2009-2010 Academic Year
Department of Geology Scholarship Recipients

Lee H. Cornell Scholarship  Robert Turner
Crouch Memorial Scholarship  Wei Guan, Chamandika Warusavitharana
E.K. Edmiston Endowed Scholarship for Geology  Nicholas Gerstner
Arthur Gibson Scholarship  Jonathan Obrist
Donal and Gwendolyn Heller Endowed Geology Scholarship  Nicholas Gerstner, Tyler Foster
Charles R. Mayfield Scholarship  Tyler Foster
Daniel F. Merriam Fellowship  Brad Jeffrey
Donald Phillips Award in Mineralogy  Jonathan Obrist
Al Reid Endowed Scholarship  Beau Morris
Larry D. Ricks Scholarship  Tyler Foster
Diana Scott Scholarship  Cristina Goodrich
Claude L. Sheats Environmental Science Fellowship  Oluwaseau Araso, Alexander Blecha

Harold L. Steincamp Scholarship  Oluwaseau Araso, Alexander Blecha
James and Mary Louise Tasheff Scholarship  Cristina Goodrich
Paul and Ruth Tasch Scholarship  Cristina Goodrich
John H. Tatlock Geology Scholarship  Cristina Goodrich
Dr. Walter A. Ver Wiebe Scholarship  Eric Wigton, Indra Dahal, Kevin Bunger, Aaron Young
Wichita Gem and Mineral Society Scholarship Fund  Cristina Goodrich
Graduate Teaching Assistantship  Wei Guan, Brad Jeffrey, Zack Koch, Chamandika Warusavitharana

Total scholarship and fellowship fund: $55,742
The Upswing of Geology Programs in Wichita State

Dear Fellow Geologists and Friends:

It is a pleasure for me to report that, despite the severe economical downturn of 2009, our undergraduate and graduate student bodies have grown! Historically, our department has been small and under-funded in comparison to many other science, mathematics, and non-science departments in the Fairmount School of Liberal Arts and Sciences. However, the strength of our program has sustained us for many decades and is the reason for the continued upswing in this year (see figure below).

Among the many accomplishments this year, we finally replaced the 60-plus-year-old X-Ray Diffractometer. This modern system can do amazing things and will greatly enhance student learning in mineralogy, petrology, and sedimentology as well as student and faculty research. Dr. Parcell, our current Berg Fellow, was awarded with 10 licenses of Kingdom Suite seismic interpretation software. They are worth $1.4 million and are instrumental to his exploration geophysics and sequence stratigraphy classes and many petroleum geology researches. Dr. Mazzullo has led and significantly advanced the study of Mississippian carbonate sedimentology, stratigraphy, and petroleum geology in outcrop and subsurface in Kansas and Missouri. The preliminary results by his team have received professional awards and attracted great attentions from petroleum industry. Dr. Parcell also has started an advanced study in Ordovician carbonate sedimentology and stratigraphy in the outcrop and subsurface in Kansas, Oklahoma, and Missouri. I myself was awarded a research grant by American Chemical Society Petroleum Research Fund to support undergraduate student research in northwestern China.

Our undergraduate and graduate students have been successful in 2009, as represented by the numerous recipients of departmental scholarships, Kansas Geology Foundation awards, and various grant awards and presentations. Several of Dr. Burke and Dr. Gries’ students presented research results in regional and national meetings. Dr. Gries’ Big Bend and Dr. Collette’s Arkansas Hot Springs field trips are highlights for the Geology Club. The summer field course in southern China was a blast, for the second time, for our students. Many students completed their BS and MS degrees, found employment, or went on for advanced studies in Master’s and Ph.D. programs.

These accomplishments resulted from the diligence of our students, the support from our friends and alumni, the support from the college and university, and the dedication of our faculty and staff. In addition to current endowed scholarships, Dr. Merriam, emeritus professor of the department, reopened the Daniel F. Merriam Fellowship. The Bruce Memorial Fund, Kansas Geology Foundation, and Kansas Geophysical Society also provided much-needed financial support for our students and their research. The new X-Ray Diffractometer was purchased mainly with the Diamond Anniversary Fund donated 12 years ago by our alumni and friends. Last, not the least, several alumni and friends (Marj Crane-Noel, Dennis Hedke, Jim Michael, and Larry Skelton) taught classes or lectured for our students throughout the year.

I invite you to stop by the department to see our new XRD and exhibitions, talk to our students, and/or write to us to update your success and accomplishments.

Please read on. I anticipate more good news and achievements in 2010. Be well and keep in touch!

Wan Yang, Chair
316-978-3140
wan.yang@wichita.edu
December 2009
Bill Bischoff is a professor and is the Dean of School of Liberal Arts and Sciences. He taught the well-received Geochemistry class in the spring, and will teach more whenever he can, although he has not been able to supervise graduate students in the last few years. He has been collaborating with Dr. Burke studying rocks and doing fieldwork in west Kansas during the summers.

Collette Burke A fabulous perk that nobody told this new recruit to the WSU university community 26 years ago was that the job grows with you without the necessity of relocating to a new country. So, as my interests change, the University accommodates, and permits entry into a variety of new arenas that include professor of micro- and macro-paleontology, research in soft rocks studies, ancient and modern reef work, environmental geology, field work, CEHH center director, administrator, disgruntled committee slave, department chair, data analyst and interpreter, statistician, author, editor, computer geek, mentor, field trip leader, and more. This fall, I offered a new course on the Geology of National Parks and led a field trip to Hot Springs National Park in Arkansas over fall break.

If I tire of one activity, I simply phase shift to another. The trick is making the shift ‘appear’ to be an obvious and necessary segue to the new phase. This way, one is not accused of being a dilettante. Thus far, these reallocations have been endlessly variable, entertaining, and excellent experiences to bring to the classroom. The last few years have been busy with graduate students and research completion. One of my graduate students, Leah Kasten took first place for best poster at the Kansas Academy of Sciences Meeting in March, 2009. Other graduate students presented their ongoing research at GSA in Portland, at WSU GRASP, and KAS meetings this year. Other recent graduate students including Michael Lichtenwalter and Jaci Venhaus are gainfully employed petroleum geologists in San Antonio, Texas; whereas, Marj Crane is employed here at Woolsey Petroleum. In addition, Ijoema Iweaha is planning on continuing for her PhD. I look forward to continue working with students and colleagues on completing ongoing research projects and initiating new research projects.

My husband Michael, a professor of Psychiatry at KU MC-Wichita, and I have been married since the Precambrian. Michael suffers from a wonderful excess of personality which keeps home-life fascinating. We have 3 children. All of whom are now legally adults. Katie (24 YBP) graduated from KSU and is working at Exploration Place as an anthropological educator. Annie (19YBP) is a freshman/sophomore at KSU and BCCC, and Michael (nee baby-michael, little-michael, michaelee or mikey, 18YBP) is a freshman/sophomore at KSU and BCCC, and Michael (nee baby-michael, little-michael, michaelee or mikey, 18YBP) is a freshman/sophomore at KSU and BCCC. We love them dearly, and hate to see them run off to college just as they’re getting interesting. Sigh.

In addition to work and home I am a member of several civic organizations and charities. I also collect mushrooms, shells, insects and plants—just for fun.

Marjorie (Crane) Noel (’07) Some of you may have noticed the name change. Yes, I did get married this past May to my best friend, Shane. Married life has been full of surprises and in October we found out that our little family will be expanding. We will be welcoming a little bundle of joy the end of May 2010. My 11 year old stepson, Cody, is absolutely thrilled that we are having a baby (but only if it’s a boy).

As for my other life, the professional life, I am a lecturer in the WSU Geology Department, teaching one evening Geology 102 course per semester. During the day, I am an exploration geologist with Woolsey Operating Company in downtown Wichita, where I have joined fellow WSU alums Brian Wilhite (’01), Kimberly Dimmick-Wells (’02) and Marc Summervill. I also serve on the WSU GeoAdvisory Board and have recently been elected as the Kansas Geological Society’s 2010-2011 Secretary/Treasurer.

John Gries continues to enjoy teaching and field work without administrative responsibilities. This past year I’ve taught Field Methods, Geohydrology, Structure, a new two hour Tectonics class, and the introductory energy resources class. Structure again includes a four day field trip to Southern Colorado and Northern New Mexico in the late spring.

During Spring Break, I led a Geology Club field trip to the Big Bend area of Texas. We based in a remote part of Big Bend Ranch State Park, a nearly 300,000 acre cattle ranch recently converted to a State Park, adjacent to the better known Big Bend National Park. The crew was introduced to the Chihuahua Desert and Tertiary volcanic geology, late Tertiary and Laramide structures, and deformed Paleozoic units. We spent a day in the Solitario, an isolated volcanic dome complex which exposes the furthest south outcrop of Paleozoic rocks deformed in the Ouachita collision at what was then the southern edge of the North American Plate.

Field camp went well with an enthusiastic group of students. We spent about 10 days working in the Wet Mountains on the Evenhart, 3R, and Pope ranches before moving to the Western Slope. We mapped in the Lime Creek area of the San Juans and worked on some surface water quality problems in the area. Thanks to the Burke family, our base camp featured a picturesque view of the Cimarron Range of the San Juan Mountains and a large tepee as a study area. The camp activities extended into the Paradox Basin to look at and map some salt tectonic and collapse structures. Both renewed petroleum and uranium exploration are creating a lot of activity in the area.

Graduate student Renee Vardy completed the water quality study of Silver Lake, Colorado, examining the effects of mill tailings which have been submerged and undisturbed in the lake for about 100 years. The results recently have been submitted for presentation.

I always enjoy hearing from alumni by what ever means including visits. I owe a number of you replies and will get it done. Stop by and see us!

Toni Jackman I continue to teach many of the Geology Intro classes; Earth Science and the Environment; Earth and Space Science; and, occasionally, Dr. Gries’ old 300 standby Earth, Resources and the Environment; and I have a pretty good track record of subverting undeclared students, and even some misdirected declared ones, into Geology. In addition, I continue to teach the department’s only Oceanography course, despite the limitations on field work for this course here in Kansas (I have, however, done some pretty interesting SCUBA diving in old abandoned quarries in the southeast sector of the state). My main focus continues to be environmental issues and, as faculty
advisor to the WSU Greengroup, we went all out for last year’s Earth Day events. We recruited sponsors and partners for our second, and much larger, Mid- America Green Earth Fest. In addition to a week of films, documentaries, panel discussions and speakers, our Community Day hosted hundreds of students and other visitors here on campus and featured 15+ bands playing “off the grid” with solar powered amps, key note speaker Rod Bremby-head of the Kansas Department of Health and Environment; participation by Kansas Board of Education member Walt Chappell; a recycled-materials Fashion Show with guest Miss Kansas; a native American presentation, many tables and booths for “green” vendors and much more. Alas, with some of our more active students graduated or otherwise missing, this year the Earth Fest may scale back a bit but we are still looking for sponsors!

Last summer, I was privileged to join the Department Field trip to southern China and the Triassic sediments of the Yangtze platform and Great Bank of Guizhou. In addition to an extensive array of carbonate formations, we also examined the famed Permian Triassic boundary. And you know those wonderfully exaggerated Chinese paintings of soaring pinnacled peaks and karst topography one often sees in museums – they aren’t really exaggerated! - as my knees can attest; but the scenery was magnificent and the interaction of students from WSU, University of Wisconsin, Oshkosh and Guizhou University was very fruitful with many new friendships and broadened perspectives on both Geology and culture.

Sal Mazzullo In 2009, Dr. Mazzullo continued with his cooperative (between local industry and academia) research on Mississippian rocks in the midcontinent. His latest paper on the subject, a lengthy tome on the depositional origin and reservoir geology of the subsurface Cowley Formation in Kansas, was just published in the December issue of the prestigious Bulletin of the American Association of Petroleum Geologists (AAPG). He has given invited lectures on the subject this fall to the Kansas Geological Society (Wichita), the “Triple Junction” (a consortium of Oklahoma State University, Tulsa Geological Society, and Oklahoma City Geological Society), and the Oklahoma City Geological Society. He again won the Planap Award for best poster presentation at the bi-annual meeting of the midcontinent section of AAPG in Tulsa in October.

DAN MERRIAM is Senior Scientist Emeritus with the Kansas Geological Survey as well as Distinguished Professor Emeritus at WSU. Dan came to WSU in 1981 as chair and brought geologic applications of computer technology to our curriculum. He continues to actively publish. He and Annie reside in Lawrence, Kansas. – From J. Gries.

Jim E. Michael comes to the Geology Department with a wide range of professional expertise dealing with land management and environmental conflict issues. He received a B.S. in Education and a M.S. in Forestry from Southern Illinois University before entering the military. After military service, Jim spent two decades dealing with land conservation issues in California and Washington State before returning to the Midwest to be near his family. For the last 15 years, he had dedicated most of his time to the Sunflower Land Trust as its Chief Executive Officer and as a professional Mediator dealing with Domestic, Civil and Environmental issue. In addition to his environmental duties, Jim has served as a Lecturer for our EEPS “Current Issues in Global Environments” class, a Faculty member at Baker University teaching courses in Dispute Resolution and as a University of Phoenix Instructor for Environmental classes.

During the summer most of Jim’s time was spent working with the Federal and State Regulatory Agencies to certify a 40 acre wetland mitigation bank in the Wichita area.

Will Parcell Dr. Will Parcell is Associate Professor of Geology and the current holder of the Berg Faculty Fellow. He continues in the role of Graduate Coordinator of the EEPS (Earth, Environmental and Physical Sciences) Masters Program. Dr. Parcell has been at WSU for eight years now! My, how time flies! In recent years, his course offerings have included Mineralogy, Petrology, Extreme Environments, Advanced Stratigraphy, Exploration Geophysics, and History of Geology. His research examines the theoretical and applied aspects of microbial sedimentology and geocognitive issues in stratigraphy. His projects in microbial sedimentology include constructing models of microbial growth, and investigation microbial reef petroleum reservoir architecture and quality. Most recently, he has been actively involved in outcrop characterization of microbial facies in the Arbuckle-equivalent strata in Missouri. This past year, he has presented aspects of this research at the AAPG and GSA annual meetings. His second research initiative in geocognition examines the techniques that earth scientists use to manage uncertainty and interpret stratigraphic data. This research is certainly multidisciplinary in nature, and draws upon a variety of “non-traditional” disciplines such as philosophy, computer science, information science, communication theory, and history. Research results have direct application to the refinement of conceptual models and computer simulations of geologic processes. In the past year, Dr. Parcell has published two articles related to this second initiative, including articles in a GSA Memoir and in the Journal of Geoscience Education. He and his wife, Lisa, keep a watchful eye on their two boys, Austin and Grant. Austin is now six and in first grade. Grant is three and attending WSU (the Child Development Center that is). The boys grandparents are inching ever closer to the idea of moving to Wichita. The new “babysitters” will be a welcome addition to our lives!

Nathaniel D. Reynolds, is an adjunct faculty in meteorology. His interests are in the areas of mathematics (BA) and meteorology (M.S. and Ph.D.) constitute the main areas of academic background for Nathaniel (Nate) Reynolds. Work experience has been quite varied, but heavily related to scientific software development and modification. Some time ago, Nate has developed algorithms for visual scenery display in flight simulators. He also performed some loads and vibration calculations for the Space Station, especially in the interest of keeping a sufficiently vibration-free environment for microgravity scientific experiments. The main areas of interest are, however, related to fluid dynamics, with and without embedded particles. He works at Spirit AeroSystems in the area of analysis and control of icing on aircraft. Other atmospheric related background includes rotating annulus experiments related to the atmosphere, analysis of satellite ozone data, and theoretical atmospheric dynamics investigations of flow over topography and instability of baroclinic atmospheric flows.

Nate’s wife, Charlene, is a 1974 graduate of WSU in Music Education. She returned to WSU a few years ago and received a Master’s degree in Music Education in 2005. She currently teaches instrumental and vocal music full time, grades K-12. Nate and Charlene have three daughters. The oldest, Sarah, is a graduate student in physics at the University of Kansas. The second daughter, Angela, teaches 5th grade. The youngest daughter, Amy, is a graduate student at the University of North Carolina in Chapel Hill, studying linguistics.
For extracurricular activities, besides some church activities, Nate is active in the South Central Kansas chapter of the American Meteorological Society and National Weather Association, and has contributed to the organization of some recent meetings and conferences.

**Lawrence "Larry" Skelton** is an instructor of “Earth and Environmental Sciences” in spring and summer semesters of 2008. He is also the Assistant Director Emeritus of the Kansas Geological Survey where he was employed for 25 years. Prior to that, he served 21 years in the United States Air Force in the field of petroleum logistics. He received the B.A. degree in geology from Indiana University, an M.B.A. from Trinity University and an M.S. degree in geology from Wichita State University. He is certified in Advanced Logistics Management by the University of Dayton and Air Force Institute of Technology. He has served as president of the Kansas Geological Society and Kansas Geological Foundation. He was honored in 2001 by the Rocky Mountain Federation of Mineralogical Societies for distinguished achievement in the field of earth sciences and with the 2002 National public Service award by the American Association of Petroleum Geologists. He is a member of AAPG, Sigma Xi, the Kansas Geological Society and Kansas Geological Foundation, and a past-president of the Kansas Academy of Science and its current treasurer. He has published 40-some papers on geological and historical topics.

**Kevin Smith** is the Senior Administrative Assistant for the Geology Department. He is the one you more than likely will speak to when you call the office, or come in seeking direction through the University system. Kevin has a Master’s in Music Theory from Wichita State University. His activities include being in several bands in the 80s, producing After Midnight for KMUW, writing an opera, D.J.’ing at Kirby’s Beer Store and special events, and reviewing music and theatrical performances for the local press.

**Peter Sutjerlin** is Professor Emeritus with the Department. Peter brought his knowledge of computer organization of geologic data to fill out that area of Departmental expertise in 1983. He and Ann reside in Merrickville, Ontario, Canada, when they are not visiting their children or touring with a local choir group. – From J. Gries.

**Wan Yang** has traveled quite a bit in 2009. He made two trips to an oil town in eastern China in January and March to start up a research project with Chinese Academy of Sciences on sedimentology, sequence stratigraphy, and petroleum geology of rift basins. The third trip across the Pacific was in the summer, teaching a summer field course in southern China and conducting field research with two graduate students in NW China. In between, he presented two papers in AAPG Annual Meeting in Denver in June and one paper in GSA Annual Meeting in Portland, Oregon in October (and a detour to Mt. St. Helens). The last trip will be to Washington, D.C., and New York City over the Christmas with the family.

As usual, he has been rewarded with the eager and curious young minds in his General Geology, Sedimentary Geology, and Clastic Depositional Systems classes. He is learning and discovering new things in the lab and field with several undergraduate and graduate students working on sedimentology, stratigraphy, paleoclimate, and petroleum geology projects. He was awarded with a WSU grant to date the ashes in the Permo-Triassic fluvial-lacustrine rocks, and a grant from American Chemical Society Petroleum Research Fund to conduct research in the desert of NW China with undergraduate students in the next three years. He hopes for a late Christmas present from National Science Foundation to fund a multi-disciplinary research with collaborators from 8 U.S. and Chinese universities and institutions. The next year will be busier. A manuscript is slowly coming to shape. But he is the co-author of four papers submitted by colleagues in Southern Methodist University, University of Oklahoma, and Chinese Academy of Sciences.

The family just moved from the 10-year temporary house to a new house. Minying and the kids are adjusting to the larger space (and chaos) and starting to enjoy it. Travis became a freshman in East High and Angela a kindergartener in Minneha. They are all looking forward to the trip to the Capitol Hill and Statue of Liberty in about a week.

### Faculty Accolades

**Journal Articles:**

**Conference Abstracts:**
- Mancini, E.A., Parcell, W.C., 2009, Outcrop analogs from western Europe for reservoir characterization and modeling of Upper Jurassic Microbialite and associated higher energy lithofacies
in the eastern Gulf Coastal Plain, USA: AAPG Rocky Mountain Section Meeting Abstract Volume.


Textbook:
Lehrmann, D., Yang, W., Yi, Y.Y., 2009, Field Geology Course – Part Two: Evolution of Ancient Seas, Tropical Reefs, and Textbook:
Lehrmann, D., Yang, W., Yi, Y.Y., 2009, Field Geology Course – Part Two: Evolution of Ancient Seas, Tropical Reefs, and Textbook:
Lehrmann, D., Yang, W., Yi, Y.Y., 2009, Field Geology Course – Part Two: Evolution of Ancient Seas, Tropical Reefs, and

Life in the Nanpanjiang Basin of Guizhou South China: University of Wisconsin, Oshkosh, Wichita State University, Guizhou University, China. 210 pp.

Awards, Grants, and Presentations:
Sal Mazzullo, 2009, Planalp Award for best poster-session presentation at the midcontinent AAPG biannual convention in Tulsa, OK. His co-authors are Brian Wilhite and I. Wayne Woolsey.


Student Accolades

Wei Guan (advisor Yang), $1000, Dora Wallace Hodgson Summer Graduate Research Grant, Graduate School of WSU, for thesis research in NW China.

Ijeoma Iweha (advisor Burke), presentation at Kansas Academy of Sciences Annual Meeting, 2009.

Brad Jeffrey (advisor Yang), $1000 for spring 2009 and $1000 for fall 2009, Kansas Geology Foundation, for thesis research in NW China.


Zachary A. Poland (undergraduate), spring 2009, KGF scholarship winner, $1,000.


Aaron L. Young (undergraduate), spring 2009, KGF scholarship winner, $1,000.
Master’s Program in
Earth, Environmental, and Physical Sciences

William Parcell, coordinator

EEPS continues to grow since its inception in 2005. It is currently the fastest growing graduate program in LAS. Since 2005, EEPS has seen a steady rise in enrollment, reaching over twenty students in the last two years. We have graduated eight students in 2008 and 2009. Dr. Will Parcell continues as the Graduate Coordinator for 2009-2010. Our master's program was strategically revitalized to broaden its scope to incorporate environmental and physical sciences to meet the new challenges in the 21st century while strengthen the core focus. The master’s program provides an integrated approach to graduate education and research that applies environmental issues, ethics and methods to sustainable mineral and energy resource development. The program is organized as to take advantage of the talents and expertise of faculty in the disciplines of geology and physics, and the supporting fields of biology and chemistry. The EEPS program offers three options to complete a master’s degree to meet the varying career needs and academic background of our graduate students: research, internship or coursework-only.


Our faculty are proud of our latest graduates from EEPS: Tamara Alcorn (coursework option; Burke), Leah Kasten, (research option, Burke); Michael Lichtenwalter (research; Burke); Alan Heckel (coursework option; Mazzullo), Daryl Lederhos (research option, Mazzullo); Ijeoma Iweha (internship option; Burke), Zach Koch (research option; Burke), Ganganath Koralegadara (research option; Parcell), Walter Moody (coursework option; Parcell); Joseelyn Nittler (Physics), Jessica Puyear (research option; Mazzullo), Renee Vardy (Thesis option; Gries).

Despite erratic funding, CEHH has recently carried out a number of effective programs on Global Climate Change. During Spring 09, CEHH partnered with the Green Group to support and organize the Second Annual All Midwest Green Fest, a weeklong celebration of Earth Day on the WSU campus. In April 09, CEHH organized and supported Secretary of Kansas Department of Health and Environment Bremby’s visit to the WSU campus and geology department. During the summer of 2009, CEHH and Warren Theaters partnered to present the movie FEUL at a special presentation at Warren East Theaters. CEHH organized a panel discussion and dinner following the preview. Subsequently, FEUL has received critical acclaim, and has been nominated for an OSCAR. CEHH continues with its support of environmental education while forming productive working partnerships with a number of other like-minded organizations across the state.

Dr. Collette Burke

Current Chair, Center for Environment, Human Health

CEHH continues to carry out a number of effective programs on global climate change. During Spring 09, CEHH partnered with the Green Group to support and organize the Second Annual All Midwest Green Fest, a weeklong celebration of Earth Day on the WSU campus. In April 09, CEHH organized and supported Secretary of Kansas Department of Health and Environment Bremby’s visit to the WSU campus and geology department. During the summer of 2009, CEHH and Warren Theaters partnered to present the movie FEUL at a special presentation at Warren East Theaters. CEHH organized a panel discussion and dinner following the preview. Subsequently, FEUL has received critical acclaim, and has been nominated for an OSCAR. CEHH continues with its support of environmental education while forming productive working partnerships with a number of other like-minded organizations across the state.

Geo Advisory Association – Brian Wilhite, President

Greetings again from the WSU Geo Advisory Association! In case you have forgotten and/or are new to the Department or our geological community, my name is Brian Wilhite, and I am the current President of the Association. Many of you may recognize or remember us from our joint functions with the Department of Geology including the well attended Spring Baseball Bash. Our goal, per our Mission Statement, is to “support, aid, and advise the Wichita State University Department of Geology in its endeavor to provide education, research, and service to the geologic community.”

Historically, we have followed these tenets in working with the department chair to try to meet some of the Department’s and students’ needs. The growth of the department requires us to begin a push to grow the Geo-Advisory Association and broaden its relationship with the Department, its faculty, and the students in an effort to bridge the gap between the University and industry. As of current, in an effort to streamline these goals, we are considering a complete restructure of the Geo Advisory Association. The changes under consideration will shift responsibility of the planning of social functions to the Department hence, freeing the Geo-Advisory Association and its members in the endeavor to better help aid the Department, and connect the needs of the students and faculty to industry. It is in this effort that we hope to increase the flow of communication, ideas and skill between the two entities. With that being said, we will very soon, be looking to increase our membership. Membership is not restricted to alumni, although alumni are greatly encouraged to join, and will be open to anyone with an interest in the Geology Department at WSU.

Inasmuch as the future of our geological community and industry are in the hands of the professors and the students they teach, it is our purpose to help them along the way when needed and where necessary. Please feel free to contact any one of us if you have
interest in becoming a member, if you are an alumnus and want to reconnect and get involved with your Alma Mater, or if you have a sincere interest in the well-being of the WSU Geology Department. We look forward to speaking with you.

Current acting board members include: Brian Wilhite (c/o 2001) - President; Jon Callen (c/o 1983) - Treasurer; Alan Banta (c/o 1979) - Secretary; and members Jeff Klock (c/o 1990), Scott Oatsdean, Larry Richardson, Maurice Korphage, Dallas Donner, and Marjorie Crane (c/o 2007).

Geology Club Report

Brad Jeffrey, Geology Club President, Graduate Student

The Geology Club is wrapping up another active and successful year. Spring tree planting with the Sunflower Land Trust raised $1,000 for club activities. We appreciate the opportunity offered by Mr. Jim Michael. The spring break field trip with Dr. Gries took us to the back-country of Big Bend State Park. Fall break with Dr. Burke featured a geo-boat trip through the Ouachitas near Hot Springs National Park, Arkansas. The annual Halloween party, hosted by Toni Jackman and Dr. Gries, offered plenty of great costumes, food, and beer. We are looking forward to another great semester. The coming spring will offer more opportunities for fundraising and volunteering, such as Science Olympiad and other departmental functions. The upcoming spring break trip will offer another excellent chance to get out into the field, possibly to the Guadalupe Mountains. Our goal is to offer affordable travel, excellent field experience, and ever-lasting memories for club members. Come join us!

Nota Bene

Miniflex™ II benchtop XRD System

This compact XRD system was purchased with a cost of ~130,000 including basic software and 5 years of maintenance contract, using funds from Diamond Anniversary Fund, Clifford Fund, and contribution from the School of Liberal Arts and Sciences. It is housed in the basement of Geology Building in May, 2009. Faculty and student training was completed in November. Now the system is ready for teaching and research.

The system can do many amazing things. It will enhance the teaching and learning in numerous classes, such as mineralogy, petrology, sedimentology, carbonate sedimentology, petroleum geology, and paleontology. The system is flexible and requires minimal maintenance. It can analyze powder, thin section, hand sample, and slurry paste by using various sample holders. Digital data collection can be easily exported into software for qualitative and quantitative analyses.

The system will definitely broaden and deepen the scope of student and faculty research in many fields of geology and environmental sciences. In addition, the system can be used for studies in many other fields: chemical (duct tape), biological (tissues), materials (metals, cements), medical, food, and forensic sciences.

Geology Colloquium

As usual, a colloquium series has been carried out through videoconferencing with Department of Geology, University of Kansas mostly from 4-5 PM on Thursdays. Cookie and coffee are served before the talk. Students and faculty members on campus have benefited greatly from presentations by national and international geologists in all fields of geology. Fellow geologists in the Wichita area are welcome to attend. We thanks KU Geology Department for their generosity and support.

New Courses

In the spring, Dr. Parcell taught Sequence Stratigraphy using various 2-D and 3-D seismic data. In the summer, Dr. Yang offered the second part of the Summer Field Geology course in China in southern China, with students from WSU, University of Wisconsin, Oshkosh, Guizhou University of China, and Texas and Hawaii. In the fall, Dr. Burke offered a revitalized “Tectonics” course after a long hiatus. All the courses are very well attended by undergraduate and graduate students.

New Scholarships and Donations

Dr. Dan Merriam, Emeritus Professor, re-opened the Daniel F. Merriam Fellowship for graduate students who have completed a thesis proposal, which was awarded for the 2009-2010 academic year.
The Bruce family has set up a $1,000 Robert Bruce Memorial Fund for the department and a Fellowship in 2009. The department is grateful for the donations from our alumni and friends, noticeably, a $2000 anonymous gifts to the Diamond Anniversary Fund. The Crouch Memorial Scholarship by Geophysical Society of Kansas from Geophysical Society of Kansas increased the scholarship to $1,000 in 2009. These new scholarships and funds and the existing scholarships have provided tremendous financial and moral support to our students and faculty, and are greatly appreciated.

**New Microscopes** Three microscopes were purchased in the spring. They are 'Borealis student' scopes with standard petrographic equipment. These scopes and those purchased in 2008 with an anonymous donation will meet the urgent demands in several courses, including Mineralogy, Petrology, Sedimentology, Paleontology, Micropaleontology, Carbonate Sedimentology, and Petroleum Geology, and in undergraduate and graduate research.

**Help Needed** We would love to hear from our friends and alumni about your achievements, accomplishments, stories, memories, and just simple greetings. We will put them in the future newsletters to pass around among the friends and alumni. Please write, e-mail, or call any of us. The main contacts are Kevin Smith at 316-978-3140, kevin.smith@wichita.edu; Wan Yang at 316-978-7241, wan.yang@wichita.edu. Mailing address: Department of Geology, Wichita State University, Campus Box 27, 1845 Fairmount Avenue, Wichita, Kansas 67260.

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**The Dynamic Speaker from the Dynamic Yellowstone Hot Spot**

In early December, the Department hosted its Watkins' speaker, USGS Research Scientist Dr. Lisa Morgan. She was recommended by Toni Jackman who had participated in her GSA-sponsored 5-day field trip to trace the track of the Yellowstone Hot Spot. Lisa has published numerous papers on the geology and geophysics of volcanic terrains and is particularly well known for her work mapping and interpreting the Yellowstone hydrothermal systems. Her visit started off with an introduction to Wichita culture as her plane made it in just in time for a 5:00 pm gathering at Kirby’s. The next morning started with a tour of the Anthropology Museum. It turns out that Lisa’s father was an alumni of WSU and had donated his extensive and well-documented collection of Hopi pots and clay work to the Museum - forming the bulk of one of its most valuable collections.

Her public lecture focused on the mantle plume/hot spot and underlyiing volcanic processes that created the well-known geothermal features of Yellowstone National Park. She described the hot spot’s interaction with the westerly movement of the North American Plate that has left a track of residual geothermal features along the Snake River Plateau. She also gave a second lecture on Yellowstone geothermal explosions, which are frequent occurrences in the park today, as opposed to a major volcanic eruption. She stated that the so-called Super Volcano is a very unlikely event, but one much beloved by the media. Particularly interesting was her three dimensional map showing thermal anomalies underlying Yellowstone Lake. This on-going work involves sophisticated sampling by remotely-controlled submersibles integrated with seismic and other data. It demonstrates how active many parts of the Yellowstone continue to be. Lisa’s visit tied in nicely with Dr. Burke’s “Geology of National Parks” and Dr. Gries’ “Tectonics” courses. The talks were open to all, including students in introductory classes. Some of the latter may have found parts of the talks rather technical, but couldn’t fail to appreciate Dr. Morgan’s enthusiasm and the excitement of clarifying and solving field problems.

In addition, the Geology Club hosted an informal talk and lunch session that covered topics from her work in Big Bend and opportunities with USGS to field work in general. Lisa made it a point to include students on her summer field research and in the excitement of the moment, and perhaps fueled by a couple of beers, several students expressed interest in accompanying her on this summer’s field projects despite the 5:30 am start to a typical day. Field projects on volcanoes and hydrothermal explosions may be a bit off the “track” for petroleum geology, but it’s a level of field experience that would prove invaluable for our future geologists.

Toni Jackman, co-host

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**A POCKET HISTORY OF THE WSU DEPARTMENT OF GEOLOGY -- John Gries**, reprinted from 2008 newsletter

Fairmont College is generally considered to have been founded in 1895 by elements of the Congregational church, although it was preceded by the Fairmont College for Women (the Vassar of the West) and a couple of other short lived educational efforts, according to Merriam. The first interest in geology apparently started with the hiring of Samuel E. Swartz in 1907 to teach chemistry and physics. When the oil boom started in 1914 in the El Dorado area, Swartz began to consult as an oil geologist in the area on Saturdays (no work on Sundays - it was a church school) (Rydjord, 1977, p.73).

Apparently some geology was introduced into the classroom at this time, followed by the hiring of Jenner A. Payne, who taught geology and botany. Payne told students that there were three requirements to be a geologist: 1. travel, 2. travel, and 3. travel (Rydjord, 1977, p.101).

When church support for the college faltered, the City of Wichita took over in 1926 forming the Municipal University of Wichita. One of President John Finlayson’s first acts was to hire Walter A. Ver Wiebe to found the new Department of Geology (Merriam, 1985, p.66). Ver Wiebe returned from Mexico where he was Chief Geologist for Sinclair Oil Company. Well known in the petroleum industry, Ver Wiebe was Editor of the Bulletin of the American Association of Petroleum Geologists from 1934 to 1943. A second faculty member was added in 1930, followed by a third in 1936. Ver Wiebe consulted and traveled widely during this time. His collection and carefully labeled specimens from these travels still form the core of our teaching collections today. After nearly
closing the Department for the duration of World War II, Ver Weibe hired Robert Berg in 1946 and Jack Blythe in 1949 (Merriam, 1985, p.66).

During the 1950s and 60s, Paul Tasch joined the faculty along with Cal Noah, Jim Myers, Andy Lang, Bernard Shafter, Dah Wu, and several others. In the early 1970s Jim Gunderson and John Gries were added to the faculty to make a six person department. In the late 1970’s David Smit and Doug Schultz joined the faculty followed by Dan Merriam’s arrival as Chair in 1981. Merriam brought the Department into the computer age with new courses and faculty applying computer technology to the science of geology. During the early boom times of the 1980’s Collette Burke, William Full, Peter Sutterlin, C. Philip Kaiser and Bill Bischoff joined the faculty with both Paul Tasch and J. R. Berg retiring. Emphasis on petroleum geology continued with the arrival of Sal Mazzullo from the West Texas oil fields.

Meteorology has been taught on a part time basis for more than forty years within the Department. Instructors since the late 1960’s have included Cecil Carrier, Lynette Flann, Dorian Burnette, Dave Schaffer, Jon Davies, and presently Nate Reynolds.

With the turn of the new century came a move to the remodeled Math-Physics building, now named the Geology Building and the addition of Wan Yang, Will Parcell, Toni Jackman, and Hongsheng Cao. This ended over 70 years of being housed in McKinley Hall, first known as the Science Building when completed in 1928-29. During this time the market for petroleum geologists rebounded and a new market for geologists working in the area of applied environmental geology was met by new courses and additional faculty expertise. During this time the M.S. in Environmental Science and the M.S. in Geology were replaced by the M.S. in Earth, Environmental, and Physical Sciences, allowing student to earn an M.S. with a Geology emphasis, an environmental science emphasis or physics applications.

Today, the future looks good for WSU graduates in a variety of fields and the Department continues to develop a wide range of classes, programs, and research interests.

I have borrowed liberally from the following references as well as Departmental records and thank these authors for their contribution to this short note. I know of a number of faculty that have served Wichita State University and University of Wichita that I have missed because of incomplete information. I would be pleased for additional input.

REFERENCES CITED
Kyle Day posing in front of a large microbialite bioherm, Ordovician Roubidoux Fm., near Westphalia, Missouri, in a field study with Dr. Parcell in the summer.

Dr. Burke led the department fall-break field trip in SW Arkansas. No diamond was found, but a lot of rocks.

Learning in China this summer was intensive – platform carbonate rocks, end-Permian mass extinction, sequence stratigraphy in 2 weeks and culture and history in 1 week. Left: American and Chinese students in the field, Right: Univ. of Wisconsin, Oshkosh and Wichita State students in front of Temple of Heaven.

Geology Club member Renee Vardy and future geologist Angela Yang planting trees in early spring. The activity was organized by Mr. Jim Michael. The hard work by the members raised $1,000 for the club.

Brad Jeffrey taking a break in the desert of NW China, July 2009. The standing mummified desert rat gradually turned into the silhouette of his advisor Dr. Yang under the hot desert sun.
Learning in China this summer was also diverse – pipe puffing (Wei Guan, above), chicken-head sampling (Jonathan Orbist, below), and bewilderment by culture and history (Jonathan Orbist upper right; Brad Jeffrey and Wei Guan, lower right).

Left: Dr. Mazzullo posing in front of non-dolomitic Grand Falls Chert, Joplin, Missouri, trying to keep even footed due to a recent hip replacement. Right: Robert Turner and Beau Morris dwarfed by the magnificent Osagean Reeds Spring limestone exposure in Reeds Spring, Missouri.