



## Chair's Message

Dear alumni and friends:

Greetings! The spring semester is well underway and our faculty and staff are gearing up for an active season of class field trips, field research, professional meetings and other departmental events. It has been an exciting year thus far; especially for me as the new Chair. As I look back to August, I am impressed by the success and enthusiasm of our students and the hard work of our faculty and staff. As you will see below, we have much to be proud of.

First, we had a very successful open house event in October that showcased student and faculty research as well as upgrades to our public displays in DeLoach. As part of a departmental "face-lift" we have implemented themes (e.g. Hall of Students, Hall of Maps etc.). If you are on campus, please stop by to let us know what you think. You may also want to take a look at our new "Focus on Faculty" board that highlights the research and interests of one of our faculty members each month. The event also included our first departmental photo contest with submissions from students, faculty and staff. Following an on-line voting process, the winners were announced at the open house and the winning photographs were included in our first Department of Geography and Geology calendar (2009). Calendars were on sale in November and December with proceeds going to the G&G student scholarship fund. Based on the response (we sold out!), we plan to make this an annual fund raising activity – so please consider purchasing a calendar next year!

Our Randall-Zullo seminar series continues to host many great speakers and we have a full schedule for the spring including Dr. David Fastovsky (University of Rhode Island, Department of Geosciences) who will be giving two seminars in April as this year's Victor Zullo Speaker. The first will be a public lecture on Earth Day, April 22<sup>nd</sup> at 7PM and is entitled "Catastrophic extinction of non-bird dinosaurs at the Cretaceous Tertiary boundary, 65 million years ago". The second research seminar will be at 2PM on April 23<sup>rd</sup> and is entitled: "The Day After (the Cretaceous-Tertiary asteroid): apocalypse or silent spring?" I invite all alumni or friends to attend one or both of these seminars as well as any of the others on the schedule. Please review the seminar schedule (<http://www.uncw.edu/earsce/about-events.htm>) and mark your calendars.

For those of you who don't know, the Rock Lab underwent some substantial renovations last semester. The floor was replaced, some leaks fixed, and power issues resolved (in addition to other cosmetic changes). The facility really

looks great – so if you would like to see it, please contact Dr. Blake or me so we can arrange a visit.

We also received a generous gift from Dr. Richard Desjardins who is a new friend to the Department. Dr. Desjardins facilitated the donation of a faceting machine to the Department in honor of Mrs. Carol Rabon and in memory of her husband, Robert. He has also graciously agreed to train our faculty and students in its use. This is a welcomed addition to the department – Thank-you again Dr. Desjardins.

As many of you know, student research is a key component of our curriculum and the department supports these activities through extramural grants awarded to its faculty and through student research grants and scholarships. Last year alone, our faculty received more than \$2.7 million in grants which supported student research at both the graduate and undergraduate levels. These funds have been integral to maintaining the quality of our programs in the face of tight budgets and reductions in operating funds. Our efforts have been aided significantly by the receipt of gifts from alumni and friends that support student research, student scholarships, and field experiences. I appreciate your continued support and encourage you to visit our department website (<http://www.uncw.edu/earsce/>) on a regular basis to see what is happening.

I would like to encourage alumni and friends to attend one of our upcoming events to join us as we say good-bye to two faculty members this spring. Dr. Bob Argenbright will be leaving UNCW to take a position at the University of Utah and Dr. Craig Tobias will be leaving to join the Department of Marine Sciences at the University of Connecticut. We wish both of them the best of luck at their new institutions. Also, stay posted for information about Dr. Bill Cleary who will be retiring next year after many distinguished years of service. Well-wishes can be sent through the department – just call or email!

In closing, I encourage you to keep in touch! We have created a Geography & Geology Facebook group we welcome you to join to reconnect with classmates and faculty. Please email Cathy Morris ([morris@uncw.edu](mailto:morris@uncw.edu)) with news and contact information...or stop in. We would love to see you.

Warmest Regards,

Lynn Leonard  
Professor and Chair

## Faculty News

**Dr. Robert Argenbright** organized and participated in the roundtable, "New Public Spaces in St. Petersburg and Moscow," for the National Convention of the American Association for the Advancement of Slavic Studies, 22 November, 2008 in Philadelphia.

**Dr. Bill Harris** recently received funding for two projects: Sr Isotopic Dating of North Carolina Plio-Pleistocene from the N.C. Department of Environment and Natural Resources, \$5000; and Glauconite Dates of the Rupelian-Chattian Boundary in Belgium, a UNCW Cahill Award, \$2700. Dr. Harris also presented "A Comparison of Glauconite K-Ar Dates and  $87\text{Sr}/86\text{Sr}$  Dates from Rupelian and Chattian Strata, Campine Area, Belgium" at the 33<sup>rd</sup> International Geological Congress in Oslo, Norway,

**Dr. Dave Blake** was funded \$11,000 by NC DENR for "Geologic Mapping of the Northwestern Portion of the Stem 7.5 Minute Quadrangle."

**Dr. Doug Gamble** received \$23,573 from the National Science Foundation for "Collaborative Research and RUI: Physical Mechanisms Behind the Caribbean Mid-summer Drought."

**Dr. Eric Henry** and his co-authors from McMaster University had the article "On the importance of hysteresis in numerical modeling of surfactant-induced unsaturated flow" accepted for publication in *Soil and Sediment Contamination: An International Journal*. It will be published in 2009.

**Dr. Patricia Kelley** received a Discere Aude Award; these are given each year by Chancellor DePaolo for outstanding efforts in student mentoring. Students on the Chancellor's List are asked to nominate faculty who have made a significant impact on their development at UNCW. These nominations are then forwarded to CTE which administers these recognitions. She was also the recipient of 2 grants: National Science Foundation, "REU Site: Research Experiences for Undergraduates in Biodiversity Conservation," (with co-investigators **Dr. Richard Laws**, **Dr. Bill Harris**, Troy Alphin, Angelia Reid Griffin, Martin Posey, Craig Tobias, and Jack Hall)-- \$359,997, 2008-2011 -- 9 students from across the US (CA -- Puerto Rico) here for 8 weeks and National Geographic Society, "Latitudinal variation in drilling predation of South American Mollusks: Spatial implications for patterns of evolution in the fossil record," -- \$17,500, 2009 (field work in Brazil, Uruguay, Argentina).

**Dr. Lynn Leonard** received \$1.14M from NOAA for the project "Integration of Coastal Observations and Assets in the Carolinas in support of RCOOS Development in SECOORA. She also received \$59,514 from UNCW SeaGrant for the project: Key parameters for assessing beach functionality (with Drs. L. Cahoon --PI, and T. Lankford, M. Posey, and T. Alphin) as well as \$57,678 from USACE/Elizabeth City State for the project "Service, Maintain and Calibrate remote data collection platforms in swamps and channels of the Cape Fear Basin."

**Dr. Liz Hines** continues to serve as a board member of the African American Heritage Foundation and to volunteer with

the group. She also continues to be involved with No Boundaries International Artist Colony and recently became a board member

**Mr. Roger Shew** received the UNCW 2008 Lecturer of the Year award. He also is a recipient of the Robert H. Dott, Sr., Memorial Award from the American Association of Petroleum Geologists in recognition of the publication "Atlas of Deep Water Outcrops."

**Dr. Lew Abrams** recently returned from a research cruise in the equatorial Pacific Ocean between Costa Rica and Hawaii on the R/V Knorr. Undergraduate Jerry O'Conner also participated.

## Student News

Undergraduate students **Christy Hairr** and **Sean McGwire** were each awarded \$500 travel grants by CSURF for presentations at the SEGSA meeting in St. Petersburg.

Undergrad student **Brandon Fetter** was awarded a \$1000 travel grant by CSURF to present his DIS research at the SEGSA meeting in St. Petersburg. The title is "Using soil moisture probes to monitor solute transport in one dimensional soil columns." His faculty advisor is Eric Henry.

Fall 2008 graduate **Jehan Mashaly** (BA GLY) did an internship with DENR during the Fall 2008 semester.

**Carla Gray** is the current holder of the Dr. Melanie Crandall Scholarship in Geography & Geology. She also holds an Undergraduate Research Fellowship from CSURF and received a Student Research Grant from GAG. Carla is completing her honors thesis this semester on the topic of using buried soils as stratigraphic marker horizons in the Cape Fear River floodplain. Last October she presented her results to the NC Undergraduate Research and Creativity Symposium at Appalachian State University, and she is presenting a poster at the March 2009 southeastern sectional meeting of the Geological Society of America. She is planning to enter graduate studies in geology or education next fall.

**Greg Burzynski** received a Paleontological Society Grant-in-Aid to support his thesis research. Greg and **Stephanie White** also received research grants from the UNCW Graduate School.

North Carolina Geographic Information Systems Conference, G. Herbert Stout Student Award Competition: **Holly Gabries**, masters in Marine Science and **David P. Johnson**, Geography Program.

## Alumni News

**Luke Davis**, MS, 2006 is working as a Geologist with Kimley-Horn and Associates, Inc. in Jacksonville, FL.

**Devon (Olivola) Eulie**, MS, 2008 is in the Coastal Resources Management PhD program at East Carolina University.

**Kim (Nelson) Hall**, MS, 2002 is married and the proud mother of 2 in Ruskin, FL.

**John Huntley**, MS, 2003 is teaching at the University of Kentucky.

**Jessica Pierson**, MS, 2003, is working on the PhD at West Virginia University and is engaged to be married.

**Tina Roberts**, MS 2002, is working on the PhD at the University of South Florida and is expecting her second child.

**Lee Phillips**, MS 1996, received his Ph.D. and is an assistant professor of geology at UNC Pembroke.

**Jim Quinn** is a Senior Engineering Specialist for Storm Water Services with the City of Wilmington, NC.

**Rene Shroat-Lewis**, MS, 2007 continues in the PhD program at the University of Tennessee Knoxville.

**Brad Worley**, MS 1995, **Chris Pruneau**, MS 1983, and **Gary Rogers**, MS 1983, recently spoke to undergraduate and graduate students as part of an AEG special seminar related to careers in geology. The title was "Perspectives from the Working World - Earning a Living as a Geologist."

**Leighann Budde**, MS 2008, is a coastal geologist in Melbourne, Florida.

**Courtney Hanby Schaneville**, MS, 2005, lives in Lafayette, Louisiana and works for the National Wetlands Research Center. She is married to Kenny Schaneville.

**Jesse Baldwin**, MS 2008, is working as a geologist and geophysicist at Ocean Survey, Inc. in Old Saybrook, CT.

**Sara Althof**, MS 2007, is employed as an environmental scientist in Houston, Texas. She is engaged to Steve Mondziel.

**Steve Mondziel**, MS 2007 is employed as a production geologist at Hess Corporation in Houston, TX.

**Amanda Williams**, MS 2008, is a Marine Science GIS Analyst for Khaled bin Sultan Living Oceans Foundation.

**Brett McLaurin**, MS 1995, is an Assistant Professor of Geography and Geosciences at Bloomsburg University of Pennsylvania

**Maverick Raber**, MS 2002, is currently employed by the State of North Carolina as an environmental specialist.

**Shelly Miller Baird**, MS 2002, is employed by the NC DENR Division of Soil & Water Conservation as a Community Conservation Assistance Program (CCAP) Coordinator. Shelly lives in Raleigh and is married to Kevin Baird.

**Megan Hearne**, MS 2004, is a Geologist with Ninyo & Moore Geotechnical and Environmental Consultants in San Diego, CA.

**David Parnell**, BA 2004, is finishing up his master's degree at UNCW and is working as a geologist for Baker Hughes INTEQ in Houston, Texas.

**Matt Ball**, BA 2008, is a field crew leader for the Montana Conservation Corps.

**Leigh Hedgepeth**, BA 2008, will be attending the Merchant Marine Academy for Basic Officer Training Class for the NOAA Commissioned Officer Corps. After graduating in August she will start a three year ship assignment on a NOAA hydrography, oceanography, or fisheries ship where she will steer the ship, participate in research missions, and run her own research missions both underwater or on the land.

**Alex Croft**, MS 2003, works as a Realtor/Broker for Coldwell Banker Sea coast Realty.

**David Doughty**, MS 2006, is a managing principal at Piedmont Capital Lending.

**Michelle McCoy Friedman**, MS 2007, is a staff geologist at ENSR.

**Cj Jackson**, MS 2004, is working on his Ph.D. in coastal geology at the University of Georgia.

**Jeff Marshall**, MS 2004, is a research specialist/project manager for Coastal Carolina University.

**Pamela Medley**, MS 2008, works as a professional research scientist at the University of Colorado – affiliate of NOAA in Boulder, CO.

**Amy Gross**, MS 2006, is a lecturer in geology at UNC Pembroke.

**Lori Boettcher Saal**, MS 2005, is working at NC State University.

## Recent Articles

Allmon, W. A. and **Harris, W. B.**, 2008, A new species of Turritelline gastropod from a Turritelline-dominated limestone in the Paleocene of North Carolina: *Journal of Paleontology*, v. 82, p. 442-446.

**Argenbright, R.** (2008), *Avtomobilshchina: Driven to the Brink in Moscow*, *Urban Geography*, 29 (7): 683-704.

**Blake, D. B.**, 2008, Geologic map of the Raleigh West 7.5-Minute Quadrangle, Wake County, North Carolina: North Carolina Geological Survey Geologic Map Series 15, 1 plate with explanation.

Davis, L.A., **Leonard, L.A.**, and Snedden, G.A. (2008) Hydrography and bottom boundary layer dynamics: Influence on inner shelf sediment mobility, Long Bay, NC. *Southeastern Geology* 45(3): 97-110.

**Halls, Joanne N.**, (2008) Measuring Habitat Changes in Barrier Island Marshes: An Example from Southeastern North Carolina, USA. In, *Remote Sensing and Geospatial Technologies for Coastal Ecosystem Assessment and*

Management, edited by Xiaojan Yang. Springer-Verlag Lecture Notes in Geoinformation and Cartography. Pp. 391-414.

Hornbach, M.J., Mondziel, S.A., **Grindlay, N.R.**, Frolich, C., and Mann, P., 2008, Did a submarine slide trigger the 1918 Puerto Rico tsunami? *Science of Tsunami Hazards*, 27, 22-31.

**Kelley, P.H.** 2008. Role of bioerosion in taphonomy: effect of predatory drillholes on preservation of mollusc shells, p. 451-470. In Tapanila, L., and M. Wisshak (eds), *Current Developments in Bioerosion*. Springer.

**Kelley, P.H.**, 2008. The View from the Top: A Century of PS Presidents' Perspectives on the Paleontological Society and Paleontology, p. 1-15. In Kelley, P.H., and R.K. Bambach (eds), *From Evolution to Geobiology: Paleontology at the Start of a New Century*. Paleontological Society Papers.

**Kelley, P.H.**, 2009. Stephen Jay Gould's Winnowing Fork: Science, Religion, and Creationism, p. 171-188. In Allmon, W.D., P.H. Kelley, and R.D. Ross (eds), *Stephen Jay Gould: Reflections on His view of Life*. Oxford University Press.

**Kelley, P.H.**, 2009. Teaching Evolution During the Week and Bible Study on Sunday: Perspectives on Science, Religion, and Intelligent Design, P. 163-179. In Schneiderman, J.S., and W.D. Allmon (eds), *For the Rock Record: Geologists On Intelligent Design Creationism*. University of California Press.

Rauscher, S.A., Pal, J.S., Diffenbaugh, N.S., and **Benedetti, M.M.**, 2008. Future changes in runoff timing over the western United States. *Geophysical Research Letters* 35: L16703, doi:10.1029/2008GL034424. (This paper received some press attention including an online feature in *Science Daily* and a story in the *San Francisco Chronicle*).

**Shew, R. D.**, 2008, Channel architectures and associated facies in the Brushy Canyon and Cherry Canyon formations, Guadalupe Mountains Area, West Texas, USA, *AAPG Special Studies in Geology #56*, Paper 112, pp. 475 – 484.

**Shew, R. D.**, 2008, Deep-water siliciclastic outcrops from the Brushy Canyon and Cherry Canyon Formations, West Texas: Summary and Locations, *AAPG Special Studies in Geology #56*, Paper 102, pp. 422 – 424.

**Shew, R. D.**, 2008, Sheet sandstones in a mid-fan setting: Codorniz Canyon, Brushy Canyon Formation, *AAPG Special Studies in Geology #56*, Paper 111, pp. 471 – 474.

**Shew, R. D.**, 2008, Sheet, thin bed, and channel architectures in the Tourelle Formation, Ste. Anne des Monts, Gaspé Peninsula, Canada, *AAPG Special Studies in Geology #56*, Paper 20, pp. 73 - 76.

**Shew, R. D.** and Tiller, G. M., 2008, The Cloridorme (basin plain) and St. Roch (channel and thin beds) Formations, Gaspé Peninsula, Canada, *AAPG Special Studies in Geology #56*, Paper 21, pp. 77 – 80.

Wren, P.A., Marshall, J.A., **Leonard, L.A.**, and Van der Linde, M. (2008). The effects of hardbottom geometry on sediment transport processes on the mid-continental shelf in Onslow Bay, North Carolina. *Southeastern Geology* 45(3):111-126.

## **Upcoming Events!**

The Department of Geography and Geology is hosting an AAG (Association of American Geographers) workshop devoted to strengthening academic departments on July 10-11, 2009. The workshop will highlight three themes: research results and recommendations of the AAG's Enhancing Departments and Graduate Education in Geography (EDGE) project, the challenges posed by a stressed economy, and a special track addressing the needs of hybrid departments. **Doug Gamble** is the UNCW liaison for this event.

UNCW will host the 2011 SE section meeting of the Geological Society of America in Wilmington. **Richard Laws** is the general meeting chair, **Bill Harris** is the technical program chair, **Tricia Kelley** is the student volunteer chair, **Frank Ainsley** is the guest activities chair, and **John Huntsman** is the exhibits chair. **Kenneth Taylor**, chief geologist with the NC Geologic Survey, is the field trip chair.

### **April**

- 22<sup>nd</sup> Earth Day, Dr. Fastovsky Public Lecture – “Catastrophic extinction of non-bird dinosaurs at the Cretaceous Tertiary boundary, 65 million years ago”
- 23<sup>rd</sup> Dr. Fastovsky, Seminar – “The Day After (the Cretaceous-Tertiary asteroid): apocalypse or silent spring?”
- 28<sup>th</sup> Geography and Geology Department Awards Ceremony (1 PM)

### **May**

- 9<sup>th</sup> UNCW Commencement – Department reception in Lobby of DeLoach Hall

Please regularly check our website for other events!!!!