IN MEMORIAM - DR. RICHARD R. ALEXANDER

This issue of Surf and Turf is dedicated to the memory and career of Dr. Richard R. Alexander, former chair of GEMS and assistant dean of science. Alex, as he was known by most everyone on campus, died tragically on December 11, 2006 while vacationing with his wife, Jeannie, in St. Lucia.

Alex was the consummate professor – innovative and demanding, yet always dedicated and accessible to his students. Alex also was one of the most prolific researchers in Rider’s history and was the author of more than 100 published papers, presentations or abstracts at regional, national, and international meetings. However, he took special pride in student research and during his 25 years at Rider, Alex sponsored dozens of independent research projects, mentored numerous students, co-authored scientific papers published in international journals with many of them, and helped launch a wide variety of successful scientific careers.

Alex received his B.S. in geology from the University of Cincinnati and his doctorate from Indiana University in 1972. His Ph.D. dissertation focused on the correlation of shape and growth changes in clams and sand dollars from Pliocene sands in California. After teaching at Utah State University, Alex began his long and distinguished career at Rider in 1981 as an associate professor in the Department of Geosciences. He rose to the rank of professor in 1986, and served as department chair from 1983 to 1991 and again from 1993 until his death. He was named assistant dean of Science in the College of Liberal Arts, Education, and Sciences in 1997 and served in that position until the start of the 2006 fall semester.

Alex’s research interests focused on the functional morphology of, and substrate influence on, the shape, distribution, and behavior of brachiopods, clams, and echinoids. In recognition of his tremendous influence on not only his students, but on many other researchers in the scientific community, the Geological Society of America is sponsoring an all-day symposium in Alex’s honor at the October annual meeting in Denver.

Alex also was instrumental in creating field courses for Rider at the Bermuda Biological Studies for Research, Shoals Marine Lab off the coast of Maine, and the Roatan Institute for Marine Sciences in Honduras. Just prior to his death, he was appointed to the Board of Directors of the Natural Resource Education Foundation of New Jersey, an educational consortium that operates the Lighthouse Education Center on Barnegat Bay, a marine field station where Rider maintains facilities.

On January 26, 2007 a memorial service, attended by several hundred friends, colleagues, students, alumni, and family, was held for Alex in Gill Chapel.
At the service, Alex’s son, Curt, remembered his father as “…always there, always giving more of himself to his family. He helped guide us through the many challenges of life.” Dr. Joseph Nadeau, Dean of the College of Liberal Arts, Education, and Sciences, recollected, “always being very impressed and a bit envious of Alex’s teaching skills.” And Dr. Greg Dietl ’95, a former student of Alex’s and now the director of collections of the Paleontological Research Institution, Museum of the Earth, Cornell University, movingly said, “I think it is fair to say that I would not be where I am today without Alex. His influence on me was integral to the development of the person I have become. He helped make my childhood ambition to become a scientist a reality.”

On June 16, 2007, Alex was inducted into the Rider University Science Stairway of Fame. His tireless work ethic during his tenure at Rider was exceeded only by his desire to acknowledge the same such efforts of Rider alumni by creating the Marine Aquarium Laboratory on the first floor of the Rider University Science and Technology Center. Checks may be made payable to Rider University, c/o The Development Office, Rider University, 2083 Lawrenceville Road, Lawrenceville, NJ 08648. There should be a notation that the check is for the Dr. Alexander Marine Aquarium Laboratory. To date, over $15,000 has been raised.

Perhaps Dr. Mordechai Rozanski, president of Rider University, said it best at Alex’s memorial service. “Our community feels a deep sense of loss by Alex’s passing. Colleague, teacher, scholar, leader, student mentor, and friend; he was all these things and much, much more. He inspired us profoundly and he will be greatly missed.”

Not bad for someone who often remarked that the best thing about studying clams is that after you’re done with the research you can eat your data!

DEPARTMENTAL NEWS

Congratulations to Dr. Reed Schwimmer and Dr. Gabriela Smalley on their promotions this year. Dr. Schwimmer is now an associate professor with tenure and Dr. Smalley was promoted to assistant professor II.

Beginning this past summer and ending (hopefully!) next summer, three of our classrooms on the first floor will be renovated by installing new floors, ceilings, light fixtures, desks and other items. Most significantly, the Richard R. Alexander Marine Aquarium Laboratory will be relocated to the first floor, making it more accessible for our students and making it a focal point for people as they walk through the building.

Congratulations to Dr. Kathy Browne who was promoted to Assistant Provost. With Kathy’s office still in the Teaching and Learning Center, she now gets to do
the work of two positions! Well, it’s always nice to know you’re needed.

NEW GEOGRAPHIC INFORMATION SYSTEM (GIS) COURSE TO BE OFFERED

The department will offer a GIS course for the first time in the spring 2008 semester. This three-credit course, ENV-201: Introduction to Geographic Information Systems, will introduce students to various methods of creating, managing, visualizing, and analyzing spatial data using the software ArcGIS. Experience with GIS has become a valuable prerequisite for employment with private companies and public agencies, and this course will allow students to effectively compete for job opportunities. Besides our majors, business and liberal arts students can also benefit from GIS experience as this software is also widely used in non-science fields as well.

STUDENT ACADEMIC ACCOMPLISHMENTS

The Geological Society of America (GSA) will hold its annual meeting in Denver this fall (October 27 to 31). This annual meeting is a showcase of the current research in the geological, environmental, oceanographic, meteorological, and atmospheric fields. All our majors, particularly those who plan to go on to graduate school, are encouraged to attend.

**Tim Swavely** (’07), **Heather Warren** (’07), and **Ken Kacperowski** (’06) are co-authors with **Dr. Schwimmer** on a combined project entitled, **Relationships among grain size, infiltration rate, and foreshore slope on New Jersey beaches**. Additionally, **Dr. Schwimmer** is co-author on a second paper with **Dr. Kathy Browne**, and Laurel Goodell and Danielle Schmitt (Adjunct Instructor of Oceanography, FA07) of Princeton University, focusing on bringing science content to K-12 teachers, **Want coherency in your professional development and classrooms? Consider the CONNECT-ED model: Focusing K-12 teachers on big ideas in science and mathematics.** Both project will be presented at the GSA meeting this fall.

**Kelli Lucarino** (’07) will present her thesis project, **Changes of Salt Levels Responding to Road Salt Application in Winter Runoff Water and the Trend of Salt Level in the Delaware River**, advised by **Dr. Hongbing Sun** at the GSA meeting.

**Matthew Nelson** (’08), and co-authors **Dr. Hongbing Sun**, **Dr. Feng Chen**, and **Dr. Jonathan Husch**, also will present his study, **Effect of Structural Water in Clay Minerals on the Estimation of Soil Organic Matter Content by the LOI Analytical Method** at GSA. Matt also is a co-author on a manuscript of the project submitted to **Soil Science Society of America Journal** in the summer.

**Carey Sliko** (’08), **Alison Golinski** (’06), and **Susan Zabrocky** (’09) co-authored a poster with **Dr. Gabriela Smalley**, **Phosphate stress in two strains of the mixotrophic dinoflagellate Prorocentrum minimum determined using a single-cell alkaline phosphatase assay (ELF 97)**. The poster was presented at the joint meeting of the Phycological Society of America and the International Society of Protistologists this August in Warwick, Rhode Island.


Midnight in Reykjavik, the capital of Iceland, and the sky was still a dusky dark blue with only the Moon and the brightest stars visible. Off to the north across the bay, the sky brightened and the pinks and oranges of sunset (or was it sunrise?) were still present above the horizon. And it was cold, at least for late spring, with temperatures in the low forties and a stiff north wind making it seem even colder. But for everyone on the CBA-316: Nature’s Business: Iceland trip there was nowhere else they wanted to be. Because everyone knew they were experiencing something
really different, something truly unique, something very special.

Fifteen students from Rider and other colleges, along with five Rider faculty,

traveled for eight days throughout much of southern Iceland this past May (see photo), learning first hand about the country’s history, culture, geography, geology, environment, climate, biodiversity, economy, and high-tech and ecotourism industries. In addition to lots of reading and fact finding about Iceland prior to traveling, each student in the course kept a detailed journal during the trip and wrote a research paper on a faculty-approved topic of his/her choice after returning to Rider. Team-taught by Dr. Susan Denbo, Professor of Business Policy and Environment, Dr. Cynthia Newman, Associate Professor of Marketing, Dr. Jonathan Husch, GEMS Chair and Professor of Geological and Environmental Sciences, and Dr. Julie Drawbridge, Chair and Professor of Biology, the trip was the culminating experience of the semester-long course sponsored by the College of Business Administration.

The journey started with an overnight flight to Keflavik, where the country’s only international airport is located, followed by a short bus ride to Grindavik, a small fishing town on the southwest coast, and the Blue Lagoon geothermal pool (fans of the Amazing Race television show may remember it), where the steaming hot waters and silica-rich mud helped wash away jet lag. In the afternoon, Helge, intrepid and slyly funny bus driver and guide, drove the group to Reykjavik (see photo), where they spent the next three days visiting various museums, tourist sights, and local businesses.

The latter included deCODE, a biopharmaceutical company that is using its huge genetic database of the Icelandic population for developing new drugs and disease therapies; CAOZ, a small, but highly innovative, computer animation studio; Spurl, the developer of an internet search engine that understands the Icelandic language; and Isafold Travel, the group’s tour company that specialize in smaller, ecotourism-based trips. Everyone also attended a lecture on Icelandic history and culture at the National Museum, and a lecture on Icelandic geology at the University of Iceland. In addition to all those educational experiences, the group was treated to some absolutely amazing dinners at local restaurants.

By the end of their stay in Reykjavik, everyone was ready to head out and see the rest of the beautiful, but often desolate country. For the next three days, they traveled east towards Vatnajokull, the largest glacial ice cap in Europe, stopping at many geologic and scenic points of interest. These included Thingvellir,
where one can actually step inside the central rift of the Mid-Atlantic Ridge and see the process of plate tectonics and seafloor spreading up close and personal; Geysir, the nearby geothermal area where all geysers get their name; and Nesjavellir, a geothermal power station that provides Reykjavik with much of its electricity and heat (over 90 percent of Iceland’s energy is produced by renewable geothermal or hydroelectric sources). They also stopped at numerous and incredibly beautiful waterfalls, including Gullfoss (Golden Falls), Skogafoss, Seljalandsfoss, and Svartifoss (Black Falls). And everywhere were volcanoes and lava flows of all types - shield, composite, central, cinder cone, aa, and pahoehoe. After taking a fun, but very bumpy Icelandic pony ride, our intrepid travelers drove around Hekla, one of the most active volcanoes in the world and, according to Icelandic folklore, believed to be the gateway to hell. Fortunately (or unfortunately to some), the volcano, which last erupted in 2000, decided to behave while they were there. Oh well.

After crossing the vast glacial sand outwash plains of the south-central coast, the group arrived at the Hotel Skaftafell, located at the foot of the high peaks of the Oraefajokull and Vatnajokull glaciers. It was here that probably the most memorable event of the trip took place; walking hundreds of feet out onto the Svinafellsjokull glacier (see photo). Standing there in the blowing snow and ice (it was May 21!), listening to nothing but the wind and the groaning and creaking of the moving river of ice, was truly and awe-inspiring experience. And if that weren’t enough, the next day they drove to the Jokulsarlon lagoon (see photo), a glacially fed body of water filled with hundreds of icebergs that have calved off of the adjoining Breidamerkurjokull glacier. The boat ride on the lagoon amongst the bergs and seals, which rested and sunned

On the Svinafellsjokull glacier

themselves on the ice under a beautiful blue sky, was a great way to end the trip before they headed back to Reykjavik and the flight home.

Amongst the icebergs of Jokulsarlon

Once again, the course and trip were a great way to learn, travel, make new friends, and experience many new things. Unfortunately, the next Nature’s Business trip to the Galapagos Islands and Ecuador in January 2008 already is filled. However, if you’ve missed out on the chance to travel there or regret not having been part of the Icelandic experience, don’t despair, because a new course and trip are being planned for 2009, perhaps to Panama, Chile, or South Africa. Even if you don’t take the course for credit, you can still participate in the trip if space is available. Contact either Dr. Denbo
(denbo@rider.edu) or Dr. Husch (husch@rider.edu) this spring for more details. See you soon at someplace interesting, fun, and very educational!

**ALUMNI UPDATE**

A large number of GEMS alumni stopped by for a visit or contacted us this year with their latest news. If you haven’t done so recently, please feel free to bring us up to date with what is going on in your life and of those close to you. You can find much more alumni news, including specific contact information, on our alumni web page, located at http://www.rider.edu/172_1711.htm. As always, we look forward to hearing from you.

Doug Ruhlin '81 is an Environmental Consultant and owner for over 15 years of Resource Management Associates (RMA), Inc. in Forked River, New Jersey. RMA specializes in environmental and operational consulting. In addition, Doug is on the Board of Directors of the New Jersey Concrete and Aggregate Association, where he serves as Chair of the Environmental Committee. He’s also involved with the National Ready Mixed Concrete Association and the National Stone, Sand and Gravel Association. In addition, Doug develops and teaches training courses, dealing with regulatory compliance, water quality management, pollution prevention, environmental management, etc., for the concrete industry. Doug lives in Lanoka Harbor, NJ with his wife of 25 years and their three children.

Bill Edelman '82, after completing a Masters of Science degree in geophysics from North Carolina State University, joined Conoco (now ConocoPhillips) in Houston as an associate geophysicist where he was responsible for several offshore commercial oil/gas discoveries. When the oil slump hit in the 1980s, Bill took an environmental and regulatory compliance supervisory position with Conoco in their drilling and production office in New Orleans. After moving back to Conoco’s Houston office, Bill has been the Health, Safety, and Environment Manager and Company Security Officer for Marine Operations for the past ten years where he works with ConocoPhillips’ global fleet of oil tankers, tugs, barges, and other vessels. Bill and his wife have been married for 24 years and they have four sons.

Erik Bender '85 received his doctorate in 1994 from the University of Southern California where he completed a thesis entitled, "Petrology of Early Proterozoic plutons from southeastern California, western Arizona and southern Nevada: Implications for crustal growth of the southwestern United States." Dr. Bender (see photo) is now Professor of Geology and Chair of the Geology Department at Orange Coast College in Costa Mesa, California. In addition to teaching and running the department at OCC, Erik is teaching geology courses at Chapman University and California State University, Fullerton. Over the years, he also has taught geology courses at Chaffey College, Mount San Antonio College, Pasadena City College, and California State University, Long Beach. Erik and his wife, Linda, are the proud parents of three daughters, ages 5, 7, and 11.

Julian Master '85 is an Associate for the SMITHGROUP, Inc., an architectural, engineering, and interior planning design company in Washington, D.C. Julian has spent the past year working on a project involving a state-of-the-art ambulatory care facility for returning wounded soldiers in San Antonio, Texas.

Chuck Trione '85 is living in Arlington, Virginia and working for EarthTech, Inc.,
a global engineering, construction, and environmental consulting firm, in their Alexandria, VA office.

Robyn Epstein Katzenstein '86 is married, living and working in the Cleveland, Ohio area, and the mother of two children, Nikki, 10, and Michael, 7. Robyn received her masters' degree in geology, with a specialty in structures, from Bowling Green University. She then worked for five years for an environmental consulting firm, first in Dayton, Ohio and then Cleveland. Robyn then worked for a chemical manufacturer, selling soil and water immunoassay kits that tested for PCB, BTEX, and explosives. Currently, she is working for VWR International, a laboratory supplies distributor, as a Senior Sales Representative, handling most of the major accounts in the Cleveland area.

Carl Scharpf '88 moved to Jakarta, Indonesia where he is the Vice President for Exploration for the Marathon Indonesia Oil Company. Carl and his wife, Nhan, have two daughters, Anna and Sarah.

Jackie Frizano Beck '93 married Robert Beck in 2006 and they are living in Allentown, Pennsylvania. Congratulations! Jackie not only has her doctorate in environmental geology from the University of Pennsylvania, but also her Professional Geologist certification for the State of Pennsylvania. Congratulations again! Dr. Beck is working as a geologist for HDR, an environmental consulting firm in Allentown.

Marsha Hostetter Nix '93 and her husband, Bruce, recently relocated from Illinois to Little Rock, Arkansas when Bruce was presented with a job offer he couldn't refuse.

Kathy Keely Edmonds '93 is now a seventh grade science teacher at the Upper Middle School of the Montgomery Township School District.

Lauren Tyler '93 lives in St. Petersburg, Florida and received her MBA, with a concentration in marketing, from the University of Tampa in 2002. Congratulations! After graduation, Lauren left her position in zoo education at Busch Gardens to work as an Environmental Communications Consultant in Gainesville. However, she missed the zoo and aquarium life so Lauren now is back at the Florida Aquarium as their Education Programs Manager where she develops and manages fee-based education programs.

Robert Jakubicki '94 purchased a well and pump company in Tucson, Arizona. In order to do so, he had to pass the Arizona State Business Exam, obtain his contractor's license, and become a member of the National Ground Water Association. Eventually, he would like to become a certified geologist as well. Rob also worked full-time as an aircraft mechanic for the Arizona Air National Guard.

Cindy Benkert Parmentier '95 married Tim Parmentier in December 2006. Congratulations! Cindy now is the Development Director for the Palladium Theater, St. Petersburg, Florida.

Greg Dietl '95 and Joanne Gore Dietl '95 and their two children have moved to Ithaca, NY where Greg is the Director of Collections for the Paleontological Research Institution, Museum of the Earth, Cornell University. Greg also is assisting the department in ensuring that Alex's teaching and research shell collections are organized and preserved.

Dawn Chicano '96 is living in Vero Beach, Florida and teaching marine science at the Indian River Charter High School. Before that she worked as a biologist for the company, Oceans, Reef & Aquariums, at the Harbor Branch Oceanographic Institute, breeding and raising ornamental marine fish.
Michelle Pelc '96 has been working for Baxter Healthcare in Cherry Hill, New Jersey for the past five years as a Scientist in the Technical Services Department. She recently bought her first house in West Deptford where she lives with her three "children," a dog, Brody, and two cats, Quint and Hooper (yes, all three are named after characters in the movie Jaws). Michelle also volunteers a couple of weekends a month as a science interpreter at the Franklin Institute in Philadelphia.

Jessica Stephen '96 is working for the South Carolina Department of Natural Resources as a fisheries ecologist. While working full-time, she simultaneously is pursuing her Ph.D. in marine science. Jessica’s current work investigates the effects of commercial fishing pressure on the life histories of fish populations, with particular emphasis on the potential for evolutionary responses through fishing mortality.

Kerry Szemple Drennan '96 married Bill Drennan, a Bayonne, New Jersey fireman, in September 2006. Congratulations! They live in Bayonne where Kerry is a Geologist and Assistant Project Manager with AquaTek Environmental of Livingston, NJ. For their honeymoon Kerry and Bill spent three weeks backpacking through Europe.

Jodi Wendt McDonald '96 is now the Chief of the Rivers and Lakes Section, Planning Division, for the U.S. Army Corps of Engineers' New York District.

Louise Bolge '97 now is working as a Research Scientist for the Lamont Doherty Earth Observatory of Columbia University in Palisades, New York. She’s in charge of running their multicollector and single collector ICP-MS units, their laser ablation system, and the lab in which the instruments are housed. Louise says she is happily living in New Jersey again, although it is only north Jersey.

Matthew Greenberg '98 is working at CH2M Hill, an environmental consulting firm located in the Boston area. At the present time, Matt is involved on a contract with the Air Force Center for Engineering and Environment, performing a major clean up of an aquifer in the vicinity of a large military base on Cape Cod. CH2M Hill operates and maintains several groundwater treatment systems to remediate a number of contaminant plumes at the site. Matt married Grace Kim in October 2006, traveling to Hawaii for their honeymoon, with Volcano National Park being the highlight of the trip. Congratulations! Even though he has lived in the Boston area since 2001, Matt says he is still a Yankees fan.

Robert Baron '00 was promoted recently to Senior Marine Biologist at Coastal Planning & Engineering, Inc., Marine Science & Biological Research Department, in Boca Raton, Florida. Rob and his wife, Susan, are expecting their first child in November 2007.

Brian Kennedy '01 is now a Senior Project Specialist for the Natural Resources Department at ENSR, Inc. in Piscataway, New Jersey. His job responsibilities include permit writing and task management for freshwater wetlands, CAFRA and ACOE projects, stream encroachment, and waterfront development. Brian also assists other departments at ENSR with various geological needs, including soil classification, well installation, and soil and ground water sampling.

Jennifer O'Reilly '01 was inducted into the Rider University Athletics Hall of Fame on January 20, 2007. Congratulations and well deserved! Recently, Jen started work with the Virginia Department of Environmental Quality. Jen still swims in Master meets, including the 2006 FINA Masters World Championships in Palo Alto, California,
goes mountain biking, and competes in triathlons.

Julie Pasternak Santaniello ’01 married Drew Santaniello, a Rider accounting grad, in October 2004. Congratulations! She also switched jobs last year and is now a project scientist for ARCADIS in their Boston office. Julie’s primary responsibilities include data evaluation and reporting for sites with on-going remediation, in-situ treatments, and phytoremediation. She also is responsible for tracking all of her office’s sites through the Massachusetts waste site clean up program and staying current with changes to the regulations.

Alison Golinski ’06 enjoyed her first year as a graduate student in the Department of Animal Sciences at Rutgers University, New Brunswick. She’s been working on Radio Immuno Assays of tadpole samples to determine their stress levels due to the effects of pesticides and/or the presence of predators.

Dan Latini ’06 has been accepted into the master’s program in geology at Royal Halloway College, University of London, England. He will be working on the geochemistry and petrology of recent lavas from the Krafla volcano, Iceland. Dan completed his first field season in Iceland this past June.

Harmony Liff ’06 has been accepted into the doctoral program in the marine sciences at the University of South Carolina. Furthermore, USC has awarded Harmony a teaching and research assistantship, which includes a stipend and full tuition. Congratulations on all accounts! Harmony’s thesis topic will look at the effects of global climate change on intertidal species, specifically California mussels. Harmony, who was a Marine Science/Fine Arts-Dance double major and biology minor at Rider, has spent the past year working in the lab of Dr. Joanna Burger, Department of Ecology, Rutgers University, working on heavy-metal analysis in fish and bird species. Oh yes, in her spare time Harmony also teaches dance.

Dan Hewins ’07 has been accepted into the doctoral program in ecology and evolution at New Mexico State University. Furthermore, Dan has been awarded an NMSU Graduate Assistant Tuition Fellowship (only 56 offered each year with the expressed purpose to "recruit outstanding graduate students"), which provides for a three-year teaching assistantship stipend and full-tuition grant. Congratulations and well deserved! The teaching assistantship will require him to teach two lab sections, either for an introductory biology or plant ecology course.

Kelli Lucarino (’07), an environmental science major, graduated with honor this past spring and is working for Weston Solutions, Inc, located in Edison, NJ.