our faculty. Ken MacLeod and Eric Sandvol were promoted to Associate Professor with tenure and Carol Wicks was promoted to Professor.

We continue to attract talented students at both the master's and doctoral levels. We have 26 graduate students in residence. This past year they presented 15 papers at national and international conferences, published five papers and received five research grants and fellowships based on proposals that they wrote. Six of our students completed Master of Science degrees this year: Daniel Basnet, Steve Bates, Amanda Hassler, Paula Lee, MooJoon Shim and Ry Stone. Mike Formolo completed his doctoral degree. We will miss each of those who have left.

We are fortunate to have a large group of talented new graduate students. Two students joined our department in January 2005. Sara Harkins (BS, University of Iowa) is studying geochemistry of non-sulfide zinc deposits in Australia with Martin Appold. Deepak Manjunath (BS, Sadar Vallabhbhai College of Engineering and Technology) is working with Paco Gomez and Eric Sandvol using radar data to locate earthquakes. Nine new students arrived this fall. Geoffroy Avard (MS, Universite Clermont-Ferrand) is starting a doctoral study of volcanology of the Santiaguito dacite dome in Guatemala with Alan Whittington. Doctoral student Xueyang Bao (MS, University of Science and Technology, China) is characterizing seismic wave propagation in the Middle East with Eric Sandvol. Junhua (Samuel) Guo (MS, Institute of Oceanography, Chinese Academy of Sciences) is beginning a doctoral study with Mike Underwood on how variations in sediment input to subduction zones affect the physical behavior of the plate-boundary fault. Douglas Lewis (BA, University of Missouri-Columbia) will study paleontology with Ken MacLeod. Jennifer Maloney (BS, West Virginia University) is investing lithium isotopes in California pegmatites with Peter Nabelek. Michael O'Malley (BS, University of Missouri-Rolla) will study petrology. Steven Pagan (BS, Southeast Missouri State University) will begin a hydrogeology project with Carol Wicks. Urmidola Raye (MS, Indian Institute of Technology, Kharagpur) is pursuing a doctorate concerning thermal conductivity of silicate melts and its implication for the thermal evolution of collisional orogenic belts under the direction of Alan Whittington. Mary Schubert (BA, Washington University) is studying hydrogeology. In summary, we're doing great! However, we would not be able
to make competitive offers to attract these quality students without the help of our alumni scholarship funds. Thank you.

Our alumni also give us reason to celebrate. The department devoted a first floor wall to honor alumni for outstanding achievement. This past spring the department celebrated the formal unveiling of plaques that recognize Honorary Life Members of the Geology Development Board, MU Distinguished Alumni, and Geoscience Society Presidents. A detailed story about the Wall of Fame can be found later in the Newsletter.

On behalf of the faculty, students and staff, I want to thank those of you who continue to support our department through your annual gifts. I want to recognize specifically two recent gifts to the department. Merrill Shields is establishing the Dr. M. Ray Thomasson Graduate Fellowship Fund. Ed Williamson—current Geology Development Board chair, devoted friend to the department, and recently designated Arts and Science Distinguished Alumnus—made a substantial donation to the new Geology Student Scholarship Fund. A detailed story about the fund and its recent success can also be found later in the Newsletter.

Enjoy the Newsletter, and remember to keep us informed of your activities.

Sincerely,

Kevin L. Shelton
Chairman and E.B. Branson Professor

Three MU alumni take a break at the St. James Winery following the SEPM conference in Springfield, Mo., on “The Sedimentary Record of Meteorite Impacts.” From left, they are George Davis (MS ’89, Missouri Department of Transportation), David King Jr. (PhD ’80, Professor at Auburn University) and Arthur Banet (MA ’76, Reaseable Minerals Section of the Bureau of Land Management with the United States Department of the Interior).
Faculty News
(In their own words)

Faculty

Martin Appold completed his first year in the department and is excited about starting the second one. His teaching consisted of an introductory and advanced course in hydrogeology, and he is following that up with a new course in groundwater modeling this fall semester. Martin advised two masters students this past year. Jamie Cachine completed a numerical modeling project on Zn-Ph sulfide mineralization in the Tri-State district near Joplin, Mo., and is now working for MWH, an environmental consulting firm, near San Francisco. Sam Harkins began working with Martin in January on a fluid inclusion and isotopic study of zinc silicate mineralization in the Flinders Ranges of South Australia. The project included a two-week field trip to the Flinders Ranges in May and June with two geologists from Perilya Mining, Inc., that enabled them to collect a good suite of samples and see many of the important field relationships first-hand. A third project nearing completion is a reactive transport modeling study of the role of mixing of methane-rich basinal fluids with fresh meteoric water in forming calcite cements in faults in the Santa Barbara Basin, offshore California.

Bob Bauer’s duties as director of the Branson field camp in Wyoming occupied much of his time this past year. This past summer’s field camp included new student projects in advanced hydrogeology and geophysics that were made possible by an NSF grant to the camp. Bob spent part of his summer working with his master’s student, Chris Brocka, on the Dallas and Derby Dome structures, and he continued collaborations with Pat Bickford of Syracuse University and Joe Wooden of the USGS on radiometric dating problems in the very old Archean rocks in the Minnesota River Valley of southeastern Minnesota. New ages for these rocks, as old as 3,500 million years, will be reported in an upcoming issue of the GSA Bulletin. Bob took over the department job as director of graduate studies last year and has been actively working with other faculty members to increase the number of doctoral students in the department. Bob’s courses included Structural Geology, Continental Tectonics, and field camp. This fall he is teaching Advanced Structural Geology and is presenting a series of lectures on “scientific writing” in support of the department’s new series of upper-level writing-intensive courses for our bachelor of science majors.

Raymond Ethington’s most significant thing to report is that he still able to report. Daily ingestion of coumarin and the monthly visits to the phlebotomist were suspended in March, and no subsequent repercussions have occurred. Ray doesn’t miss being on a first-name basis with all of those folks at University Hospital. He emerged from the depths of retirement to teach a historical geology class during the winter semester to fill a vacancy created when Tim Lyons resigned. It seemed to him that a surprising amount of history had been added in the five years since he had last taught it, and some fancy footwork was needed to keep him ahead of the class. By the time May arrived, he was quite ready to return to retirement. Work on the catalogue of the conodont collection is nearing completion; a couple of papers were published, and several manuscripts dealing with conodonts have been submitted or are almost finished. An incredible number of purported dinosaur bones have been handled this year, and Ray wonders why so many of them come from around the Lake of the Ozarks. The assumed human finger from near Tusculumna proved to be from a deer and not from a missing relative of the person who referred it to him. It’s been an interesting year.

Tom Freeman continues to teach Geology of Our National Parks (Honors) during fall semesters while also presenting half a dozen lectures in environmental geology in MU’s Lifelong Learning program. Tom also serves as president of the MU Retirees Association and continues to produce MURA’s quarterly newsletters. All this while finding time to write and illustrate improved editions of his two geology lab manuals, Geoscience Laboratory and Environmental Geology Laboratory. Tom and Peggy toured
Banff National Park this past July, which included visits to Athabaska Glacier and the legendary Burgess Shale. Tom’s ‘Parks’ students are viewing overhead transparencies of Banff scenery this semester. Son Tom continues to teach, with his mentor, Miles Hayes, short courses in coastal geology for industry geologists. A return to their clean-up project along the coast of Saudi Arabia appears to be in the offing. Son Rob is part owner and CEO of TradeWind Energy, a wind power project development company in Overland Park, Kan. Grandkids are within reach of MU Tiger football and basketball, so the Freeman extended family is together often. Tom says he enjoys visiting with former students at annual meetings of GSA.

Paco Gomez’s past year has been an exciting one for him and his students. The NSF awarded a grant to continue his ongoing research on earthquakes and active tectonics of the northern Dead Sea fault in Syria and Lebanon. Field work accomplished during the past summer included selecting sites for paleoseismic trench investigation in Syria and Lebanon and global positioning system (GPS) measurements in Lebanon. Additionally, they have begun GPS measurements of crustal deformation along the southern Dead Sea fault in Jordan. His other major research project involves active tectonics of northern Morocco with support from the NSF and the Petroleum Research Fund. On this project, Paco and his Moroccan colleagues are trying to constrain long-term rates of deformation to compare with recent results from GPS measurements by colleagues at MIT. Graduate student Scott Lepley conducted a successful field trip to Lebanon for their research on erosion rates. Another graduate student, Deepak Manjunath, has been producing precise images of crustal deformation in the Chilean forearc using radar interferometry. Both students have submitted abstracts describing their research to the fall meeting of the American Geophysical Union.

Glen Himmelberg reports that he and Marilyn are excited about the freedom of retirement and the ability to go wherever their interests take them. For the near future, at least, they plan to remain in Columbia.

Cheryl Kelley is pleased to report on the accomplishments of Daniel Basnett, a master’s student she co-advised with Ken MacLeod. Daniel presented his project on the sclerochronology of snail shells from Muramee Spring in April and walked in the May graduation. He is currently employed as a high school teacher in Jefferson City. Cheryl is also pleased to report on the success of her research leave. She collaborated with colleagues at NASA Ames Research Center at Moffett Field, Calif., to conduct a stable isotope study of hypersaline microbial mats from Guerrero Negro, Baja California, Mexico Sur. The research leave gave her the opportunity to spend significant portions of time out in the Bay Area — she enjoyed the change of pace, but was always glad to be back in the Midwest after each sojourn. This past February she traveled with the NASA group down to the field site in Baja California. While traveling down the Baja peninsula, they caught the desert at full bloom — beautiful — and even got the chance to go whale watching one morning in the Ojo De Liebre lagoon, a site where hundreds of gray whales go to mate and raise their young each year. The field site is part of the world’s largest salt-producing company and is amazing, both in terms of the salt operations and the ecosystems that have evolved in these hypersaline environments. The microbial mats that were collected are laminated, multi-colored because of the different microbial groups, and approximately 5 cm thick. By studying these ecosystems, information about early life on this planet, as well as on other planets, may be ascertained.

Mian Liu had another busy year. He taught Principles of Geology in the auditorium and began teaching Plate Tectonics, which was originally taught by Eric Sandvol. While continuing their research of continental deformation and mountain building, Mian and his group are also working on active crustal deformation and earthquakes. Qingsong (Pine) Li, expected to finish his doctorate next spring, has made major progress in our
understanding of intraplate earthquakes in the New Madrid seismic zone. The results are published in two recent papers. He is currently working on fault dynamics and earthquakes in California and preparing another paper. Gang Luo passed the comprehensive exam and is currently working on timescale-dependent fault behaviors. Dr. Youqing (Richard) Yang continues to work on active tectonics in the western United States and China. Dr. Shimin Yang finished a preliminary modeling of Asian continental deformation. Dr. Huai Zhang has returned to MU temporarily to work with Mian and other faculty members interested in parallel computing. With his help, Mian’s group has moved to the frontier of high-performance computer simulation of lithospheric geodynamics.

Ken MacLeod is on research leave and will spend several months throughout the year at the University of British Columbia in Vancouver working on estimating surface water productivity as it relates to the distribution of incinerated bivalves and organic carbon delivery to the seafloor. Ken will be examining primarily Cretaceous black shales he helped recover as a shipboard scientist during Ocean Drilling Program Leg 207 to Demerara Rise in the tropical western Atlantic. Ken sampled the cores last spring in Bremen, Germany. In Columbia, master’s student Daniel Basnett presented his project on the longevity of snails and seasonal variability in water temperature and composition in Marmee Spring, Mo. Continuing doctoral students Carolina Isaza and Damon Bassett both have the results of their master’s research submitted for publication and passed their respective comprehensive exams this past spring. Damon will be giving a talk at this year’s annual meeting of the Geological Society of America in Salt Lake City, Utah. Finally, incoming master’s student Doug Lewis is going to be working on the systematic and paleoecology of some dendroid graptolites collected largely from Missouri.

Eric Sandvol continued to work with his Turkish colleagues on data from the Eastern Turkey Seismic Experiment (ETSE). Postdoctoral research associate Ekrem Zor is continuing his work on measure seismic wave attenuation in the Middle East. Prof. Dr. Niyazi Turkelli visited both Ekrem and Eric during the fall of 2004 as a part of this project. Ekrem has also made an important discovery beneath the eastern Anatolian plateau. He has found what appears to be an oceanic slab that broke off approximately 10 Ma ago and led to the uplift of the Anatolian and Iranian plateaus. Preparations are beginning for a very large seismic experiment (INDEPTH IV) in the northeastern corner of the Tibetan plateau. This project will last four years and will involve no fewer than 25 scientists from the United States, China, the United Kingdom and Germany. They will begin deployment in the spring of 2007. Furthermore, Mian Liu and Eric have worked with their Chinese colleagues to deploy 15 stations in the Ordos plateau. They are planning to deploy another 30 to 40 stations in the Ordos plateau during the fall of 2005 using instruments from both Nanjing and Peking Universities. This project is the first major passive source experiment in the Ordos plateau, which is located at the very edge of the Tibetan plateau and is the location of the most devastating earthquakes in human history. Eric and Bob Bauer developed several advanced seismic reflection and refraction projects at the Branson Field Laboratory. They had eight students participate in the field work and data analysis. The students discovered several important subsurface structures that may help to shed some light on the structural geology of Dallas and Derby dome. Two new students are working
toward their doctorates in seismology: Qie Zhang and Xueyang Bao. Amanda Lough, a geology undergraduate, is also working in the lab, creating geophysical databases.

Mitchell Schulte arrived late for his first semester as an assistant professor in the department because he was at sea on the Research Vessel Atlantis, 2,200 meters above the Endeavour Segment of the Juan de Fuca Ridge, off the northwest coast of the United States. He was lucky enough to get to dive (for the second time—the first was on the East Pacific Rise) in the DSV Alvin to the sea floor on the ridge, from where he was collecting samples of the hydrothermal vent fluid in order to analyze their organic-sulfur compound composition. Mitch has long been involved in the RIDGE program, an NSF-funded interdisciplinary community devoted to researching the Earth’s mid-ocean ridge system. This November he will be attending a planning workshop in Vancouver, where he and other RIDGE scientists will evaluate scientific progress made so far and help direct future efforts for the community. He has been invited to speak in a special session at the American Geophysical Union fall meeting in San Francisco, where he is also co-convener of two other special sessions. Prior to being appointed at MU, Mitch was a staff research scientist for NASA at the Ames Research Center in Mountain View, Calif., for five years. One of his research projects there was a field-based study of the geobiology of the peridotites in the Coast Range and Trinity ophiolite complexes as analogs for similar environments on Mars. Mitch is very excited to be within driving distance of his wife, Karyn, who is in graduate school in St. Louis. In the meantime, he is very happy that there will be a hockey season again to distract him from time to time and that the baseball Cardinals are looking like the team to beat this year! This semester he is teaching a course in Geomicrobiology and Microbial Geochemistry, and in the spring he will be teaching Historical Geology.

Kevin Shelton completed a busy first year as department chair. As a welcome break from administrative duties, Kevin visited Camp Branson for the first time and got royally sunburned on Derby Dome. In late July, Kevin and master’s student Jason Yuvan traveled to the Yukon and Northwest Territories of Canada. In addition to looking at a number of tungsten, gold, and emerald prospects, they had the opportunity to see enough granites to convince themselves that they don’t want to become igneous petrologists. (Check out some of their field photos in the newsletter). After returning from the field, Kevin and Lois drove Ben out to Duke for the start of his freshmen year. Emily, 13, started eighth grade and is singing and running track. Kevin is learning to live in a house where he is the only male, so he got a new dog.

Mike Underwood and family had an eventful year. Gail was one of two Missouri recipients of the Presidential Award for Excellence in Mathematics and Science Teaching. A full week of activities in Washington, D.C. included facetime and glad-handing with POTUS (George W. Bush), a state department banquet, an awards ceremony at the National Academies, and a substantial cash award from the National Science Foundation. Mike went along as arm-candy. Gail continues to teach second grade at Grant Elementary, notwithstanding her almost legendary status. On July 8, Alexis presented her parents with their first grandchild, Alicia Marie Camel. Quantitative scientific tests have proven that the baby is the most delightful ever born. Alexis lives in Oklahoma City and is due to process out of the U.S. Air Force in September. Nikolas survived two major hurricanes in Florida and has moved back to Columbia. Mike spent his idle time as a core member of the Project Management Team for the Nankai Trough Seismogenic Zone Experiment and Co-Chair of the Science Steering and Evaluation Panel of IODP. NanTroSEIZE will probably begin operations during 2007, thus becoming the first international users of the new riser-capable drilling vessel, Chikyu. While in town, Mike taught the capstone course for the bachelor of arts in Environmental Geology, a one-credit mini-course on beach dynamics, oceanography and environmental geology.

Alan Whittington’s travel for the fall included the Penrose Conference on Continental Magmaic-Hydrothermal
Systems in Montana, a visit to Michigan Tech, and the annual GSA meeting in Denver. The winter semester was busy with fieldwork at the active volcanic dome of Santiaguito in Guatemala over spring break. Master’s students Bridget Hellwig and Jackie Getson came along too, although somehow Alan ended up carrying most of the rocks. Alan led the Igneous-Metamorphic Petrology field trip to southeast Missouri, again joined by a group from the University of Arkansas followed by a visit to the University of Kansas. Paula Lee successfully defended her master’s thesis on the age and emplacement directions of basalts and lamprophyres in the Raton Basin. Jennifer Cooper continued researching contact metamorphism of coal beds, spurred on by participating in a highly selective NSF-sponsored workshop in Antarctica over the winter break. Fred Davis continued his undergraduate research on the emplacement of Antarctic basalts. Last May Alan organized a special session on the physics and chemistry of magmas at the Goldschmidt conference held in Idaho, which was thoroughly enjoyable. In July, Alan took the family to Wyoming for the hard-rock week of field camp, which was again popular despite being optional for the first time. Before camp they visited Yellowstone and the Tetons, and afterwards visited seven more national parks in Utah, Arizona, and Colorado, and the closest recently active volcano to Columbia at Capulin Volcano National Monument in northeast New Mexico (well worth a visit). Despite seeing hard rocks of many kinds, Xander shows a worrying fascination with paleontology (dinosaurs, anyway). Now he can roar. We hope he will start talking soon. Three new graduate students arrived in August: Mike O’Malley from UM-Rolla, Geoffrey Ayard from France and Urmidola Raye from India, so the upcoming year should be even busier.

Carol Wicks enjoyed teaching Low-Temperature Geochemistry, Geology of Missouri and Environmental Geology this past year. Carol also taught Principles of Geology during this past summer. Amanda Hassler defended her master’s thesis last May. Amanda’s research investigated the source of quality of water in scour holes at Overton Bottoms (Missouri River floodplain). These scour holes provided critical habitat for migrating birds and resident turtles. Carol’s research efforts have focused on scour disturbances, habitat destruction and the recovery times of stream ecosystems and applying signal processing techniques to time series data from karstic springs. Ethan Jenzen returned to finish his master’s degree. Ethan was employed by the Minnesota State Parks this past summer. Two new students, Steve Pagan and Mary Schubert, have joined the karst project. On a personal note, Carol’s son, Peter, is 13, is in eighth grade and is now a First Class Scout. After three summers at Boy Scout camp, Peter finally passed the ‘swimmer’s’ test, thus the first class rank! It turns out Peter sinks quite well and therefore staying afloat was and is quite difficult for him. Peter and Butler, Carol’s husband, along with their boy scout troop, rode their bikes to Illinois this past summer. They rode 210 miles over four days and camped along the Katy Trail. Peter is not a swimmer, but he can ride!

Student bus drivers Roger Planalp (left) and Hank Ott (right) in front of Alcoa cabin at Camp Branson, summer 1952. Roger is allegedly wearing swim trunks behind the wash tub, according to photographer Randall Weber (FC ’52, BA ’53).
### Active Research Grants

<table>
<thead>
<tr>
<th>University/Institution</th>
<th>Principal Investigator(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Chemical Society</td>
<td>Paco Gomez</td>
<td>$30,000</td>
</tr>
<tr>
<td>College of Arts &amp; Science</td>
<td>Mian Liu</td>
<td>$1,460</td>
</tr>
<tr>
<td>Department of Energy</td>
<td>Eric Sandvol</td>
<td>$209,715</td>
</tr>
<tr>
<td>Geological Survey of Canada Field Support</td>
<td>Kevin Shelton</td>
<td>$22,400</td>
</tr>
<tr>
<td>MU Research Council</td>
<td>Martin Appold</td>
<td>$7,500</td>
</tr>
<tr>
<td></td>
<td>Paco Gomez</td>
<td>$7,500</td>
</tr>
<tr>
<td></td>
<td>Cheryl Kelley</td>
<td>$7,500</td>
</tr>
<tr>
<td></td>
<td>Mian Liu</td>
<td>$7,500</td>
</tr>
<tr>
<td></td>
<td>Ken MacLeod</td>
<td>$7,500</td>
</tr>
<tr>
<td></td>
<td>Peter Nabelek</td>
<td>$4,200</td>
</tr>
<tr>
<td>NASA</td>
<td>Cheryl Kelley</td>
<td>$67,220</td>
</tr>
<tr>
<td>National Science Foundation</td>
<td>Robert Bauer and Eric Sandvol</td>
<td>$62,335</td>
</tr>
<tr>
<td></td>
<td>Paco Gomez</td>
<td>$72,257</td>
</tr>
<tr>
<td></td>
<td>Paco Gomez</td>
<td>$17,967</td>
</tr>
</tbody>
</table>

### National Science Foundation (cont’d)

<table>
<thead>
<tr>
<th>Principal Investigator(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paco Gomez</td>
<td>$55,182</td>
</tr>
<tr>
<td>Paco Gomez</td>
<td>$225,922</td>
</tr>
<tr>
<td>Paco Gomez, Mian Liu and</td>
<td>$148,113</td>
</tr>
<tr>
<td>Eric Sandvol</td>
<td></td>
</tr>
<tr>
<td>Mian Liu</td>
<td>$50,821</td>
</tr>
<tr>
<td>Mian Liu</td>
<td>$150,000</td>
</tr>
<tr>
<td>Ken MacLeod</td>
<td>$155,799</td>
</tr>
<tr>
<td>Peter Nabelek and Mian Liu</td>
<td>$162,465</td>
</tr>
<tr>
<td>Eric Sandvol</td>
<td>$91,230</td>
</tr>
<tr>
<td>Eric Sandvol</td>
<td>$2,420</td>
</tr>
<tr>
<td>Kevin Shelton</td>
<td>$53,160</td>
</tr>
<tr>
<td>Mike Underwood</td>
<td>$106,025</td>
</tr>
<tr>
<td>Mike Underwood</td>
<td>$100,000</td>
</tr>
<tr>
<td>Alan Whittington</td>
<td>$219,968</td>
</tr>
<tr>
<td>Alan Whittington and</td>
<td></td>
</tr>
<tr>
<td>Peter Nabelek</td>
<td>$141,289</td>
</tr>
</tbody>
</table>

### Perilya Mining Ltd.

<table>
<thead>
<tr>
<th>Principal Investigator(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martin Appold</td>
<td>$8,000</td>
</tr>
</tbody>
</table>

### UM Research Board

<table>
<thead>
<tr>
<th>Principal Investigator(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paco Gomez</td>
<td>$21,000</td>
</tr>
<tr>
<td>Peter Nabelek</td>
<td>$20,000</td>
</tr>
<tr>
<td>Alan Whittington</td>
<td>$24,090</td>
</tr>
</tbody>
</table>

### U.S. Geological Survey

<table>
<thead>
<tr>
<th>Principal Investigator(s)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Bauer</td>
<td>$5,966</td>
</tr>
</tbody>
</table>

New master's student Jennifer Maloney adds to her field notes on a lithium pegmatite outcrop in southern California.
Visiting Students

This fall, our department hosted two undergraduate Brazilian students from the State University of Campinas, from left, Talita Lammoglia and Carlos Araújo. We hope that they are the first of many to take advantage of MU’s exchange program in Geology and Civil Engineering.

Bastian Joachim and Andre Stechern (center, from left) from the Institut für Mineralogie, University of Hannover, Germany, enjoy researching silicate melt viscosity with master’s student Bridget Hellwig, left, and Alan Whittington, right.

New Faculty

Mitchell Schulte joined our faculty as an assistant professor in September 2005. Mitch completed his doctorate at Washington University in 1997. A biogeochemist by training, Mitch has been a research scientist at NASA’s Ames Research Center in Moffett Field, Calif., since July 2000. He is on the editorial board of the journal Astrobiology and is a co-investigator on the NASA Ames Astrobiology Institute team. Mitch has led field-based studies of ophiolite terranes in northern California as habitats for extremophile organisms and as analogs for a potential Martian biosphere. He also studies the organic geochemistry of hydrothermal systems, currently focusing on the behavior of sulfur and the abiotic formation of organic compounds in terrestrial and extraterrestrial geochemical systems.
MU Geological Sciences Department hosts preview screening of Discovery Channel’s new film event, *Supervolcano*

The Discovery Channel selected the Geological Sciences Department at MU as one of twenty schools nationwide for an exclusive preview screening of Discovery’s new film event, *Supervolcano.*

On Tuesday, April 5, 2005, Keller Auditorium was overflowing with people for this exclusive preview. The first 100 people received t-shirts, and it was an excellent exposure not only for the department but also for the science of geology. Current student board member Scott Lepley and other students organized the event.

Film Description: A supervolcano 53 by 28 miles across lies under Yellowstone National Park. Through the film *Supervolcano,* the Discovery Channel tells the story of what would happen when this massive underground volcano erupts. Produced in conjunction with government agencies and based on the latest predictions of leading scientists, the Discovery Channel dramatically explains the science behind the supervolcanic eruption and projects viewers into the aftermath of this cataclysmic event.

New master’s students (left to right) Jennifer Maloney, Sara Harkins and Michael O’Malley enjoy volleyball with Jon Truesdale (BS ’04) at the geology club fall barbeque.

Thanksgiving celebration in the Geological Sciences Department. From left in the foreground, Dean Mike O’Brien, Marilyn Himmelberg, Carol Wicks and Bill Simpkins (Iowa State University) enjoy fine food and conversation.
Glen Himmelberg Retires

Glen and Marilyn Himmelberg receive a generous thank-you gift from the Geology Development Board following a decade of hosting board dinners at their house while Glen was Chair: a luxury train trip across the Canadian Rockies!

A Geology-Geography Wedding

A geology-geography merger! Geophysics doctoral student Qingsong (Pine) Li and geography master’s student Yin Luo were married last academic year in Columbia. Mian Liu presided over the ceremonies, accompanied by wife Julie and daughter Karina.
Alan Whittington proudly displays his Mizzou Geology shirt at the active volcanic dome of the Santiaguito volcano, Guatemala. Note to Alan: Scottish complexion, combined with gray shirt and gray rocks, causes Photoshop to work overtime resolving the picture.

Ash eruption at Santiaguito, Guatemala. A few kilometers closer and Alan and his students could have re-enacted Pompeii.

Master's students Jackie Getson and Bridget Hellwig recover in the clouds after an arduous climb up a Guatemalan volcano.
Mona Sirbescu (PhD '02) pushes new master's student Jennifer Maloney around while on a field trip to the lithium pegmatites of San Diego County, Calif.

Kevin Shelton and master's student Jason Yuvan in the helicopter after a long day looking at tungsten prospects in the Northwest Territories. This was taken right before Kevin "mysteriously" fell out of the helicopter.

Master's student Jason Yuvan points out the granite-skarn contact underground in the Cantung tungsten mine in the Canadian Northwest Territories. Note the proper use of safety gear!
Visiting Speakers

A rich and varied program of visiting speakers was funded by our Williamson Family Endowment Fund. Last year’s Williamson Family Colloquia included:

Kevin Brown, Scripps Institution of Oceanography
What causes transience in fluid flow in subduction zones and in other oceanic margin environments?

Brent Christner, Montana State University
Geomicrobiological investigations of the Vostok Ice Core: Implications for life in subglacial Lake Vostok.

Mark Clementz, Smithsonian Marine Station at Fort Pierce
Bone carbonate, collagen, and cholesterol: Three temporally distinct biogenic records of ecological information for ancient marine mammals.

Eric Erslev, Colorado State University
Controversies and contusions in the Rockies: New tectonic models for Laramide compression.

Rodney Ewing, University of Michigan
Minerals and the safe immobilization and disposal of plutonium.

Kathryn Hoppe, University of Washington
Using isotopic analyses of bison bones and teeth to reconstruct paleobiological and palaeoenvironmental conditions.

Quisheng Jin, University of California at Berkeley
Microbial sulfate reduction in geochemical environments.

John W. Moreau, University of California at Berkeley
Microbial sulfur cycling and the fate of metals in mining-impacted environments.

Tina Niemi, University of Missouri-Kansas City
Using archaeological sites to study earthquakes on the southern Dead Sea Transform, Jordan.

Matt Nowell, EDAX/TS
Electron Backscatter Diffraction (EBSD) and Orientation Imaging Microscopy (OIM).

Jack Pushin, Geological Survey of Alabama

Roberto Perez Xavier, State University of Campinas (Brazil)
Archaen and Proterozoic Cu-Au deposits of the Carajas Mineral Province, northern Brazil.

Mitchell Schulte, NASA Ames Research Center
Geochemical controls on organic synthesis and metabolic processes: Lessons from the California coast range and the East Pacific Rise.

Galen Suppes, Chemical Engineering, MU
Hybrid Electric Vehicles and the plug-in versions that will bring in the Hydrogen Age.

Greg Swain, University of Adelaide (Australia)
The Gawler Craton, Australia: Insights from SHRIMP U-Pb, geochemical, Sm-Nd isotopic and EPMA monazite analysis.

An Yin, University of California, Los Angeles
Creating Tibetan Plateau, the Tian Shan way.
New Field Experiences at Camp Branson

The 2005 summer field camp session marks the first year of our newly expanded NSF-supported curriculum. With advanced projects in both hydrogeology and geophysics, we are working to supply more field experience for students in these critical areas while still providing students with a well-rounded field geology background. This was also the first summer that Kevin Shelton had a chance to visit Camp Branson, and we were glad to have the chance for him to see the facilities and learn about our programs. We had a great summer overall.

The student group this summer included 28 students from 13 different schools. In addition to 17 students from Missouri schools, (including five from MU, four from Northwest Missouri State University, five from Southwest Missouri State University, and three from Washington University), 11 students attended from eight other states (California, Idaho, Kentucky, Michigan, North Carolina, New York, Pennsylvania and Washington). Many of the students received partial scholarships to attend the course from funds donated to field camp scholarship funds by many departmental alumni.

The new National Science Foundation (NSF) grant had a great impact on our projects this summer. The grant, along with matching equipment funds from MU, allowed us to purchase a 32-channel seismic data acquisition system, a total station for high-resolution surveying, a fluorometer for conducting tracer experiments, and several computer and data logger systems for data acquisition and processing. In addition to providing expanded advanced project options, the new equipment allowed us to expand our integrated hydrogeology and geophysics projects in the Red Canyon Ranch area. This year, in addition to stream gauging and Geoprobe well construction, new chemical kits and techniques allowed the students to collect more data. And, with new laptop computers provided by MU, students were able to both collect and process their data in the field.

The new seismic data acquisition system allowed the students to collect all data digitally (no more strip recorders), and it significantly increased the resolution of the near subsurface images that students were able to process. During the advanced geophysics projects, the students designed appropriate data acquisition plans, learned to use a time-term inversion scheme to improve their data models, learned to use basic refraction tomography, and imaged tight synclines that occur along the margin of Derby Dome.

Eric and Christine Sandvol guided the students through seismic studies across the project area, and Dennis Dahms (University of Northern Iowa) ran a surface mapping project with the students to map a sequence of Pleistocene to Holocene stream terraces in Red Canyon. Don Siegel (Syracuse) continued to head up the hydrogeology projects, and he was assisted by Laura Lautz (Syracuse), Jim Luecke and Len Payne. Don recently received a substantial grant from the National Science Foundation to complete a detailed hydrologic study in the Red Canyon area. As a result, several of the students and researchers associated with this project used the camp as a base of operations.

Linda Ivany (Syracuse) and Ann Holmes (University of Tennessee, Chattanooga) covered the sedimentation and stratigraphy projects on facies analysis and sedimentary structures. Bob Bauer covered the mapping projects on Dallas and Derby Domes and was assisted by Ann and teaching assistants Angie Van Boening and Joe Hill. Kevin
Shelton visited camp during the Derby Dome project and had a chance to work with both faculty and students in the field. This year Bob gave a series of lectures on the use of GPS receivers, and each mapping group had a GPS receiver to assist with mapping efforts. Despite the new technology, most students came to realize that the time-tested technique of reading a topographic map is still the basis of geologic mapping. Alan Whittington and Bob ran the hard-rock mapping projects in the South Pass area.

Temperatures were pretty cool during the first couple weeks of camp, but excellent weather conditions again prevailed for this year’s trip through the geology of northwestern Wyoming. Mark Anders (Columbia University) returned to provide his expertise on the Snake River Plain, the Yellowstone hot spot, and the Heart Mountain detachment, and Dennis Dahms again presented stops on the Pleistocene glacial history of the region. Joe Hill served as the logistical coordinator and hydrothermal expert during the trip through Yellowstone Park, and Angie covered the discussions of the geomicrobiology in the thermal systems.

Marcia Suniga, who owned and ran the Magpie Café in Lander for many years, served as the camp cook again this summer (another year of great food). Len Payne returned this summer to once again serve as our caretaker, and he lived in the new caretaker’s cabin that was constructed last year. Len also helped us get a well constructed for the camp. For many years, the camp’s water came from the Popo Agie River that flows through the camp. The new well eliminated the need for the complex process of filtering and chlorinating water that occupied much of the caretaker’s time for years.

Thanks to all of the faculty, staff and alumni contributions that helped to make another great summer at Camp Branson, and thanks to Kevin for coming to see what camp is all about.

Field Camp scholarship recipients. Kneeling, Rusty Riis. Second row from left (staggered), Fred Davis, Yuko Takishita, Tricia Collins, Emily Hartwick and Rebecca Dodds. Back row from left, Ian Orland, Joey Cushing, Brandon Klingensmith and Shawn Murphy.
Undergraduate Degrees

Bachelor of Arts
Magna Cum Laude

Dylan E. Sullivan

Bachelor of Science

Eric J. Nelson
Michael A. Pelch
Jon P. Truesdale (with departmental honors)

Scholarships

Richard G. Boyd Scholar
Mariana L. Cockran

Edmond & Mary Raymond Scholar
Jacob J. Hahn

Pearl T. Sando Scholars
Chris Burrows
Sarah Grant
Amanda C. Lough
Frederick A. Davis
Ashley Ripple

Fred Strothmann Scholars
Rachel L. Barker
Rebecca M. Dodds
Rachel D. Lee
Eric Livingston
Alicia M. Matson
Elyn G. Potter
Andrea L. Westfall

Field Course Scholars
Tricia M. Collins
Joseph M. Cushing
Frederick A. Davis
Rebecca M. Dodds
Emily E. Hartwick
Brandon Klingensmith
Shawn R. Murphy
Ian J. Orland
Rusty H. Riis
Yuko Takishita

JOI and NSF Host Truman Fellow
Dylan Sullivan

You might recall that a year ago, we announced that Dylan Sullivan (BA 2005) received a prestigious $30,000 Harry S. Truman Scholarship, one of 70 awarded nationwide to students who are pursuing careers in public service. The Truman Fellows Program allows 20 of these scholars to gain employment experience through a yearlong program in Washington, D.C. This coming year, the National Science Foundation and the Joint Oceanographic Institutions are jointly hosting Dylan. In his three months at NSF’s Division of Ocean Sciences, Dylan will develop a Broader Impacts database for ocean science research proposals. In his nine months at JOI, he will work on the U.S. Science Support Program’s outreach and community engagement activities.

Geology Club members working the concession stand at the MU-Iowa State football game on October 15, 2005.
Graduate Degrees

Master of Science

Daniel D. Basnett
Stable isotopic sclerochronology in shells of the fresh-water snail Amphicola limosa to evaluate growth history and environmental variability in the Maramec Springs, Missouri karstic system.
Adviser: Ken MacLeod

Steven M. Bates
Conodont oxygen isotope records of late Carboniferous palaeoenvironmental variability.
Adviser: Tim Lyons

Amanda Hassler
Ground water interaction with the Missouri River at Big Muddy National Fish and Wildlife Refuge.
Adviser: Carol Wicks

Paula Lee
Spatial, temporal and petrogenic relationships of basaltic and lamprophyric dikes and sills of the Raton Basin, southern Colorado and northern New Mexico.
Adviser: Peter Nabalek

MooJoon Shim
Techniques for the analysis of carbonate-associated sulfate (CAS) concentrations in modern and ancient limestones and dolostones.
Adviser: Tim Lyons

Ry E. Stone
Causes of incipient garnet growth in garnet-biotite grade pelitic schist, the Black Hills, South Dakota.
Adviser: Peter Nabalek

Doctor of Philosophy

Michael J. Formolo
The biogeochemical cycling of sulfur in varying redox regimes.
Adviser: Tim Lyons

Scholarships

John F. Burst Scholars
Sara Harkins  Jason Yuvan

Graduate School Fellows
Jennifer Maloney  Michael O’Malley

Leonard D. Harris Scholars
Damon Bassett  Carolina Isaza

Walter D. Keller Scholars
Jacqueline Getson  Jennifer Maloney
Carolina Isaza  Steven Pagan
Ethan Jenzen  Angela Van Boening
Scott Lepley

Dan E. McMillen Scholar
Jennifer Cooper

Raymond Peck Fellow
Junhua Guo

Carl B. Rexroad Scholar
Carolina Isaza

Fred H. Strothmann Scholars
Christopher Brocka  Bridget Hellwig
Jennifer Cooper  Jason Yuvan

W.A. Tarr Scholars
Sara Harkins  Angela Van Boening

Jen Cooper is presented with the GSA Coal Division’s Antoinette Lierman Medlin Scholarship in Coal Geology by Gretchen Hoffmann of the New Mexico Bureau of Geology and Mineral Resources at the annual meeting in Denver, November 2004.
Scott Lepley receives the 2004-05 Superior Graduate Achievement Award from Bob Bauer.

Jennifer Cooper receives the 2004-05 James Stitt Graduate Teaching Award from Bob Bauer.

Fred Davis receives the Estwing Hammer from Cheryl Kelley. This award honors the top undergraduate student to attend field camp.
Student Publications and Abstracts


Lepley, S.W., Gomez, F.G., and Nader, F., 2005. Insights on watershed development along the actively uplifting Mount Lebanon range (Lebanon) from marine and fluvial terraces: AGU Annual Meeting, Program with Abstracts, #7118.


Li, Q., Liu, M., and Sandvol, E., 2005. Stress evolution following the 1811-1812 large earthquakes in the New Madrid Seismic Zone:


Student Grants and Awards

American Association of Petroleum Geologists Research Grant
Chris Brocka
Sara Harkins

Antoinette Lierman Medlin Scholarship in Coal Geology, GSA Coal Division
Jennifer Cooper

Geological Society of America Research Grant
Chris Brocka

Geological Society of America Travel Award
Damon Basset
Chris Brocka

MU Graduate Professional Council Travel Award
Scott Lepley

MU Graduate Student Association Travel Award
Scott Lepley

North-Central GSA Travel Award
Chris Brocka
Scott Lepley

James H. Stitt Graduate Teaching Award
Jennifer Cooper

Superior Graduate Achievement Award
Scott Lepley

Superior Graduate Student Award
Scott Lepley
Investments in the Future

The Department of Geological Sciences gratefully acknowledges the financial support of alumni and friends who promote the recognition, welfare and progress of the Department of Geological Sciences and the University of Missouri-Columbia. Donors whose cumulative gifts to MU, including corporate matching contributions, total $25,000 cash or pledge or $50,000 or more deferred are recognized through the University of Missouri-Columbia's Jefferson Club.

Snow at Camp Lander (before it was Camp Branson) on June 14, 1945. Photo taken by Betsy Page McRae (MU '48).

Jefferson Club Members

Ambassadors
Mr. & Mrs. Norman F. Jeffries

Very Distinguished Fellows
Drs. Alice M. and John F. Blount
Dr. and Mrs. Tom Freeman Jr.
Mrs. Hugh M. Looney
Mr. John H. Marshall Jr.
Dr. and Mrs. Herman Ponder

Distinguished Fellows
Mr. and Mrs. Richard G. Boyd
Mr. Stephan M.L. Eisner
Mr. Donald S. Garvin
Mr. B. Ray Holifield
Mrs. Wallace B. Howe
Mr. & Mrs. Ed A. Williamson

Fellows
Mrs. Frank D. Gorham Jr.
Michael W. Quearry
Mr. and Mrs. Robert L. Rayl
Mrs. James F. Westcott

Members
Mr. and Mrs. David K. Baumann
Dr. and Mrs. Richard Bishop
Dr. and Mrs. John F. Burst
Mr. and Mrs. Paul E. Gerdemann
Mr. and Mrs. John J. Heberger Jr.
Mr. and Mrs. Harold E. Johnson III
Mr. and Mrs. Andy Kemmer
Ms. Amy C. (Patterson) King
Mr. and Mrs. Ernie Knirk
Mr. Andrew Kugler Jr.
Ms. Jane Espy Meyer
Mr. and Mrs. Robert C. Miles
Mr. Gary C. Mitchell
Mr. and Mrs. M. Clay Parsons
Mr. and Mrs. David Rapp
Mr. Scott H. Raymond
Mr. and Mrs. Robert K. Sylvester
Dr. and Mrs. M. Ray Thomasson
Mrs. Keith Tuthill
Mr. and Mrs. Tom Ware
2004–05 Contributors
(through Aug. 31, 2005)

Henry W. Allen
Dewey A. Baker
John L. Berkley
Michael J. Bernthal
Dr. Richard S. Bishop
Alice M. Blount
Jack D. Burgess
Wayne F. Canis
Robert E. Carver
Randel T. Cox
James W. Danser
Richard P. DeCamara
Stephan M. Eisner
John G. Elliott
Evard P. Ellison
Robert L. Foster
Thomas J. Freeman Jr.
Alice C. Fuest
Donald S. Garvin
Richard J. Gentile
Martha George
Norman G. Grannemann
Glen R. Himmelberg
William M. Hoag
Richard D. Hoare
Mark J. Hoffmann

Harold and Ruth Johnson
Art Kasey
Eugene J. Kinney
Amy C. King
Ernest P. Knirk
Larry M. Knox
Roger G. Kussow
Troy J. Laswell
Mrs. Hugh M. Looney
Olav Malvik
Melvin V. Marcher
Earle F. McBride
Joan S. McDougal
Timothy R. McHargue
Jim P. Miller
Gary C. Mitchell
George E. Moore Jr.
Dennis R. Ojakangas
Richard W. Ojakangas
Henry L. Ott
Grace E. Palmer Estate
Marshall C. Parsons
David M. Patrick
Patrick Perotta
Stephen T. Phillips

Michael W. Quearre
Scott H. Raymond
Carl B. Rexroad
Thomas D. Rush
Gene and Thelma Schmidt
Eugene S. Schweig III
Kevin L. Shetton
Yunqing Shen
David D. Smith
Marjorie C. Smith
Craig A. Stewart
Wendy Straatmann
Robert K. Sylvester
Laurence G. Trudell
Kay N. Werner
Ed Williamson

Matching Gifts:
Chevron USA
Dominion Foundation
Exxon/Mobil Foundation
Marathon Oil Foundation
Phillips Petroleum Foundation
USG Foundation

Geology Development Board member Cheryl Seeger explains alternative hypotheses for formation of the iron ore deposits at Pilot Knob, in southeast Missouri to students from MU and the University of Arkansas on the Igneous-Metamorphic field trip, April 2005.
DEVELOPMENT ACTIVITIES
ENDOWMENTS

Endowed Scholarship Funds

William Burrows Allen Field Camp Scholarship
Mr. & Mrs. Richard G. Boyd Endowment Fund
John F. Burst Graduate Fellowship in Industrial Minerals
Richard P. Frey Memorial Paleontology Fund
Donald S. Garvin Geology Field Camp Scholarship
Leonard D. Harris Scholarship
Wallace B. Howe Fellowship in Geology
Clayton H. Johnson Memorial Scholarship Fund
Hal and Ruth Johnson Fellowship Fund
Walter D. Keller Scholarship Fund
Maurice G. Mehl Memorial Scholarship in Field Geology
James G. Mitchell Memorial Fund in Geology
Ernest J. Palmer Memorial Scholarship
Mrs. Pat Scholarship for Geology Students
Raymond E. Peck Undergraduate Scholarship
Raymond E. Peck Graduate Fellowship
Edmond A. & Mary L. Raymond Scholarship
Carl B. Rexroad Geological Sciences Endowment
Pearl Todd Sando Geology Scholarship Endowment Fund
James H. Stitt Memorial Scholarship Fund
Fred Strothmann Perpetual Geology Scholarship
W.A. Tarr Scholarship
George W. Viele Memorial Geology Field Camp Scholarship Fund

Unrestricted Endowment Funds

Lily Marie Carter Endowed Geology Fund
Geology Endowment Fund
Walter D. Keller Opportunities for Excellence Endowment in the Geological Sciences
John & Betty Marshall Opportunities for Excellence Endowment in Geology
Gene & Thelma Schmidt Geology Endowment
Norman E. Smith Opportunities for Excellence in the Department of Geological Sciences
John M. Ware Memorial Geology Endowment
Williamson Family Geology Endowment

Other Endowed Funds

E.B. Branson Professorship
R.E. Peck Professorship
A.G. Unklesbay Travel Award

Bequests

Blount Opportunities for Excellence in the Department of Geological Sciences
Cache Creek Exploration Co. Scholarship Fund
Norman & Shirley Jeffries Graduate Fellowship
Robert W. Quearry Scholarship Fund
Carl R. Swartzlow Memorial Geological Sciences Endowment Fund

Charitable Remainder Trusts

John & Betty Marshall Opportunities for Excellence in the Geological Sciences
Jack & Mildred Schindler Geological Sciences Endowment Fund
The Geology Student Scholarship Fund

On June 1, the Geology Development Board and the Department of Geological Sciences initiated a campaign to establish the Geology Student Scholarship Fund (GSSF).

Help us to Shape the Future
Our department has a tradition of commitment to excellent training of students in the geological sciences. Caring faculty mentors in the classroom, the laboratory and the field have shaped our students' lives. To continue this legacy, we ask you to share in establishing a permanently endowed fund to provide scholarships to undergraduate and graduate students.

To Attract the Finest Students
The department seeks private gifts to raise $1 million for an endowed Geology Student Scholarship Fund to help attract the finest students. Our immediate need is scholarships for graduate students. Annually, 5 percent of the fund will be distributed to enhance stipends for students. For example, a $1 million fund will provide ten scholarships at $5,000 per student to supplement current graduate stipends.

To Compete with Peer Institutions
A department's ability to offer competitive graduate financial support directly influences the quality of its graduate program. As a result of declining state support in recent years, the level of graduate student financial support the department is able to offer is not on a par with competitor universities. For example, stipends for master's and doctoral students are $3,000 to $6,000 higher per year per student at schools such as Kansas, Illinois and Indiana than at MU. This discrepancy is causing the department to lose prospective graduate students. The Geology Student Scholarship Fund will significantly affect our ability to attract top students. We expect increases in the number and quality of our applicants and an improved chance of getting our best applicants to come to MU.

To Partner with the MU College of Arts and Science
In tandem with our Geology Student Scholarship Fund campaign, the College of Arts and Science has committed to significantly increase the level of our graduate teaching stipends. Through this partnership, gifts to the fund will greatly affect our ability to attract quality students as well as reward the accomplishments of current graduate students. For 2005-06, we received an 8 percent increase in our teaching assistant stipends. We typically receive 2 percent, so the institution of our GSSF campaign has already resulted in an extra 6 percent in our TA budget.

How You Can Help
Alumni and friends of the department are uniquely positioned to help an already strong department. The members of the Geology Development Board have pledged lead gifts to the fund. Now we ask for your help. Please join in strengthening the future of the department through a gift to the Geology Student Scholarship Fund.

- Gifts of all amounts will help make a difference in the lives of our students.
- Gifts of $10,000 or more will allow donors to name individual scholarships within the fund in honor of a mentor, family member or geology friend.
- Gifts of $100,000 will produce a $5,000 scholarship for a new graduate student each year.

Assist the Next Generation
"Our department has an excellent graduate student body that is doing top-notch research comparable to that at leading universities across the nation with whom we compete for quality students. Enhancement of student stipends will make us a more attractive choice for our best graduate student applicants. As you know, life as a graduate student is not easy. We have to teach, take classes and conduct research while living on a tight budget. In partnership with the department, the College of Arts and Science has also begun to raise the level of support for current graduate students. We are very thankful for your support of this campaign and its impact on our own and future students' educational experiences." — Carolina Isaza-Londono, MS 2004 and current doctoral student.
First Geology Student Scholarship Fund
Scholarship Awarded

We have awarded the first Geology Student Scholarship Fund scholarship to new doctoral student, Samuel Guo. Samuel will be working with Mike Underwood on the Nankai Trough Seismogenic Experiment. Plans are advancing to complete four IODP drilling expeditions during Stage 1 of NanTroSEIZE, which should begin in 2007. NanTroSEIZE will be the first project to utilize the new Japanese drilling vessel CHIKYU. Samuel’s responsibilities will include a combination of lithostratigraphic analysis, tests of geotechnical properties, and analyses of clay-mineral compositions using X-ray diffraction. The first-order goal is to determine how variations in sediment input to the subduction zone affect the physical behavior of the plate-boundary fault at seismogenic depths.

The D/V CHIKYU in sea trials near Nagasaki. (Image with permission of CDEX/JAMSTEC).
Geology Development Board
Membership, 2005

Ed Williamson, Chair
BP Amoco (retired)
Houston

David Fulton (Vice Chair)
MWH Americas Inc.
Broomfield, Colo.

Mary S. Clark
Department of Natural Resources
Jefferson City, Mo.

B. Ray Holifield
Holifield Co., Inc.
Giddings, Texas

Carolina Isaza
University of Missouri-Columbia

Harold E. Johnson III
U.S. Geological Survey
Columbia, Mo.

Ernest P. Knirk
Dominion Exploration & Production
Calgary, Canada

Scott Lepley
University of Missouri-Columbia

Marshall Energetics Inc.
Plano, Texas

Wes McCall
Geoprobe Systems
Salina, Kan.

Gary Mitchell
Forest Oil Corp.
Denver, Colo.

Henry "Hank" Ott
Consulting geologist
Greenwood Village, Colo.

Michael W. Quearry
Chevron
Houston

Scott Raymond
Marathon Oil Co. (retired)
Littleton, Colo.

Gene Schmidt
Consulting geologist
Tulsa, Okla.

Cheryl Seeger
Department of Natural Resources
Rolla, Mo.

Walter G. Staley Jr.
A.P. Green Refractories (retired)
Mexico, Mo.

David J. Steyaert
Impact Energy Resources
Denver, Colo.
From Our Geology Development Board Chair...

The Geology Development Board is a group of people who support the interests of the Department of Geological Sciences. Although some of us are now retired, all of us are or have been involved in wide-ranging applications of geology throughout our working lives. Our diverse experiences enable the department faculty to develop a perspective that might otherwise be lacking.

The board currently consists of 18 members. Over our 24 years of existence, almost 70 people have served, or are now serving, as board members. Our members come from many geological fields, including federal and state natural resource or geological surveys, the petroleum industry, the “hard mineral” industry, and various specialties of environmental or groundwater application. We hold two meetings a year in Columbia, plus additional gatherings as appropriate depending on what activities might be underway at a particular time.

Most of us are quite certain that whatever rewards have come to us in life are in large part due to the education we received in geology at Mizzou. For that reason, over the years we have conducted a number of fundraising campaigns that have served to further strengthen the department and to assist the students who are now in the same situation that we were, those many years ago.

Our current project is the Geological Student Scholarship Fund, details of which are found nearby in this Newsletter. We believe this is one of the most important efforts we have ever made because it directly addresses the issue of attracting the best possible students from across the country and from around the world. This is critical to the long-term success of the department.

I strongly urge you to consider what you can do to assist the students who wish to follow in your footsteps. For those in the stage of life when you are considering estate planning, a planned gift to the GSSF could be particularly significant. I or any other board member would be happy to discuss the matter with you, share some of the things we personally have done, and help you develop your thoughts.

Sincerely,

Ed Williamson
Chairman

From left, honorees Dick Bishop (MA '69), John Marshall (BA '49, MA '50) and Ray Hollifield (BS '59, MA '64) relax in Keller Auditorium at the dedication of the department's Wall of Fame honoring outstanding alumni.
Wall of Fame Celebration at MU’s Department of Geological Sciences

The MU Department of Geological Sciences recently devoted a first-floor wall to honoring alumni through recognition of their outstanding achievements.

On Friday, April 22, 2005 at 3:30 p.m. the department celebrated the formal unveiling of plaques that recognize Geoscience Society Presidents, Distinguished Alumni, and Honorary Life Members of the Geology Development Board. Campus and local newspapers covered the event, as well as the local ABC television affiliate.


MU Alumni Association and MU Arts and Science Alumni Award honorees include: Richard Bishop (MA 1969), Arts and Science Distinguished Alumni Award 1998; B. Ray Holifield (BS 1959, MA 1964), Arts and Science Distinguished Alumni Award 1990, MU Alumni Association Distinguished Alumni Award 1991; John H. Marshall Jr. (BA 1949, MA 1950), Arts and Science Distinguished Service Award 1996, MU Alumni Association Distinguished Alumni Award 2001; Herman Ponder (BA 1955, PhD 1959), Arts and Science Distinguished Alumni Award 1993; Arts and Science Distinguished Alumni Award 2000.

Honorary Life Members of the Geology Development Board who were honored include Hugh M. Looney (BA 1947, MA 1948) and John H. Marshall Jr. (BA 1949, MA 1950).

The Geology Development Board was created in 1981 to support the programs and students of the Geological Sciences Department at MU. Since its inception, the board has helped raise funds to provide scholarships to undergraduate and graduate students, to bring notable geoscientists to speak at MU, and to support and improve teaching facilities on the MU campus and at the Branson Field Laboratory in Lander, Wyo.

The department hopes that recognition of these outstanding alumni will serve to inspire current and future students to pursue rewarding careers in the geological sciences.

Fourteen plaques occupy the first floor Wall of Fame that recognizes outstanding achievements of our alumni. Honorees include geoscience society presidents, distinguished alumni awardees and honorary life members of our development board.
Alumni News

Kathleen Abel (MA '78) resides in St. Paul, Minn.

Christopher G. Adams (BS '95) writes, “I’m still doing environmental consulting work at Marshall Miller & Associates, Inc. I am also a committee chairman with the Missouri Groundwater Association. Check out our website at www.missourigroundwater.com.”

Rhesa M. Allen Jr. (FC instructor '60, '62) resides in Dallas.

William B. Allen (FC '40, MA '41) writes, “Agnes and I did not have a good 2004. In February Agnes died, and I am continuing to live at home to check on the family: two sons, two daughters, seven grandchildren and four great-grandchildren. Memories of field camp and Columbia are still around even at 90.”

Art Banet (MA '76) writes, “Some big changes this year, and I’m not just talking about those 1/4 carat kidney stones. To my surprise, this geology gig has gotten better, and it’s not the recent exploration or the coal bed methane and hydrates stuff. Thanks to serendipity and SEPM at SMSU in Springfield, I may be a junior impactologist, along the same lines as Dave King and George Davis (irrespective of what they may say, I probably didn’t do it). Somehow I’ve gone from cuttings and cores to craters and shocked quartz in my spare time. My spare cash and everything that isn’t tied down is going to Missoula with Ceri. She took down slightly more than just a duffle bag and a clock radio. I don’t recall all those skateboards on campus or so little clothing on the ladies. I’ll have to think about this when I’m out at Elk River looking for the lost Yupik coal.”

Bret S. Beall (FC '81, BS '82) writes, “Who knew my having been a paleontologist would open so many doors for my company www.god-ess.com (hyphen needed). Forget my old nicknames. Now I’m ‘the Martha Stewart for interesting people,’ or ‘The Fab Five’ rolled into one! Life is very good.”

Deborah Bergfeld (FC ’90, BS ’91, MS ’94) writes that she just completed her third year in California and has recently moved into the redwoods where she is enjoying life away from the “burbs.” Deb says that the summers are still busy. She just returned from St. Helen’s and Yellowstone, where both trips reminded her of why she went back to school.

Bill Berthold (BS ’85) resides in Eureka, Mo.

Joseph F. Born Jr. (Grad student '69-'70) writes, “I’m working primarily Gulf Coast geology from, of all places, Tulsa, Okla., and loving it. P.S. – E-mail me, Bob Bush.”

William C. Bridges (FC '55, BA '56, MA '58) resides in Dallas.

Jack D. Burgess (MA '55) reports that he is completing his 50th year since graduation in the oil business and looking forward to many more. Jack writes, “Still working and very busy. Hope you have a wonderful year.”

Wayne F. Canis (MA '63, PhD '67) writes, “Hello to all. By the time you read this I will have retired from 35 years of university teaching.”

Cynthia J. Carroll (MA '83) works for the Missouri Department of Natural Resources in Jefferson City, Mo.

Randy Cox (PhD '95) writes that he and Angie still live with their many cats and dogs and are within walking distance of the University of Memphis, where they teach geology and math. They like bird watching, bicycling, and painting.

John R. Crocker (FC ’50, BA ’50) still resides in Dallas and spends retired life in world travel from Cape Town, South Africa to Cairo, China and Antarctica. John writes, “Retirement suits us just fine. Lots of MU alum activity in and around Dallas.”

Jessica Cundiff (FC '98) is a curatorial assistant with the Museum of Comparative Zoology in Cambridge, Mass.

George H. Davis (FC ’86, MS ’89) reports another busy year. He attended and presented at the Underground Construction Technology 2004 and 2005 conferences. George went to Tucson, Ariz., for a biennial meeting of Abandoned Underground Mine Interstate Technical Group in 2004 and to Bozeman, Mont., to teach a spring engineering workshop at Montana State University. He is still involved with Crooked Creek, Deachatville and Weaubleau Oseola meteorite impact structures and will attend the SEPM special conference in May as a field trip leader and will also present a paper and a poster. He writes, “Very, very busy but very, very HAPPY!”
Stanley Davis (Former Faculty '67-'72) recently finished a review paper on bromide in potable water in addition to a longer summary of the history of hydrogeology in the United States for the years 1780 through 1950.

Robert D. Diem (FC '51, BA '52, MA '53) writes that he and Anne continue to enjoy good health and various activities. They stay in touch with many friends made in the oil industry in North and South America.

Joseph Dom (MS '02) resides in Topeka, Kan., where he works as an environmental geologist.

Andrew J. Downs (BS '99) resides in Overland Park, Kan.

John G. Elliott (FC '74) reports that he is currently working on USGS projects related to hillslope erosion, fluvial sediment transport and reservoir sedimentation. John writes, “Colorado has been a great place to work for over 27 years.”

Evard P. Ellison (FC '46, BA '46, MA '47) writes that he enjoyed part of the summer in Montana. Evard resides in Houston, where he visits often with Tom Rush.

Brad Esslinger (FC '80, BA '81, MA '83) writes, “Still loving life here in Arkansas. Anyone know the whereabouts of John Callanan? If so, please let me know or have him contact me. Hope to see anyone if in our area.”

Jerome Eyer (FC '59, BA '60, MA '61) reports that he is well, working seven days a week consulting, writing and teaching.

Stanley C. Fagerlin (PhD '80) writes, “I am enjoying my retirement in the north woods of Wisconsin. I get to see Olav Malvik frequently as he resides in Madison. All my old friends are welcome if they find themselves in the north country. The Point beer will be cold and the grill can be fired up for brats on short notice.”

Daniel Ferber (MA '79) writes, “I am busy practicing child and adolescent psychiatry in the Columbia Gorge. Reeen and I are busy renovating our house. Doug and Kate have left the nest, so we have more time to enjoy the northwest. Hello to Bill ‘Bucky’ Mills, Jerry Yunker, Dave Steyaert and Rob Kalish.”

Lee Florea (MS '98) writes, “I have one last year before completing my PhD at the University of South Florida. Several papers are in press. I hope to have a postdoc position lined up by the time I leave Tampa. I am continuing my work in several locations, including Florida, Belize and the Bahamas.”

Richard M. Foley (FC '46, BA '47) is the owner of Food For Thought, Inc. in Wichita, Kan.

Robert L. Foster (FC '60, MA '62, PhD '66) is still prospecting in central Nevada with additional exploration north of Haines, Alaska.

James R. Frank (FC '75, BS '76, MA '79) writes, “In Houston (still), working offshore Angola; 16 years and counting. Best wishes to Glen Himmelfare and Don Zenger. Don, thanks for the ride to the Lander hospital with my broken hand (1975).”

Dave (MS '85) and Sara (MS '85) Fulton write, “We’ve survived our third year of playtime in Colorado and are still loving it here. Eric turns 16 this fall and is a sophomore at Boulder High School – snowboarding, tennis and track are his activities. Anna will be 13 soon and is in the seventh grade enjoying middle school, including rock climbing, theater and basketball. Sara and I are keeping up with our youth and enjoying the occasional visits back to Columbia.”

Richard J. Gentile (FC '56, BA '56, MA '58) reports that he gave a paper at the International Geological Congress meeting in Florence, Italy, in August, 2004. He also took tourist trips to the Leaning Tower of Pisa, Venice and Rome.

James P. Grady (FC '80, BA '81) writes, “I am returning to Dallas for a six-year project to build an extension to the Light Rail Transit System there. I hope to have a new home completed in time for the Superbowl in 2006. So what am I doing building on expansive clay soils? Go figure!”

Norman Grannemann (FC '74) reports that he started a new position as Great Lakes Program Coordinator with the USGS in Lansing, Mich., about a year ago. Norman writes, “It’s a great job. Sarah is nearly done with her first year of college — remember those days? Hello to all of the ’70s era folks from Karen and me.”

Melvin Haley (FC '53, BA '54) is still enjoying retirement from the Defense Mapping Agency, where he was a cartographer/production controller.

Richard Hamilton (FC '53, MA '55) writes, “I still enjoy geological excursions in the hills of western Massachusetts. My wife and I work
one day a week in our son-in-law’s water garden business, and we treasure the time spent with our four grandchildren. I continue my satisfying work as director of the Berkshire Circus Camp at Berkshire Community College in Pittsfield, Mass.”

**Joseph E. Hazel (FC ’54, BA ’56, MA ’60)** retired from Louisiana State University and now runs a free fossil and rock identification service for children of all ages (7 to 87).

**Lisa Head (FC ’96)** is a master’s student at Michigan Tech University in Houghton.

**Larry Heflin (FC ’59, BA ’59, MA ’61)** has been doing geotechnical consulting on earthquake engineering in California and on tunnels in South America, New York and a couple within 10 miles of his home in Maryland. Larry writes that he is winding down to have more time for vacation.

**Robert Heller (FC ’77, BS ’79)** reports that after five years as a geotechnical consultant and 20 years in the oil and gas industry, he decided he had had enough of the corporate world and “retired” to sell real estate in the mountains of Colorado. Bob says to give him a call if you’re in the area.

**Richard Hoare (MS ’53, PhD ’57)** is still working on Paleozoic invertebrates but slowing down a little.

**Ray Holifield (FC ’64, BS ’59, MA ’64)** resides in Giddings, Texas.

**William C. Hood (FC ’58, BA ’59)** writes, “Sandy and I are up to our eyeballs in volunteer work for the National Park Service. We create interactive exhibits covering geology, plants, animals and culture for visitor centers. We are working on our fifth one now.”

**Art Kasey (Grad Student ’65-’70)** is starting his 35th year teaching earth science and geology at Fox High School in Arnold, Mo. Art writes, “I still love the challenges of teaching the teens about geology and the earth sciences. I am very grateful to Prof. Walter Keller and Prof. Clayton Johnson for leading me to this great career.”

**Robert Kink (FC ’77, BS ’78)** continues to work for the Forrester Group in Springfield, Mo., doing environmental investigation and remediation.

**David T. King Jr. (PhD ’80)** writes, “We have been working on a stratigraphic revision of northern Belize (north of the 17th parallel) including a new geologic map. Our KT boundary studies have lately focused on microtektite beds in Wilcox County, Ala. Hello to all old friends.”

**Renee Knecht (FC ’00)** works for Retec in the Seattle area.

**Paul C. Knowlton (FC ’50, BA ’51)** resides in Covington, La.

**Romaine L. Kupfer (FC ’48, MA ’49)** writes that in early July she flew from Cody, Wyo., to Bangor, Maine, to attend her 60th class reunion at the University of Maine (in Orono) and returned home to observe Don’s and her 53rd wedding anniversary on June 7.

**Roger Kussow (PhD ’71)** writes that he has enjoyed his past 30 years of work with the CAS Division of the American Chemical Society and has no intention of retiring soon.

**Troy J. Laswell (PhD ’53)** writes that although he has lost his left eye and his ability to drive at night, he hasn’t lost his ability to loaf and watch TV! He is thankful that he can still get around, though slowly. Troy is also thankful for a small lot in a Huntington Park subdivision, and for a whole bunch of good neighbors!

**Dottie Loeblum (MS ’87)** write, “I’m enjoying a particularly nice year with the simultaneous publication of my hiking book, *Geology Trails of Northern California* (co-written with author/partner Robin Johnson), and my recent promotion to senior engineering geologist at the EPA.”

**Fred Lohrnel (MA ’64)** writes that he still enjoys teaching at Southern Utah University. He says they are doing more and more undergraduate research.

**Stuart Maier (FC ’76, BS ’76)** writes, “Where are all the young geologists?”

**Kenneth Markwell (MA ’73)** resides in St. Joseph, Mo.

**Earle F. McBride (FC ’54, MA ’56)** writes, “After 46 years of teaching and research at the University of Texas-Austin, I retired. I have five years of unfinished projects to work on. I am also doing some family history research.”

**Patrick McGlone (FC ’93, BS ’94)** writes, “An angel named Ella Gracen arrived via UPS on March 14, 2005. Package weighed 7 pounds, 12 ounces and was 19 inches long. Very healthy and well-behaved.”

**Gordon McWilliams (Grad Student ’89-’90)** writes, “I’m still teaching earth science for
these little youngsters. They kill me. Can’t say I get too far beyond the geology aspect of the textbook. Weather, astronomy, etc. — (not). Hope everything is good.”

Greg Mehlhose (FC ’93, BS ’94) writes that he and family are enjoying life in Colorado Springs raising their son, Karston.

Leisa Meitl (FC ’04) recently graduated from Kansas State University and started her master’s at the University of Wyoming in August.

Arthur B. Merkle (PhD ’67) writes, “Starting my sixth year teaching at Okaloosa-Walton College. No classes today. Just watching Katrina blow through. It’s the third one since my last letter. Teaching is still interesting and fun. We have excellent students at OWC.”

John Miller (FC ’65, MA ’68) writes, “Much of Mary’s and my time has involved travel and birding (U.S., Canada and Mexico). I continue to write short stories. Largemouth bass in the spring and summer and ‘specks’ in the winter provide relaxation and tasty meals. Living good!”

Joseph G. Minke (PhD ’69) writes that he successfully concluded a 10-year groundwater litigation case in Denver. He is publishing proceedings of the 4th Park County History-Science Symposium and serving as a director of the Park County Historical Society.

Gary C. Mitchell (FC ’67, BS ’70, MA ’71) sends greetings to everyone. He writes, “Going strong. Exploration still exists and hopefully is growing. Let Jan and me know if you are in the Denver area. Hope all is well with everyone!”

Carla Wilson Moore (FC ’72, BS ’72, MA ’75) is still enjoying working at the “weather station” after 29 years — never a dull moment, she says.

Thomas R. Moore (MA ’81) writes, “Switching jobs again, back to industry, but not because there was anything really wrong with the Illinois State Geological Survey, but ‘location, location, location.’ The northern Appalachians are home, always were at heart.”

Dennis Murphy (BS ’74) resides in Milford, Del.

Matt Neuner (FC ’99) reports that he has spent the last few years living in Jackson Hole, Wyo., learning how to climb mountains while surveying. Matt writes, “Fortune was lent to me on many wonderful climbs including Denali on a day that even allowed me the snowboard descent of the Orient Express route. Now I am off for a master’s at the University of British Columbia.”

John Nold (FC ’62, BA ’63, MA ’64) is still teaching geology at Central Missouri State University and enjoying it. John writes, “Still doing research on iron deposits in the St. Francois Mountains terrane. Wife Judy and I walked across England last summer, the most fun thing we have ever done.”

Dennis Ojakangas (FC ’57, MA ’58) remains active jogging, golfing, gardening, cooking, participating in church activities and grandparenting.

Richard Ojakangas (FC ’55, MA ’60) writes that he is retired and busier than ever!

Robert Orr (FC ’87, BS ’87) is a project manager for Bucher, Willis and Ratliff Corp. in Kansas City, Mo.

David Parrish (FC ’66, BS ’66, MA ’68) enjoys living in the Black Hills of South Dakota, where he operates a rock mechanics consulting business. David writes, “My wife, Donna, and I travel occasionally, and we are both members of a local Toastmasters club.”

Dustin Pearce (FC ’99) writes, “After finishing all but the final details on my research project for a master of arts in teaching at SMSU, I’ve begun a teaching career in southeast Missouri at Caruthersville High School. My teaching duties include courses in physical science, physics, geology and astronomy.”

Patrick Perfetta (MS ’98) writes that he’s relocated from Texas to Alaska while working for ConocoPhillips.

Mark E. Petersen (FC ’74, MA ’77) continues to work for Marathon in Houston.

Melissa Pratt-Bautz (FC ’95, MS ’99) writes, “I’m enjoying the slow life in Lander. Our second child, Theresa, was born November 1, 2004. Now Jenny (3) has a playmate! I still teach and play bagpipes and go fishing and hunting with my husband, Greg. I’m working three-quarter time at the Wyoming Department of Environmental Quality. I make a lot of maps using ArcGIS and All-Topo programs. Life is good.”

James Pulliam (FC ’52, BA ’53, MA ’54) enjoys spending half the year in Missouri and the other half in the upper peninsula of Michigan, where there are many interesting glacial effects and deposits.
Mike Quearry (FC '72, BS '73, MA '75) joined the geology department development board this year and looks forward to serving the department. Mike works for Chevron conducting stratigraphic projects in the deep water of the Gulf of Mexico. He writes, “I am a deacon in our church. Eva and I enjoy our family, friends and community and like to entertain and travel. Please contact us if ever you are in Houston.”

Scott Raymond (FC '71, BS '72, MA '74) writes that he's been enjoying skiing as a pleasant diversion from the unexpected responsibilities he never dreamed he'd have in his retirement.

Carl B. Reed (FC '48, BA '49, MA '50) writes, “My survey work has changed only in that I'm no longer getting a salary for my conodont biostratigraphy in the Late Mississippian and Pennsylvanian. We took two weeks in March for a fabulous trip to Peru including Machu Picchu and Lake Titicaca as high points.”

Roger F. Rice (MA '70) writes, “I am more active at present in real estate sales and investment. Also, I am looking at participants for some oil and gas ventures. Have lived in south Texas for 30 years.”

Audrey C. Lipke Rule (BA '75, MA '78) writes, “I am a full professor in curriculum and instruction at SUNY-Oswego. I am chair of the K-12 education committee for the Clay Minerals Society and an associate editor of the Journal of Geoscience Education. I am remembering old friends from Mizzou!”

Mark Russell (FC '76, BS '77) writes, “Solid waste business keeps piling up. It was good seeing Dave Boeckelmann this winter. Any other FC '76ers out there?”

John W. Runk (FC '57) reports that he sold his quarry and is still active in fishing camps in Canada and Panama. He still fishes a lot and is a Ford dealer in St. Charles, Mo.

Edward M. Ryan (MA '43) has been retired from teaching geology at Stephens College since 1984. He started the development of two museums in his home: one of minerals (2,000 of them) and the other of fossils (3,000 of them). In 2004 these two museums were donated to Adams State College in Alamosa, Colo., where they may be seen as the Edward M. Ryan Geological Museum.

Beverly J. Sapp (Former Office Staff) has been working on the family genealogy and volunteers at the Ellis Fischel Cancer Hospital gift shop in Columbia, Mo. Beverly writes, “Try to keep up with 11 grandchildren and 4 great grandchildren. Congrats to Himmelberg.”

Gene W. Schmidt (FC '53, BA '55) continues his consulting practice in forensics of petroleum hydrocarbons. Gene gave a paper at the 2005 Goldschmidt Conference on aging dating distillate fuels. He enjoys being a member of the geology development board.


Tom Searight (FC '50, BA '51, MA '52) writes, “I am retired from Illinois State University where I helped establish the geology major. In the 35 years I was there, we graduated approximately 400 geology majors, 87 percent of whom are still employed in geology. I retired in 1994 and moved to Kansas so my wife and I could be near our daughter. I taught field camp for 22 years and enjoyed every one of them.”

Cecil Slaughter (FC '76, BS '76) reports that life is good! He is still working for the USGS and lives in Denver. Cecil writes, “When is the next field camp reunion?”

Maynard Slaughter (FC '54, MA '57) writes, “Retired, having fun doing research in particle physics, gravity and behavior of quarks.”

John H. Spotts (FC '49, BA '50, MA '51) writes that he has been doing some traveling, dabbling in a little geology and doing a lot of searching for genealogical roots.

M. Ray Thomasson (FC '50, BA '52, MA '53) writes, “Thomasson Partner Associates is enjoying the current ‘sunshine’ and is ‘making hay’ as fast as possible. Merrill and I are enjoying our home in North Carolina, traveling to grandchildren and traveling to interesting parts of the world. I still love the ‘exploration game’ and work very hard at it.”

Nick Thompson (BS '02) writes that he finished his master’s degree at the University of Nevada-Reno and is currently working as an engineer in Reno. He is working on a doctorate in geodetic engineering.

George J. Ulmo (MA '79) writes that after 16 years of self-employment, he decided to
accept a job with an oil company again and enjoy the oil boom. George writes, "Family is doing well. Congratulations to Dr. Himmelberg on his retirement."

Paul Weaverling (FC '79, MS '87) writes, "Now well into three years with IRG – a company specializing in assuming and insuring environmental liability with transfer of property for redevelopment, a key piece of the puzzle. I inherit the project after the deal closes and need to bring it all in on time, and of course under budget. No pressure at all! Sort of like mapping Dallas Dome in several hours."

Robert Weigel (FC '56, BA '58) says that he's forgotten so much that he thinks he should take a hard rock class at the University of Arizona. Robert writes, "I'm teaching a few wood-turning classes and doing some consignment work, but I live in constant fear of creating a successful business. Retirement is great!"

Robert "Bud" Weiser (FC '57, BA '58, MA '60) writes, "We are enjoying retired life on Lake Norman, N.C. (30 miles north of Charlotte). We have a second home on top of a mountain in the Blue Ridge Mountains in southwest Virginia overlooking the New River and a 360-degree view of mountains in every direction. The New River is geologically the oldest river in the USA. Sue, whom I met at MU, and I celebrated our 47th anniversary this past September. I still do some training/consulting. We have two sons, two daughters and three grandsons. Life is good."

Lee Wilkening (FC '79, BS '80) reports that the mining business is booming these days, but that doesn't make finding water to support it any easier. Lee writes, "But hey, at least you can cycle year-round in Arizona. Hi to all those who remember the good times we all shared at MU and field camp."

James H. Williams (FC '50, BA '51, MA '52) is still doing a mix of geology, farming and flying as Civil Air Patrol. Jim writes, "I enjoy the newsletter."

Ed Williamson (MA '73) writes, "It's wonderful to see that so many Mizzou geology alums have done so well in life. Connie (former geology librarian) and I still live in the Houston area, mostly due to inertia."

In Memoriam

Carl W. Klaenhammer (FC '45) passed away on November 12, 2004. Carl resided in Casper, Wyo.

Elmer D. Patterson (FC '48, BA '49, MA '50) passed away on July 24, 2004. Elmer had resided in Roswell, N.M.

Larry Seright (FC '50, BS '51) passed away on November 15, 2004 in Midland, Texas, at the age of 77.

The department lost a good friend this past May when Beverly O'Brien died. Many of you remember Bev from when she worked for the Arts and Science Development Office. Our condolences go out to Mike O'Brien and the rest of Bev's family.
<table>
<thead>
<tr>
<th>Name</th>
<th>Email Address 1</th>
<th>Email Address 2</th>
<th>Email Address 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>KATHLEEN ABEL</td>
<td><a href="mailto:jimb@edf.org">jimb@edf.org</a></td>
<td></td>
<td><a href="mailto:krugerbyrd@erols.com">krugerbyrd@erols.com</a></td>
</tr>
<tr>
<td>CHRISTOPHER ADAMS</td>
<td><a href="mailto:shane.bird@dvn.com">shane.bird@dvn.com</a></td>
<td></td>
<td><a href="mailto:jcal1470@aol.com">jcal1470@aol.com</a></td>
</tr>
<tr>
<td>MARVIN ANDRESEN</td>
<td>DICK BISHOP</td>
<td></td>
<td><a href="mailto:william.caneer@aol.com">william.caneer@aol.com</a></td>
</tr>
<tr>
<td>DOUG BABCOCK</td>
<td>ALICE BLOUNT</td>
<td></td>
<td><a href="mailto:wayne.canis@hiwaay.net">wayne.canis@hiwaay.net</a></td>
</tr>
<tr>
<td>MICHAEL BAHORICH</td>
<td>JOSEPH BORN JR.</td>
<td></td>
<td><a href="mailto:alden.carpenter@cps.harvard.edu">alden.carpenter@cps.harvard.edu</a></td>
</tr>
<tr>
<td>CAROLINE BAJSAROWICZ BORG</td>
<td>CHRISTOPHER BOUCHARD</td>
<td></td>
<td><a href="mailto:cynthia.carroll@dnr.mo.gov">cynthia.carroll@dnr.mo.gov</a></td>
</tr>
<tr>
<td>DEWEY BAKER</td>
<td>JOHN VAN BRAHANA</td>
<td></td>
<td><a href="mailto:nathan.chao@chmc.org">nathan.chao@chmc.org</a></td>
</tr>
<tr>
<td>ARTHUR BANET</td>
<td>ROBERT BRENNER</td>
<td></td>
<td><a href="mailto:kenneth.chapman@i-plus.net">kenneth.chapman@i-plus.net</a></td>
</tr>
<tr>
<td>JAMES BARKDULL</td>
<td>MICHAEL BREWER</td>
<td></td>
<td><a href="mailto:gregory.chludzinski@yahoo.com">gregory.chludzinski@yahoo.com</a></td>
</tr>
<tr>
<td>CONNIE BARSKY</td>
<td>WILLIAM BRIDGES</td>
<td></td>
<td><a href="mailto:christopher.clark@anadarko.com">christopher.clark@anadarko.com</a></td>
</tr>
<tr>
<td>CINDY BARTLETT</td>
<td>RICHMOND BROWN</td>
<td></td>
<td><a href="mailto:mary.clark@dnr.mo.gov">mary.clark@dnr.mo.gov</a></td>
</tr>
<tr>
<td>DANIEL BASNETT</td>
<td>DONALD BUCHANAN</td>
<td></td>
<td><a href="mailto:wendell.cocharan@eskimo.com">wendell.cocharan@eskimo.com</a></td>
</tr>
<tr>
<td>BRET BEALL</td>
<td>RUSSELL BURMESTER</td>
<td></td>
<td><a href="mailto:james.courdin@aol.com">james.courdin@aol.com</a></td>
</tr>
<tr>
<td>PERRY BEASON</td>
<td>JOHN BURST JR.</td>
<td></td>
<td><a href="mailto:randel.cox@memphis.edu">randel.cox@memphis.edu</a></td>
</tr>
<tr>
<td>CHARLES BEIERLE</td>
<td>ISAC BURSTEIN</td>
<td></td>
<td><a href="mailto:john.crocker@sbcglobal.net">john.crocker@sbcglobal.net</a></td>
</tr>
<tr>
<td>DEBORAH BERGFIELD</td>
<td>ROBERT BUSCH JR.</td>
<td></td>
<td>xiaojun (Albert) CUI</td>
</tr>
<tr>
<td>JOHN BERKLEY</td>
<td>JOSEPH BUTERA</td>
<td></td>
<td><a href="mailto:j.torrey.curtis@ptsi.net">j.torrey.curtis@ptsi.net</a></td>
</tr>
<tr>
<td></td>
<td><a href="mailto:berkley@fredonia.edu">berkley@fredonia.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Email Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAMES DARR</td>
<td><a href="mailto:jimdarr@netway.net">jimdarr@netway.net</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEORGE DAVIS</td>
<td><a href="mailto:George.Davis@modot.mo.gov">George.Davis@modot.mo.gov</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MILFORD DAVIS</td>
<td><a href="mailto:milford.davis@att.net">milford.davis@att.net</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STANLEY DAVIS</td>
<td><a href="mailto:snadavis@u.arizona.edu">snadavis@u.arizona.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RICHARD DE CAMARA JR</td>
<td><a href="mailto:RdeCamaraJ@aol.com">RdeCamaraJ@aol.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANDREW DIEFENDORF</td>
<td><a href="mailto:drew.diefendorf@rmtine.com">drew.diefendorf@rmtine.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROBERT DIEM</td>
<td><a href="mailto:annebobb@cox-internet.com">annebobb@cox-internet.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTHONY R. DINCAU</td>
<td><a href="mailto:tadin@linknet.net">tadin@linknet.net</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JENNIFER DISTLEHORST</td>
<td><a href="mailto:jenniferd@ksdot.org">jenniferd@ksdot.org</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOBY DOGWILER</td>
<td><a href="mailto:tdogwiler@winona.edu">tdogwiler@winona.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JOSEPH DOM</td>
<td><a href="mailto:jdom@kdhe.state.ks.us">jdom@kdhe.state.ks.us</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DANA DOWNS</td>
<td><a href="mailto:dana.downs@luke.af.mil">dana.downs@luke.af.mil</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RUSSELL DRESBACH</td>
<td><a href="mailto:DresbachR@missouri.edu">DresbachR@missouri.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MELANIE DUNAY</td>
<td><a href="mailto:Dunay@fastrans.net">Dunay@fastrans.net</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JEFFERY EDSON</td>
<td><a href="mailto:jedson@kleinfelder.com">jedson@kleinfelder.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTHUR EHLMANN</td>
<td><a href="mailto:A.Ehlmann@tcu.edu">A.Ehlmann@tcu.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JOHN EICKERMAN</td>
<td><a href="mailto:john@eickerman.com">john@eickerman.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEIL ELFINK</td>
<td><a href="mailto:nelfink@rollancor.org">nelfink@rollancor.org</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOUG ELLEY</td>
<td><a href="mailto:doug.ellery@dnr.mo.gov">doug.ellery@dnr.mo.gov</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JOHN ELLIOTT</td>
<td><a href="mailto:jelliott@usgs.gov">jelliott@usgs.gov</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JESSIE B. ELLIS</td>
<td><a href="mailto:rocklook@surfcity.net">rocklook@surfcity.net</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVARD ELLISON</td>
<td><a href="mailto:epe555@hotmail.com">epe555@hotmail.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BRAD ESSLINGER</td>
<td><a href="mailto:braddSSLinger@yahoo.com">braddSSLinger@yahoo.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAMES EVANS</td>
<td><a href="mailto:jimephoto@carolnet.com">jimephoto@carolnet.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JEROME EYER</td>
<td><a href="mailto:jeyer@msi.com">jeyer@msi.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STANLEY FAGERLIN</td>
<td><a href="mailto:sweedester47@msn.com">sweedester47@msn.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JULIANA FAHY</td>
<td><a href="mailto:JFahy@do.usbr.gov">JFahy@do.usbr.gov</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DANIEL FERBER</td>
<td><a href="mailto:rockhound@gorge.net">rockhound@gorge.net</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RICHARD FISHER JR</td>
<td><a href="mailto:FisherR82@yahoo.com">FisherR82@yahoo.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEE FLOREA</td>
<td><a href="mailto:lflorea@chumac1.cas.usf.edu">lflorea@chumac1.cas.usf.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THOMAS FOCHT</td>
<td><a href="mailto:focht@pop.jaring.my">focht@pop.jaring.my</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MICHAEL FOLEY</td>
<td><a href="mailto:mike@greywolf.pnl.gov">mike@greywolf.pnl.gov</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALAN FOUNIE</td>
<td><a href="mailto:alanfouine@msn.com">alanfouine@msn.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RICHARD FOXWORTH</td>
<td><a href="mailto:dick@foxbpa.com">dick@foxbpa.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAMES FRANK</td>
<td><a href="mailto:JimFrank@chevronexaco.com">JimFrank@chevronexaco.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROBERT FREEMAN</td>
<td><a href="mailto:rfreeman@utilicorp.com">rfreeman@utilicorp.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOUGLAS FRICK</td>
<td><a href="mailto:doug.frick@mgenv.com">doug.frick@mgenv.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MICHELLE FRIEDBERG</td>
<td><a href="mailto:mfriedberg@yahoo.com">mfriedberg@yahoo.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAVID FULTON</td>
<td><a href="mailto:david.a.fulton@us.mwhglobal.com">david.a.fulton@us.mwhglobal.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JOHN GALLAGHER JR.</td>
<td><a href="mailto:74641.3363@compuserve.com">74641.3363@compuserve.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JORGE GARCIA</td>
<td><a href="mailto:jygarci@aol.com">jygarci@aol.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DONALD GARVIN</td>
<td><a href="mailto:jeangr@socket.net">jeangr@socket.net</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RICHARD GENTILE</td>
<td><a href="mailto:gentiler@umke.edu">gentiler@umke.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MARTHA GEORGE</td>
<td><a href="mailto:mgeorge@midland.westmegco.slb.com">mgeorge@midland.westmegco.slb.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUSANNE GIER</td>
<td><a href="mailto:susanne.gier@univie.ac.at">susanne.gier@univie.ac.at</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRAIG GLASSINGER</td>
<td><a href="mailto:glassinger@stoneenergy.com">glassinger@stoneenergy.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BARRY GOLDSTEIN</td>
<td><a href="mailto:goldstein.barry@saugov.sa.gov.au">goldstein.barry@saugov.sa.gov.au</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GLENN GOLSON</td>
<td><a href="mailto:glenn.golson@whiteman.af.mil">glenn.golson@whiteman.af.mil</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERIC GRABOWSKI</td>
<td><a href="mailto:grabowski@hawaii.edu">grabowski@hawaii.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAMES GRADY</td>
<td><a href="mailto:jgrady@walshgroup.com">jgrady@walshgroup.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NORMAN GRANEMANN</td>
<td><a href="mailto:NGranemann@aol.com">NGranemann@aol.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Email Address</td>
<td>Name</td>
<td>Email Address</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------</td>
<td>-----------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>PEGGY GUCCIONE</td>
<td><a href="mailto:guccione@comp.uark.edu">guccione@comp.uark.edu</a></td>
<td>ANDREW HEINEMANN</td>
<td><a href="mailto:AMHeinemann@msn.com">AMHeinemann@msn.com</a></td>
</tr>
<tr>
<td>ALICE LEE GUSTIN</td>
<td><a href="mailto:agustin@wyoming.com">agustin@wyoming.com</a></td>
<td>ROBERT HELLER</td>
<td><a href="mailto:bob@cprealty.com">bob@cprealty.com</a></td>
</tr>
<tr>
<td>JOSE HAENSEL JR.</td>
<td><a href="mailto:ahaensel@cinci.rr.com">ahaensel@cinci.rr.com</a></td>
<td>QUINTON HENNIGH</td>
<td><a href="mailto:QuintonT@aol.com">QuintonT@aol.com</a></td>
</tr>
<tr>
<td>RICHARD HAGNI</td>
<td><a href="mailto:rhagni@umr.edu">rhagni@umr.edu</a></td>
<td>THOMAS HESEMANN</td>
<td><a href="mailto:tom.hesemann@itrmc.com">tom.hesemann@itrmc.com</a></td>
</tr>
<tr>
<td>MELVIN HALEY</td>
<td><a href="mailto:bhaley66@msn.com">bhaley66@msn.com</a></td>
<td>WILLIAM HOAG</td>
<td><a href="mailto:hibill@lightspeed.net">hibill@lightspeed.net</a></td>
</tr>
<tr>
<td>TODD HALIHAN</td>
<td><a href="mailto:halihan@okstate.edu">halihan@okstate.edu</a></td>
<td>TROY HOLCOMBE</td>
<td><a href="mailto:tholcombe@ocean.tamu.edu">tholcombe@ocean.tamu.edu</a></td>
</tr>
<tr>
<td>MATTHEW HALL</td>
<td><a href="mailto:mhall@gia.edu">mhall@gia.edu</a></td>
<td>B. RAY HOLIFIELD</td>
<td><a href="mailto:Ray@HolifieldOil.com">Ray@HolifieldOil.com</a></td>
</tr>
<tr>
<td>THOMAS HAMBLETON</td>
<td><a href="mailto:mrmrsth@tstar.com">mrmrsth@tstar.com</a></td>
<td>F.D. HOLLAND JR.</td>
<td><a href="mailto:budholland@aol.com">budholland@aol.com</a></td>
</tr>
<tr>
<td>RICHARD HAMILTON</td>
<td><a href="mailto:bhamil4913@taconic.net">bhamil4913@taconic.net</a></td>
<td>WILLIAM HOOD</td>
<td><a href="mailto:whood@compuserve.com">whood@compuserve.com</a></td>
</tr>
<tr>
<td>HOWARD HAMPSTEAD</td>
<td><a href="mailto:hahamp@aol.com">hahamp@aol.com</a></td>
<td>W. FRANKLIN HOOPER</td>
<td><a href="mailto:wfhoooper@txpetinv.com">wfhoooper@txpetinv.com</a></td>
</tr>
<tr>
<td>MIRIAM HANSEN</td>
<td><a href="mailto:hansenjm@uwec.edu">hansenjm@uwec.edu</a></td>
<td>CHARLES HOSKINS</td>
<td><a href="mailto:drdirtz@juno.com">drdirtz@juno.com</a></td>
</tr>
<tr>
<td>AMANDA HASSLER</td>
<td><a href="mailto:amadama1@yahoo.com">amadama1@yahoo.com</a></td>
<td>JOHN HUBERT</td>
<td><a href="mailto:hjubert@geo.umass.edu">hjubert@geo.umass.edu</a></td>
</tr>
<tr>
<td>LORI HATHON</td>
<td><a href="mailto:lahathon@shell.com">lahathon@shell.com</a></td>
<td>TIMOTHY HUFF</td>
<td><a href="mailto:tim_huff@yahoo.com">tim_huff@yahoo.com</a></td>
</tr>
<tr>
<td>JOSEPH HAZEL</td>
<td><a href="mailto:jopaleo@aol.com">jopaleo@aol.com</a></td>
<td>BRUCE HUNTER</td>
<td><a href="mailto:bhunter@powerlink.net">bhunter@powerlink.net</a></td>
</tr>
<tr>
<td>LISA HEAD</td>
<td><a href="mailto:emhead@mtu.edu">emhead@mtu.edu</a></td>
<td>TOGWELL JACKSON</td>
<td><a href="mailto:T.A.Jackson@cciw.ca">T.A.Jackson@cciw.ca</a></td>
</tr>
<tr>
<td>JOHN HEBBERGER JR.</td>
<td><a href="mailto:JohnHeberger@chevronxaco.com">JohnHeberger@chevronxaco.com</a></td>
<td>ROGER JACOBSON</td>
<td><a href="mailto:roger@dri.edu">roger@dri.edu</a></td>
</tr>
<tr>
<td>LARRY HEFLIN</td>
<td><a href="mailto:lhheflin@juno.com">lhheflin@juno.com</a></td>
<td>ROBERT JAQUES</td>
<td><a href="mailto:rjaques@burnsmcd.com">rjaques@burnsmcd.com</a></td>
</tr>
</tbody>
</table>
MICHAEL LARSEN  
nrlarson@mail.dnr.state.mo.us

HAROLD LEVIN  
levin@levie.wustl.edu

LOWELL LISCHER  
LKLischer@sbcglobal.net

JAMES LOCH  
JDL8804@cmsu2.cmsu.edu

C. FREDERICK LOHRENGEL II  
lohrengel@suu.edu

STUART MAIER  
Stuart.Maier@sbcglobal.net

BOB F. MALLORY  
bobfrnall@aol.com

OLAV MALVIK  
malvik@attglobal.net

WILLIAM MANSKER  
wlmnex@flash.net

BRIAN MANZ  
bmanz@burnsmcd.com

CHERI HALL MARKS  
marksc@missouri.edu

KENNETH MARKWELL  
Kenneth.Markwell@modot.mo.gov

BARRY MARQUART  
tiffandbarry@yahoo.com

MICHAEL MARTIN  
martinm@wou.edu

ROBERT MASON  
GunstonWest@aol.com

KEITH MATLACK  
Keith@vsl.cua.edu

ALBERT MATTEO JR.  
matteob@publicfm.com

PATRICIA MAYHILL  
Planner@eustis.org

EARLE MCBRIDE  
efmcbride@mail.utexas.edu

GEORGE W. MCCALL  
mccallw@geoprobe.com

PATRICK MCCLUNG  
info@dungarees.net

KENNETH MCGEE  
kennmcege@usgs.gov

TIMOTHY MCCHARGE  
timmchargue@chevronexaco.com

PETER MCMAHON  
pmcmahon@usgs.gov

JEFFREY MCMANUS  
mcm4007@bellsouth.net

TODD MCMENAMY  
tamcm@cheerful.com

KIRK MCQUILLAN  
kirkmcquillan@yahoo.com

GORDON MCWILLIAMS  
gmcwilliams@nc.rr.com

THOMAS MEDARY  
medary@earthlink.net

GREG MEHLHOSE  
gmehlhose@hotmail.com

EDWARD MEISBURGER JR  
meisburger@aol.com

ROBERT MILES  
bob@bobmiles.com

JOHN MILLER  
floridamiller@earthlink.net

J. GARRETT MINKE  
jgarym@chaffee.net

GARY MITCHELL  
gemitchell@forestoil.com

TOLA MOFFETT  
tmoffett@tlinc.com

CARLA WILSON MOORE  
Carla.J.Moore@noaa.gov

THOMAS MOORE  
tmoore@ionet.net

JOAO PRATINI DE MORAES  
pratini@ecos.com.br

STEVEN MORREALE  
morreasa@id.doe.gov

RUSSELL MURPHY  
rmurphy@kmg.com

THOMAS MURPHY  
blueline@amv.com

CHINWE NDUBUKA  
chindubuka@yahoo.com

WILLIAM NEAL  
nealw@gvsu.edu

KERRY NIKOLAISEN  
fourniks@earthlink.net

JOHN NOLD  
nold@cmsu1.cmsu.edu

JACK NORMAN  
jackanorman@msn.com

BRENT NORUM  
bnorum@fs.fed.us

CHARLES NORVILLE  
cnorville@hotmail.com

DENNIS OJAKANGAS  
ddojakangas@udcavis.edu

RICHARD OJAKANGAS  
rojakang@d.unm.edu
<table>
<thead>
<tr>
<th>Name</th>
<th>Email Address</th>
<th>Name</th>
<th>Email Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOHN OPICH</td>
<td><a href="mailto:opichjm@texaco.com">opichjm@texaco.com</a></td>
<td>MICHAEL W. QUEARRY</td>
<td><a href="mailto:quearmw@chevron.com">quearmw@chevron.com</a></td>
</tr>
<tr>
<td>ROBERT ORR</td>
<td><a href="mailto:rorr@bwrcorp.com">rorr@bwrcorp.com</a></td>
<td>SUSAN RUSE EASTER</td>
<td><a href="mailto:seaster@mecpc.com">seaster@mecpc.com</a></td>
</tr>
<tr>
<td>HENRY OTT</td>
<td><a href="mailto:hankott@msn.com">hankott@msn.com</a></td>
<td>MARK RUSSELL</td>
<td><a href="mailto:mark.russell@shawgrp.com">mark.russell@shawgrp.com</a></td>
</tr>
<tr>
<td>ERIC PAGE</td>
<td><a href="mailto:Eric_Page@urscorp.com">Eric_Page@urscorp.com</a></td>
<td>BEVERLY SAPP</td>
<td><a href="mailto:jbsapp@charter.net">jbsapp@charter.net</a></td>
</tr>
<tr>
<td>DAVID PARRISH</td>
<td><a href="mailto:dkpclc@rushmore.com">dkpclc@rushmore.com</a></td>
<td>JOSEPH SATTERFIELD</td>
<td><a href="mailto:jsatte@north.sjed.cc.tx.us">jsatte@north.sjed.cc.tx.us</a></td>
</tr>
<tr>
<td>M. CLAY PARSONS</td>
<td><a href="mailto:noiillfarmer@yahoo.com">noiillfarmer@yahoo.com</a></td>
<td>ROBERT SCHAFER</td>
<td><a href="mailto:robert_schafer@urscorp.com">robert_schafer@urscorp.com</a></td>
</tr>
<tr>
<td>DANIEL PATTERSON</td>
<td><a href="mailto:twotimesfouri6@yahoo.com">twotimesfouri6@yahoo.com</a></td>
<td>JO SCHAPER</td>
<td><a href="mailto:astrelfrog@netscape.net">astrelfrog@netscape.net</a></td>
</tr>
<tr>
<td>ROBERT PAUKN JR.</td>
<td><a href="mailto:Bob_Pauken@email.mobil.com">Bob_Pauken@email.mobil.com</a></td>
<td>LISA L'HOTE SCHILDТ</td>
<td><a href="mailto:l.schildt@worldnet.att.net">l.schildt@worldnet.att.net</a></td>
</tr>
<tr>
<td>RICHARD PEARL</td>
<td><a href="mailto:rhpearl@aol.com">rhpearl@aol.com</a></td>
<td>GENE SCHMIDT</td>
<td><a href="mailto:envirodog@aol.com">envirodog@aol.com</a></td>
</tr>
<tr>
<td>PATRICK PERFETTA</td>
<td><a href="mailto:patrick.j.perfetta@conocophillips.com">patrick.j.perfetta@conocophillips.com</a></td>
<td>DIETMAR SCHUMACHER</td>
<td><a href="mailto:deet@nnmt.net">deet@nnmt.net</a></td>
</tr>
<tr>
<td>MARK PETERSEN</td>
<td><a href="mailto:mepetersen@marathonoil.com">mepetersen@marathonoil.com</a></td>
<td>EUGENE SCHWEIG III</td>
<td><a href="mailto:eugene.schweig@usgs.gov">eugene.schweig@usgs.gov</a></td>
</tr>
<tr>
<td>STEPHEN PHILLIPS</td>
<td><a href="mailto:Steve-phillips@ryderscott.com">Steve-phillips@ryderscott.com</a></td>
<td>THOMAS SEARIGHT</td>
<td><a href="mailto:jtseari@sbcglobal.com">jtseari@sbcglobal.com</a></td>
</tr>
<tr>
<td>MICHAEL PIECHOWSKI</td>
<td><a href="mailto:mpiechowski@robinson-noble.com">mpiechowski@robinson-noble.com</a></td>
<td>GREGORY SEIFERT</td>
<td><a href="mailto:seifentr@flash.net">seifentr@flash.net</a></td>
</tr>
<tr>
<td>HERMAN PONDER</td>
<td><a href="mailto:hpound@cox.net">hpound@cox.net</a></td>
<td>KURT SERVOS</td>
<td><a href="mailto:kurtservos@aol.com">kurtservos@aol.com</a></td>
</tr>
<tr>
<td>RAY POTTS</td>
<td><a href="mailto:RayPotts@ionet.net">RayPotts@ionet.net</a></td>
<td>PATRICIA SETTLES</td>
<td><a href="mailto:trish.settles@att.net">trish.settles@att.net</a></td>
</tr>
<tr>
<td>MELISSA PRATT BAUTZ</td>
<td><a href="mailto:mbautz@state.wy.us">mbautz@state.wy.us</a></td>
<td>JOHN SHARP JR.</td>
<td><a href="mailto:jmsharp@mail.utexas.edu">jmsharp@mail.utexas.edu</a></td>
</tr>
<tr>
<td>LUCIA LIST QUEARRY</td>
<td><a href="mailto:paprbark@fullcomp.com.au">paprbark@fullcomp.com.au</a></td>
<td>TIMOTHY SHEEHAN</td>
<td><a href="mailto:sheehan@cs.uoregon.edu">sheehan@cs.uoregon.edu</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>WARNER SHERMAN</td>
<td><a href="mailto:sesfirm@alltel.net">sesfirm@alltel.net</a></td>
</tr>
<tr>
<td>Name</td>
<td>Email Address</td>
<td>Name</td>
<td>Email Address</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------------------</td>
<td>-----------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>MONA SIRBESCU</td>
<td><a href="mailto:sirbelmo@cmich.edu">sirbelmo@cmich.edu</a></td>
<td>WENDY STRAATMANN</td>
<td><a href="mailto:Wendy_l_Straatmann@dom.com">Wendy_l_Straatmann@dom.com</a></td>
</tr>
<tr>
<td>STEVEN SISK</td>
<td><a href="mailto:sis.steve@epa.gov">sis.steve@epa.gov</a></td>
<td>MICHAEL SYKES</td>
<td><a href="mailto:Hobie18@msn.com">Hobie18@msn.com</a></td>
</tr>
<tr>
<td>NEIL SKILTON</td>
<td><a href="mailto:skilton@racsa.co.cr">skilton@racsa.co.cr</a></td>
<td>ROBERT SYLVESTER</td>
<td><a href="mailto:bobsyl@prodigy.net">bobsyl@prodigy.net</a></td>
</tr>
<tr>
<td>CECIL SLAUGHTER</td>
<td><a href="mailto:cslaught@usgs.gov">cslaught@usgs.gov</a></td>
<td>KATHRYN TAPPEMEYER</td>
<td><a href="mailto:kttapps@hotmail.com">kttapps@hotmail.com</a></td>
</tr>
<tr>
<td>MAYNARD SLAUGHTER</td>
<td><a href="mailto:MSLaught@mines.edu">MSLaught@mines.edu</a></td>
<td>JOHN TAYLOR</td>
<td><a href="mailto:jftaylor@grove.iup.edu">jftaylor@grove.iup.edu</a></td>
</tr>
<tr>
<td>THADEOUS SLAUGHTER</td>
<td><a href="mailto:TASlaugh@GTE.NET">TASlaugh@GTE.NET</a></td>
<td>CHRIS TEDDER</td>
<td><a href="mailto:ctedder@mactec.com">ctedder@mactec.com</a></td>
</tr>
<tr>
<td>JESSE SNOWDEN</td>
<td><a href="mailto:jsnowden@sosu.edu">jsnowden@sosu.edu</a></td>
<td>LAWRENCE TEDESCO</td>
<td><a href="mailto:lted@chevron.com">lted@chevron.com</a></td>
</tr>
<tr>
<td>JOHN SNYDER</td>
<td><a href="mailto:jlsnyder@erols.com">jlsnyder@erols.com</a></td>
<td>RANDAL THOMAS</td>
<td><a href="mailto:bthomas@geosc.psu.edu">bthomas@geosc.psu.edu</a></td>
</tr>
<tr>
<td>JOHN SPOTTS</td>
<td><a href="mailto:jhsecs@comcast.net">jhsecs@comcast.net</a></td>
<td>M. RAY THOMASSON</td>
<td><a href="mailto:tpaexpl@aol.com">tpaexpl@aol.com</a></td>
</tr>
<tr>
<td>WALTER STALEY JR.</td>
<td><a href="mailto:wstaley@sbcglobal.net">wstaley@sbcglobal.net</a></td>
<td>NICHOLAS THOMPSON</td>
<td><a href="mailto:thomps45@unr.nevada.edu">thomps45@unr.nevada.edu</a></td>
</tr>
<tr>
<td>HARLAN STARK</td>
<td><a href="mailto:hstark@joplin.com">hstark@joplin.com</a></td>
<td>RUTH SCHULTE</td>
<td><a href="mailto:einoka@comcast.net">einoka@comcast.net</a></td>
</tr>
<tr>
<td>HEATHER STEFFEN-STULTS</td>
<td><a href="mailto:stars@marykay.com">stars@marykay.com</a></td>
<td>MICHAEL TROUT</td>
<td><a href="mailto:trout@cbn.net.id">trout@cbn.net.id</a></td>
</tr>
<tr>
<td>MARTIN STEINBIS</td>
<td><a href="mailto:mtsteinbis@amoco.com">mtsteinbis@amoco.com</a></td>
<td>LAURENCE TRUDELL</td>
<td><a href="mailto:ltrudell@glenwood.net">ltrudell@glenwood.net</a></td>
</tr>
<tr>
<td>JOAN STEURER</td>
<td><a href="mailto:rhianwen@kc.rr.com">rhianwen@kc.rr.com</a></td>
<td>JON TRUESDALE</td>
<td><a href="mailto:jptruesdale@hotmail.com">jptruesdale@hotmail.com</a></td>
</tr>
<tr>
<td>JOHN STEWART</td>
<td><a href="mailto:jstewart@trigoneng.com">jstewart@trigoneng.com</a></td>
<td>JEFFREY TURNER</td>
<td><a href="mailto:j_s_turner@hotmail.com">j_s_turner@hotmail.com</a></td>
</tr>
<tr>
<td>DAVID STEYARTE</td>
<td><a href="mailto:steyaert@ix.netcom.com">steyaert@ix.netcom.com</a></td>
<td>GEORGE ULMO</td>
<td><a href="mailto:georgeulmo@cox.net">georgeulmo@cox.net</a></td>
</tr>
<tr>
<td>RON STOUFFER</td>
<td><a href="mailto:stoufer@wlk.com.np">stoufer@wlk.com.np</a></td>
<td>PATRICK VEZEAU</td>
<td><a href="mailto:PJVezeau@aol.com">PJVezeau@aol.com</a></td>
</tr>
</tbody>
</table>
ALUMNI

E-MAIL ADDRESSES

LEE WILKENING
hydrocyclist@hotmail.com

MARCIE WORKMAN
mworkman@hawaii.edu

GERALD YUNKER
yunker506@cox.net

JAMES WILLIAMS
jhwms@marktwain.net

JIA (John) YANG
yangj@lincolnui.edu

TOM ZEINER
zeiners@juno.com

ED WILLIAMSON
edwill46@aol.com

MARK YANOSKI
Target@mail.microsoft.net

DONALD ZENGER
dzenger@pomona.edu

M WESLEY WINBERRY
102465.1035@compuserve.com

DAVID YOUNG
asg@mobiletel.com

ALAN ZICK
alan@anadarko.com

EDWIN WOODRUFF
ecspook@juno.com

Scott Lepley gathering cave samples in Mar Assia Cave as part of his doctoral studies with Paco Gomez involving geomorphic analysis of the Abu Ali River watershed of northern Lebanon.
Need to get in touch with us?

You can write us at:
Department of Geological Sciences
101 Geological Sciences Building
University of Missouri-Columbia
Columbia, MO 65211-1380

You can call our main office at:
(573) 882-2040 or (573) 882-6785

You can visit our web site at:
http://www.missouri.edu/~geolwww
or
geology.missouri.edu

You can use our faculty e-mail addresses:

Martin Appold
AppoldM@missouri.edu

Robert Bauer
BauerR@missouri.edu

Raymond Ethington
EthingtonE@missouri.edu

Tom Freeman
FreemanT@missouri.edu

Francisco “Paco” Gomez
FGomez@missouri.edu

Glen Himmelberg
HimmelbergG@missouri.edu

William Johns
JohnsW@missouri.edu

Cheryl Kelley
KelleyC@missouri.edu

Mian Liu
LiuM@missouri.edu

Ken MacLeod
MacLeodK@missouri.edu

Peter Nabelek
NabelekP@missouri.edu

Eric Sandvol
SandvolE@missouri.edu

Mitchell Schulte
SchulteMD@missouri.edu

Kevin Shelton
SheltonKL@missouri.edu

Michael Underwood
UnderwoodM@missouri.edu

Alan Whittington
WhittingtonA@missouri.edu

Carol Wicks
WicksC@missouri.edu