TO DO LIST:
• Visit us in the Department
• Attend Spring Banquet
  May 4, 2006
  (end of semester)

NEW DEPARTMENT WEBSITE
http://www.uark.edu/geosciences

The Department will unveil a new website soon. Please keep checking. We hope that this will help people to see the exciting things that we do. The University wants official pages of campus units to present a uniformed look to the world. Don’t worry. Individual faculty will still have their own web pages the way that they want them.

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Message from the Chair
Greetings to All. As the new Chair, I am pleased to welcome everyone to the inaugural edition of our newsletter. We are excited about the opportunity to keep you informed of the activities of our students, staff, faculty, and alumni and hope that you are pleased to hear from us as well. If you have any news to share, please tell us so that we can include it in our next edition. Each newsletter will devote space to the events in the lives and the whereabouts of our alumni.

An event in the recent past of which some of you may not be aware is the merger of the departments of Geology and Geography into the Department of Geosciences in 1999. The degree programs of the original departments remain intact. The Geography and Geology student organizations also still function as separate entities, but work together to coordinate functions, such as the traditional Spring Banquet and the recently revived Geosciences Open House during Alumni Weekend. Mark your calendars now to join us this fall.

We are using our inaugural newsletter to re-introduce you to the Department. We’ve included a summary of the research interests of each faculty member. In case you wish to touch base with anyone, we have provided email addresses and telephone numbers. To give you a sense of the diversity of the Department, we also are listing the thesis topics of our recent master’s graduates. We think you’ll agree that these are quite impressive. The Department also participates in two interdisciplinary doctoral programs: Environmental Dynamics, which enrolled its first students in 1998, and Space and Planetary Sciences, which began January 2005.

As a Department, we are always looking for ways to move forward and improve. To that end, we are organizing an external advisory board to help guide us. If you are interested, willing, and able to participate (or know someone else who should), please contact us.

Finally, we would like to express our gratitude to each of you who has so graciously supported us financially through the years. You are essential to the success of the Department.

All the best.....

Pamela
Software Donation

In spring 2005, the geoPLUS Corporation of Tulsa gave the PETRA software package to the Department for a nominal charge, which resulted in a donation by geoPLUS of nearly $270,000. The transaction was facilitated by alum James Redman. The software will permit the further integration of technology into the classroom and the pursuit of leading-edge research and teaching by faculty and students in petroleum exploration and basin analysis. We are truly grateful for this gift. Thank you to James and to geoPLUS.

Faculty Retreat

In February 2005, the Department of Geosciences held its first faculty retreat as a merged department. The weather was gray and cold, but the setting was peaceful at the top of Mount Sequoyah with a good, hot meal for breakfast (see all enjoying in photo on left) and tasty sandwiches for lunch. Many issues were discussed from the mundane to the sublime.

Collective goals included the development of an External Advisory Board, the strengthening of Friday colloquium, the restructuring of the curriculum, and the definition of research strengths to focus strategic planning over the next several years as retirements loom. As usual, space was also an important topic as enrollments grow, new faculty are hired, and instruments and computers are acquired.

Friday colloquium will now serve everyone in Geology, Geography, and Environmental Dynamics. Each program will be responsible for one-third of the afternoons throughout the semester, ensuring a breadth and diversity of topics. We plan to take advantage of local expertise as well as visiting researchers and alumni when possible. Let us know if you are interested in giving a talk one Friday afternoon. This fall we also hosted Distinguished Lecturers from the Ocean Drilling Program, the Association of Women Geoscientists, and the Society of Exploration Geophysics. If you're in the neighborhood, drop by for excellent science, good conversation, and, of course, cookies. Check the website for the schedule--we are trying to get it out as far in advance as we can.

Several research areas were identified as strengths: hydrogeology and limnology; dendrochronology and climate change; stratigraphy and paleontology; natural hazards; geomatics; fluvial, karst, and Arctic geomorphology; Quaternary studies, and neotectonics. We have two faculty searches at the assistant professor level to begin in fall 2006: 1) paleoclimatology and 2) geochemistry. Space will be a limiting factor, but things may be looking up. The Department has acquired space in for graduate student offices in the Old Geology building, (which some of you might remember from your days) and in 2007 in Ozark Hall when CAST moves into its new building.

New Faculty

In fall 2004, the Department of Geosciences welcomed two new assistant professors: Dr. Jackson Cothren and Dr. Jason Tullis. Jack received his BS from the United States Air Force Academy and his MS and PhD in Geodetic Science from The Ohio State University. He is a native of Paragould, Arkansas. His research interests include geospatial modeling, geomatics, geodesy, and photogrammetry. Prior to joining our department, Jack was a research assistant in CAST where he was the team leader for multiple research projects. During his first year as an assistant professor, he taught Introduction to GPS and Quantitative Methods in Geosciences. Jason received his BS from Brigham Young University and his MS and PhD from the University of South Carolina. He is a Utah native who is enjoying his new home of Arkansas. Jason was a GIS/remote sensing design analyst for a NASA Affiliated Research Center in the Department of Geography at USC before coming to Fayetteville. His research interests include GIS/remote sensing, biogeography, and LIDAR. Jason taught Introduction to Raster GIS and Advanced Remote Sensing during 2004-2005. We are lucky to have both Jack and Jason on the faculty and wish them success.
**Student Organizations**

**Sigma Gamma Epsilon (SGE)**

SGE is the student honor organization for undergraduate and graduate students with interests in Geology. Anyone with the appropriate academic qualifications may join. Having a major within the Geosciences is not required. SGE traditionally has been responsible for the Christmas and Spring banquets, trash pickups along the highway near Devil’s Den, departmental colloquium and rock bags. GTU now assists with the banquets, trash pickups, and colloquium, whereas SGE still handles rock bags. SGE also oversees several student awards, such as the Dan Gabor Scholarship, which carry financial remuneration due to the generosity of alumni.

The faculty advisor is Dr. Walter Manger.

The current president is Clayton (Yarri) Davis, a graduate student pursuing his MS. His email is: cyd01@uark.edu.

Dixie Androes, a graduate student, is responsible for coordination of the Geology portion of departmental colloquium. Her email is: dandroes@uark.edu.

**Gamma Tau Upsilon (GTU)**

GTU is the student honor organization for undergraduate and graduate students with interests in Geography. A major in Geography is not required. GTU partners with SGE in the planning, financing, and hosting of the Christmas and Spring banquets, trash pickups, and departmental colloquium. GTU also offers print services to faculty and students who wish to generate large format posters. GTU also organized a large garage sale in spring 2005, which they hope to make an annual event, if Professors Paradise and Davidson permit. They also give several student awards.

The faculty advisor is Dr. Malcolm Cleaveland.

The current president is Michael Sarhan, a graduate student pursuing his MA in Geography.

Dan Griffin, a graduate student, is responsible for co-ordination of the Geography portion of departmental colloquium. His email is: rdgriff@uark.edu.

**Supporting Women in Geosciences (SWIG)**

SWIG is the organization that provides encouragement and support for women in the Geosciences, including Geography, Geology, and Environmental Dynamics. Activities have varied from weekend retreats to buying gifts needy children during the holidays. SWIG sponsors the clean-up of Skull Creek each year in collaboration with SGE, GTU, the Fayetteville Urban Resources Stream Team, and the Sierra Club. This has been a tremendous success with participation growing each year. Membership is open to all who are interested, be they students, staff, faculty, alumni or friends.

The faculty advisor is Dr. Fiona Davidson.

The current president is Stephanie Shepherd, a graduate student pursuing her PhD in Environmental Dynamics. Her email is: slesheph@uark.edu.

Anyone interested in joining or supporting any student organization is encouraged to do so!
Faculty Research Interests

Stephen Boss, Associate Professor and Director of Environmental Dynamics, PhD, University of North Carolina, marine geology and geophysics, limnogeology
Van Brahana, Professor, PhD, University of Missouri, agroforestry, surface and ground water processes
Malcolm Cleaveland, Professor, PhD, University of Arizona, tree-ring analysis and paleoclimatology, geographic information science
Jackson Cothren, Assistant Professor, PhD, The Ohio State University, geospatial modeling, geomatics
Ralph Davis, Associate Professor and Director of Arkansas Water Resources Center, PhD, University of Nebraska, physical and contaminant hydrogeology
Fiona Davidson, Associate Professor and Director of European Studies, PhD, University of Nebraska, nationalism and European electoral geography
John Dixon, Professor, PhD, University of Colorado, weathering, periglacial geomorphology
Tom Graff, Associate Professor, PhD, University of Kansas, retail geography and migration analysis
Margaret Guccione, Professor, PhD, University of Colorado, stream geomorphology and sedimentology
Phil Hays, Professor, PhD, Texas A&M, geochemistry and stable isotope hydrogeology
John Hehr, PhD, Michigan State University, Professor and Associate Dean of Fulbright College, paleoclimatology and climate change
Pamela Jansma, Professor and Chair, PhD, Northwestern University, plate kinematics, tectonics
Ron Konig, Professor, PhD, Cornell University, structural geology, general geology
Fred Limp, University Professor and Leica Geosystems Chair in Geospatial Imaging, PhD, Indiana University, geospatial analysis
Walter Manger, Professor, PhD, University of Iowa, Carboniferous ammonoids, biostratigraphy, stratigraphy, petroleum geology
Glen Mattioli, Professor, PhD, Northwestern University, GPS geodesy, volcanology
Tom Paradise, Professor and Associate Director of King Fahd Center for Middle East and Islamic Studies, PhD, Arizona State University, stone deterioration, architecture, hazards, cartography and visualization
Dave Stahle, Distinguished Professor, PhD, Arizona State University, tree-ring analysis and climate change, human environmental interactions, ancient forests
Ken Steele, Professor, PhD, University of North Carolina, impact of land use and storms on aqueous chemistry, evolution of groundwater
Jason Tullis, Assistant Professor, PhD, University of South Carolina, remote sensing, biogeography
Doy Zachry, Professor, PhD, University of Texas, stratigraphy, sedimentary petrology, petroleum geology

Faculty News

Dr. Jason Tullis and Dr. Jack Cothren joined the Department in fall 2004. For more information about them, see page 2. Dr. Dave Stahle is using dendrochronology to reconstruct the climate of central California and was named Distinguished Professor. Dr. Margaret Guccione traveled to Italy and the Netherlands to present the results of her Mississippi and Po River work. Dr. Tom Graff is completing an invited chapter for a book to be published by Routledge. Dr. Glen Mattioli has assumed the Co-Presidency of the World Organization of Volcano Observatories. He was promoted to Professor. Dr. Ralph Davis is spearheading the effort by several universities in the midwest to establish a long-term, NSF-funded hydrological observatory in the region. He received the Outstanding Service Award from GSA in October 2005. Dr. Paradise has developed a program with the College of Architecture on historic preservation and also is the Assistant Director of Middle East Studies. Dr. Steve Boss continues as Director of Environmental Dynamics. He has begun a research project on Yellowstone Lake to assess the interplay of various tectonic, volcanic, erosional, and lacustrine processes in the development of the shoreline. His course, “Earth System Science,” was designated an Exemplary Course by NASA-NOVA. Dr. Malcolm Cleaveland gave two invited presentations to the Arkansas Archeological Society. He also is an excellent recruiter for Sigma Xi within the Department. Dr. Van Brahana co-hosted HydroDays at Oklahoma State University in April 2005. He continues to develop the Savoy Experimental Watershed as a natural laboratory for hydrological research in a karst terrain. Dr. Phil Hays spent spring 2005 examining mercury contamination in Suriname and came back with numerous stories, including a harrowing encounter with local guerilla fighters. Dr. Konig continues to handle all the teaching assistants in the Department and oversees the laboratories for General Geology.
Student Award Recipients 2004-2005

GTU Outstanding Undergraduate
Dan Gabor Memorial Scholarship
Vernon Peppard Scholarship
Hugh D. Miser Memorial Award Outstanding Graduate Student
W. A. Tarr Award (Outstanding Senior in Geology)
Gamma Theta Epsilon
George W. Wagner Award for Excellence in Geochemistry
Outstanding Teaching Assistant
Robert Tucker Memorial Scholarship
Jackson Award for Excellence in Petrography
Raymond Keveren
Eric Gross
Dixie Androes
Dixie Androes
Olivia Odom
Raymond Keveren
Chris Hobza
Amiee Scheffer
Cristy Mofield
Dixie Androes

Student News

Dixie Androes (MS Geology) received a grant for her research from the AAPG. She has accepted a teaching position at Northwest Arkansas Community College for spring 2006. Yarri Davis (MS Geology) and Kevin Morgan (MS Geology) were summer interns at SEECO in Houston, Texas and Newfield Exploration in Tulsa, Oklahoma, respectively. Kevin Morgan has accepted a full-time position at Newfield, which will commence upon completion of his thesis. Matt Wilson (MS Geology) interned with Samson Energy in Tulsa, Oklahoma. The ABAT (Arkoma Basin Analysis Team) participants this year were Alec Long (MS, Geology, 2005), Jamie Woolsey (MS, Geology), Matt Boyce (MS, Geology) and Cristy Mofield (BS, Geology). Liz Van Boskirk received a travel grant to attend the conference marking the 10th anniversary of the eruption of the Soufriere Hills volcano in Montserrat. Jason Felsmann (BS, Geology, 2005) entered the MS program in Geology at Boise State University in fall 2005. Kevin McVey (MS, Geology, 2005) is entering a doctoral program at the University of Nebraska.

During the summers of 2004 and 2005, the Department hosted undergraduates from across the country as part of a Research Experience for Undergraduates funded by the National Science Foundation. The students engaged in research under the supervision of a faculty mentor. The students, their home institutions, and faculty mentors are listed below.

2005: Adrian Baldwin, UA-Pine Bluff, Dr. Glen Mattioli
2005: Sara Stamps, University of Memphis, Dr. Pamela Jansma
2005: Adam Cosentino, Augustana College, Dr. Jackson Cothren
2005: Julia Danz, Beloit College, Dr. Jason Tullis
2005: Margaret Doheny-Skubic, Carleton College, Dr. Van Brahana
2005: Vanessa Heil-Chapdelaine, Washington University (St. Louis), Dr. Steve Boss
2005: Jonathon Killingbeck, Central Washington University, Dr. Van Brahana
2005: Eva Szilvagyi, Beloit College, Dr. Van Brahana
2004: Julie Parra, Cal Poly Pomona, Dr. Glen Mattioli
2004: Beth Blessing, Michigan Tech University, Dr. Pamela Jansma
2004: Valerie Feller, Indiana University, Dr. Margaret Guccione
2004: Jason Foster, Colby College, Dr. Van Brahana
2004: Teresa Maria Garcia, University of Florida, Dr. Steve Boss
2004: Jason McIlwain, Mississippi State University, Dr. Van Brahana
2004: Camille Partin, St. Lawrence University, Dr. Margaret Guccione
2004: Christopher J. Russoniello, Colby College, Dr. Van Brahana

Alumni News

We need help. Please send your information to pjansma@uark.edu or fill in the form at the end of this newsletter.

Mr. John Williams (MS, Geology) received the Distinguished Alumni Award from Fulbright College of Arts and Sciences in 2004 for his contribution and service to the Department over the years. We truly appreciate everything that John has done for us.
Departmental Contact Information
(telephone numbers are (479) 575-3355):

- **GEOSCIENCES DEPARTMENTAL OFFICE**: 3355
  Teresa Center: tcenter@uark.edu
  Lisa Frye: lfrye@uark.edu
- **ENVIRONMENTAL DYNAMICS**: 6603

- Steve Boss: sboss@uark.edu; 7134
- Van Brahana: brahana@uark.edu; 2570
- Malcolm Cleaveland: mcleavel@uark.edu; 4876
- Jack Cothren: jcothren@uark.edu; 6790
- Ralph Davis: ralphd@uark.edu; 4515
- Fiona Davidson: fdavidso@uark.edu; 3879
- John Dixon: jcdixon@uark.edu; 5808
- Tom Graff: tgraff@uark.edu; 3878
- Peggy Guccione: guccione@uark.edu; 3354
- Phil Hays: pdhays@usgs.gov; 7343
- John Hehr: jghehr@uark.edu; 3684
- Pamela Jansma: priansma@uark.edu; 4748
- Ron Konig: rkonig@uark.edu; 3411
- Fred Limp: fred@cast.uark.edu; 7909
- Walt Manger: wmanger@uark.edu; 3370
- Glen Mattioli: mattioli@uark.edu; 7295
- Tom Paradise: paradise@uark.edu; 4359
- Dave Stahle: dstahle@uark.edu; 3703
- Ken Steele: ksteele@uark.edu; 7937
- Jason Tullis:jtullis@cast.uark.edu; 4770
- Doy Zachry: dzachry@uark.edu; 2785

Graduate Degrees Conferred 2004-2005

**MA (Geography)**
Adcock, David, "Shelter from the Storm: A Perception Analysis of Tornado Storm Shelter Need and Accessibility in Oklahoma"
Alalili, Abdulla Alshaer, "Perception Assessment of the Effects of the Non-Citizen Population on the Social Structure of UAE Families"
Frus, Michael, "Earthquake Hazards and Earthquake Risk Perception in Agadir, Morocco"
Harjo, Laura, "The Use of GIS in Determining Markets for Indian Gaming"
Passe-Smith, Mary Sue, "Utilizing Geographic Information Systems to Analyze the Distribution of Arkansas Tornadoes, 1950-2000"
Phillips-Masterson, Crystal, “A Resurvey of Township 16 North, Range 30 West, Section line 14/15 in Fayetteville, Arkansas”

**MS (Geology)**
Doerr, Erica “The Silica Source for Mississippian Chert and Its Possible Elemental Signature in Northern Arkansas and Southwestern Missouri”
Fitzgerald, Timothy, “Response of Mississippian River Tributaries to Wisconsin Glaciation and Deglaciation, Lower Mississippian Valley, Northern Mississippi and Northeastern Louisiana”
McVey, Kevin, “Pleistocene and Early Holocene Aggradation of Mississippi River Tributaries within the Eastern and Western Lowlands of the Lower Mississippi Valley”
Price, Adam, “Late Mississippian Tectonism on the Cratonic Margin of Northwest Arkansas: A Stratigraphic Response to Syndepositional Faulting”
Scheffer, Aimee “Depositional History of the Floodplain in the Vicinity of the Confluence of the Mississippi and Missouri Rivers, Missouri”
**Donor Honor Role**

A heartfelt thank-you goes out to each person on this list. You make our lives in Geosciences easier and better and allow for the students to do great things.

Mr. and Mrs. Arlen D. Poole
Dr. Margaret J. Guccione
Mr. and Mrs. Sheridan Conley
Mr. Thomas C. Sullivan
Dr. Doy Zachry
Mr. and Mrs. John C. Goss
Mr. Terry Floyd
Mr. W. T. Head
Lieutenant Colonel Jim Cochran
Mr. Wayne Van Buren
Mr. William Winkelman
Mr. William W. Stevens, Jr.
Mr. Harold D. and Mrs. Carol Ewald
Mr. Earnest K. Montgomery
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Mr. Charles R. Price, Jr.
Mr. Jeffrey Robert and Mrs. Janice Marsh
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Mr. Rodney M. Robinson
Mr. G. Hoyt and Mrs. Sandra M. Wagner
Mr. Gregory P. and Mrs. Rhonda T. Stanton
Mr. Edward A. Leding
Mr. Ken Fritsche
Mr. David L. and Mrs. Rosa M. Churchwell
Dr. Lisa K. Meeks
Mr. Louis Lambiote
Ms. Susan McConnell

**Colloquium Speakers**

This year marks the first one where Geosciences Colloquium will integrate Geography, Geology, and Environmental Dynamics. Talks will still be on Friday afternoons at 3:30 pm in Ozark 25. All are welcome. Here is the list of speakers for Fall, 2005.

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>August 22</td>
<td>Orientation</td>
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<tr>
<td>September 2</td>
<td>Dr. Robert Smalley, Center for Earthquake Information and Research, University of Memphis</td>
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<tr>
<td>September 9</td>
<td>Dr. Edith Wilson, Samson Energy</td>
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<tr>
<td>September 16</td>
<td>Jan Dixon, University Libraries, University of Arkansas</td>
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<tr>
<td>September 23</td>
<td>Dr. Cary Mock, University of South Carolina</td>
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<tr>
<td>September 30</td>
<td>Dr. Rollinson, Southwest Missouri State</td>
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<tr>
<td>October 7</td>
<td>Dr. Albert Hines, Ocean Drilling Program Distinguished Lecturer</td>
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<tr>
<td>October 14</td>
<td>Student presentations</td>
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<tr>
<td>October 21</td>
<td>Student presentations</td>
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<tr>
<td>October 28</td>
<td>Dr. Hugh Mills, Tennessee Technological University</td>
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<tr>
<td>November 4</td>
<td>Dr. Eric Calais, Purdue University</td>
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<tr>
<td>November 11</td>
<td>Dr. Stadler, Oklahoma State University</td>
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<td>November 18</td>
<td>Dr. Pamela Hallock Muller, Association of Women Geoscientists Distinguished Lecturer</td>
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<tr>
<td>November 25</td>
<td>Thanksgiving</td>
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<tr>
<td>December 2</td>
<td>Student presentations</td>
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Amount ____________________
This gift is for Geography Geology Geosciences (circle one) Checks should be made payable to:
This gift is in honor or memory of: ______________________ University of Arkansas Foundation
This gift will be matched by: __________________________
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  Field Trips and Vans 113 Ozark Hall
  Colloquium University of Arkansas
  Unrestricted Fayetteville, AR 72701

ATTENTION ALUMNI:

By completing and mailing in this form, you can help us do a better job of keeping up with you, your whereabouts, and your career or family news. We all enjoy reading about classmates who survived Fayetteville in whatever era. Mail To: Geoscience News, Department of Geosciences, 113 Ozark Hall, University of Arkansas, Fayetteville, AR 72701 or email to: pjansma@uark.edu.

Name ___________________________________________ email: ______________________ Date ____________________
Address ____________________________________________________________________________________________
Degree(s) (years and institutions) _______________________________________________________________________
Current Position/Employer _____________________________________________________________________________
News About Yourself/Family/Friends ___________________________________________________________________
__________________________________________________________________________________________________
__________________________________________________________________________________________________

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