Advancing Excellence

Update from the Development & Alumni Office at The University of Texas at Austin's Jackson School of Geosciences - No. 9, Spring 2013

Alumni and Friends of the Jackson School,

I just returned from Antarctica as part of an alumni trip sponsored by JSG and GSA. As I look around with fresh eyes, I am impressed and inspired by the dynamic place that the Jackson School has become. We are working diligently to educate the next generation of global leaders and are addressing fundamental geoscience questions that impact the regional, national and international landscapes. Recognizing these accomplishments, I feel energized for the work that remains ahead.

When you aspire to be the best, details can make all the difference, like the polish that comes with outstanding writing skills. This is the goal of our writer-in-residence program for geology students, which is now over halfway funded, thanks to your support.

We continue to set the pace nationally for outstanding field geology courses, thanks also to your generosity. This issue includes an update on our innovative Marine Geology & Geophysics field course. You can also learn about other unique, hands-on opportunities we offer students, like the recent chance to take part in a rapid response mission to the scene of Hurricane Sandy.

Friends and former students of Bill Fisher will want to know about the new William L. Fisher Research Chair, which will support outstanding research scientists. This initiative will help us to recruit the next generation of top scientists as part of our school's ongoing commitment to global research leadership and excellence.

I look forward to seeing you at our alumni reunion on April 26-27. Then I can show you firsthand the accomplishments we have achieved so far and share more about the vision for our future.

Sharon Mosher, Dean

Grad student Cassandra Browne (3rd from right) helped study Hurricane Sandy's impact on beaches. Other research scientists in photo include (left to right): Jamie Austin, John Goff, and Steffen Saustrup, all from UTIG, as well as Beth Christenson and Roger Flood.

Students Get Their Hands on Science

At the Jackson School, one of our guiding principles is that students learn best by doing. That's why we put so much emphasis on hands-on research experiences, not just for graduate students but also undergraduates. That's why we partner with industry and government to place undergraduates in summer internships as early as possible in their educational journeys. And that's why we offer some of the most intensive field experiences of any university in the country.

As anyone who has succeeded in a geoscience career can attest, the classroom is the starting point of a great education, not the end point. Here are some of the ways that we are pushing beyond traditional teaching to get our students thinking, and working, like true scientists.

Research That Matters

Cassie Browne, a PhD candidate in the Jackson School, sailed aboard a research vessel off the coast of New York City as part of a rapid response mission to assess how Superstorm Sandy affected sediments near the coast. She and a team of researchers spent more than a week collecting data that could help local governments decide how best to shore up the region's natural defenses against storms.

"There are some things one can only learn by doing and field work is obviously one of these things," says Browne. "I've sat in many classes, years of classes that are great for learning about ideal situations. You have to know these first as a foundation. But the truth is, in the field, nothing is ideal. So the only way to truly learn geology is by going out and doing it."

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THE UNIVERSITY OF TEXAS AT AUSTIN
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Students Get Their Hands on Science (Cont')

We also offer our undergraduates the chance to do real research projects working with faculty members and research scientists through the Undergraduate Honors Program. Students compete for limited spots in the program by demonstrating strong academic performance and a well-designed research plan. The students are required to write and publicly defend a thesis on their research. Many present their results at scientific meetings and publish in prestigious journals. Recent student research projects have focused on topics as diverse as the ancient climate of Cameroon, ice deposits on Mars, improved methods for interpreting seismic data, and the tectonic history of northern Turkey.

"When they finish, they are much better prepared for graduate school," says Chris Bell, professor and co-founder of the honors program. "They know what it means to do research."

Rania Eldam is an undergraduate honors student working with assistant professor Jaime Barnes to determine the chemical composition and origin of serpentinites along part of the California coast.

Undergrad Rania Eldam (right), winner of Fall 2012 AGU Outstanding Student Presentation Award, conducts research with Asst. Professor Jaime Barnes

"In the undergraduate honors research program I have been able to learn how to not only answer questions about geology, but also how to formulate those questions," says Eldam. "Moreover, the honors program has taught me how to think independently and critically without guidelines or hand holding and apply my classroom-taught knowledge to the world around me."

Working in the Real World

Maurine Riess, director of the Jackson School's Career Center, assists students and staff in all aspects of pursuing their careers. Each year, through the school's Smart Start program, she helps dozens of students apply for summer internships in the petroleum industry, environmental organizations, and government agencies such as the National Park Service and U.S. Geological Survey.

"Students think the working world is like what you do in school," says Riess. "But it isn't. You use the same skills, but you don't apply them in the same way."

Understanding what scientists in their chosen field actually do helps students make better decisions throughout their education and early careers. Riess says the experience also gives students an enormous advantage when it comes time to apply for that first real job out of college. It shows they can handle responsibility.

"Everything else being equal, if an employer were to look at a resume of a student with zero experience versus one with an internship, they would pick the one with the internship, hands down," says Riess.

Thomas Cowan is an undergraduate who interned with ConocoPhillips last year, finding and organizing public geochemical data to help with new play analysis and economic modeling. He says before the internship, he had a "pretty naïve" view of a geoscientist's role in the energy industry.

Grad student Kim Nguyen learns hydrogeology field methods from Prof. Jack Sharp

"I imagined it to be a less interesting alternative to research and something that isolated you from the ever-changing body of geoscience knowledge," he admits. "The internship showed me that oil and gas work is just as much of a learning-driven career as research."

He says he now thinks he might enjoy working as an exploration or development geoscientist.

Dirty Boots

Jackson School students also benefit from some of the most intensive field experiences in the country. Students in GEO 660 journey across the western U.S. learning spectacular geology from top faculty. In the Marine Geology and Geophysics (MG&G) Field Course, students spend a week aboard small research vessels in the Gulf of Mexico collecting and processing data. Students on the Hydrogeology Field Course travel to New Mexico's Valles Caldera National Preserve to learn how to dip into the hydrogeologist's tool bag to measure factors such as stream flow, head pressure, water chemistry, infiltration, and electrical resistivity.

Heather Christensen, an undergraduate who went on last summer's Hydrogeology Field Course, noted that learning the science in the field with all your senses engaged allows you to learn much more deeply and memorably than through readings and lectures.

"Field work also allows for learning by trial and error," says Christensen (B.S. '13). "To me this was the best part of the field work. You propose a plan to get the data you need and when things don't work out, as they often don't, you learn to think on your feet. It is difficult to get that same experience in a classroom setting."

Here at the Jackson School, we're doing more than just teaching geosciences; we're transforming students into geoscientists. Your gifts to the school insure that future students have the same rich, hands-on experiences that shaped you during your time at UT Austin, while providing new opportunities to prepare this next generation of leaders.

Honoring the Impact of a Lifetime

Bill Fisher has had an astounding impact upon the national geosciences community. And nowhere has his influence been more profoundly felt than on the 40 acres. Long-time faculty member, director of the Bureau of Economic Geology and leader of the Geology Foundation, Bill has dedicated his life to the betterment of the geosciences at The University of Texas at Austin.

As director of the Bureau, he built this stellar research unit into a major international research organization. As a professor he has mentored and instructed the best minds in the business, advising hundreds of students through his academic career. As director of the Geology Foundation for over 20 years, he oversaw the increase of endowments from $10M to more than $60M. Ultimately, his counsel, leadership and close friendship with John Jackson shepherded the creation of the Jackson School of Geosciences, where he then served as inaugural dean.

"Creating a UT endowment to honor Bill Fisher is long overdue" — Dean Sharon Mosher

Surprisingly, the Geology Foundation holds no endowment that carries the name of Bill Fisher. At the same time, few endowments exclusively support the efforts of our research scientists. The William L. Fisher Research Chair will be the first in a possible suite of research chairs that will support the recruitment and retention of outstanding researchers, while expanding opportunities for our students. The Fisher Chair will specifically target the Bureau of Economic Geology.

"Over his career Bill Fisher's contribution to the Jackson School has been enormous in all aspects: research, teaching, leadership, professional activity, service, and administration," says Dean Mosher. "His lasting legacy is the Jackson School of Geosciences, for if not for Bill Fisher, there would be no Jackson School."

The Jackson School's earth science research program is among the largest at any university in the world. Our research is helping solve some of society's biggest challenges such as finding clean and affordable sources of water and energy, protecting the environment, and reducing our vulnerability to droughts, floods and earthquakes.

Bill Fisher with Patricia Montoya (Ph.D., 2006) at her graduation ceremony. Fisher has influenced generations of students during his career at the University of Texas at Austin.

"Our research program makes the school unique and makes it strong," says Scott Tinker, director of the Bureau. "This chair gives donors a way to invest in what makes us unique."

Our goal is to name the awardee of the chair this fall. To fully fund the chair, we must raise $1 million. An anonymous donor seeded the fund, and we are gaining momentum, having already raised close to $300,000 for the cause.

Making the **William L. Fisher Research Chair** a reality is an appropriate way to honor Bill's unfailing commitment to the success of the geosciences. To learn how you can contribute to the success of this fund, please contact Ann Flemings at 512.471.1993 or aflemings@jsg.utexas.edu.

Students Embark on Life-Changing Shipboard Journey

The Jackson School's Marine Geology and Geophysics (MG&G) Field Course is one of the only programs of its kind in the country. Taught by a team of three leading researchers, the program offers students a life-changing opportunity to complete the full cycle of research from data collection to presentation of scientific findings.

The course annually provides ten to twelve Jackson School students with an intense, real-world learning experience. During the three-week course, students work with the same tools and instruments used by professional geoscientists.

"MG&G students work as a team to collect, process, analyze and present data to an audience," says Sean Gulick, research associate professor and director of the MG&G program. "What's more, they are exposed to a true shipboard experience, challenging not only their technical skills, but their interpersonal skills. These students embark on a learning journey that simply cannot be replicated in the classroom."

Although the MG&G Field Course is a relatively young program (begun in 2008), many of its graduates have already embarked on successful geoscience careers. Of the 56 MG&G alums, almost a third have gone on to industry, and 10 percent are working in academia and government.

Marine Geology & Geophysics Class of 2012 – Port Aransas, TX

As explained by 2009 field course alum Anmar Davila Chacon, "You can experience the taste of working for industry in just a few weeks."

Thanks to the generosity of corporate, foundation and individual sponsors like ExxonMobil, Chevron, GX Technology, SEG Foundation and Petty Foundation, we have been able to bridge the gap toward the program's $95,000 annual operating expenses. Our goal is to raise a permanent endowment to ensure that future generations of students have the opportunity to experience this unique course, and gifts of all sizes can help. Special thanks to Petty Foundation for being the first to commit to this endowment initiative.

If you or your company / foundation would like to get involved, contact Jazmine Leon-Wing, assistant director of development, at (512) 232-8085 or jleon-wing@jsg.utexas.edu.

Make a Gift to JSG

Jackson Family on Campus and Around the Globe

Top left: Research Scientist Harry Rowe demonstrates the capabilities of the BHP Magic Globe to AC member Wafik Beydoun and his wife Nayla. Top right: Dean Sharon Mosher recognizes former Advisory Council chairman Russ Slayback for his dedication to the Jackson School Geology Foundation.

Above: Jackson School alumni visit the Antarctic frontier on trip sponsored by JSG and GSA. Front Row, left to right: Ava Laubach, Ann Laubach, Ian Dalziel, Bob Merrill, Margaret Kroehler, Sharon Mosher, Paul Betka (current JSG PHD student), Leon Long, Isabel Laubach. Back row, left to right: Steve Laubach, Mark Helper, Rob Dunbar, Rob Blair, Steve Long.

Left: Alumni, faculty, scientists and students enjoy SEG alumni and friends reception in Las Vegas.

Bottom left: Alumni gather in Houston to spread the word about the "Earth is Calling" outreach program.

Bottom right: Last fall, professor Leon Long educated the Jackson School development team in the field at Austin's Mount Bonnell. From left to right: Karen Cochran, Leon Long, Ann Flemings, Georgia Sanders, Kristen Tucek, Jazmine Leon-Wing. For more information, please visit www.jsg.utexas.edu/alumni/contact-us

Top Left: Student award recipients at the 2013 JSG Research Symposium include (front row, left to right) Lauren Becker, Marissa Vara, Jessica Kopp; (back row, left to right) Aaron Hantsche, Dusty Schroeder, Paul Betka. Top Right: Students showcased 170 research posters at the annual Jackson School Research Symposium, sponsored by ConocoPhillips.

Right: Faculty member Jaime Barnes and undergraduate student Tim Prather talk to Advisory Council member Tom Burke during the JSG Scholars Luncheon. Also at the Luncheon, FANs Board President-elect Heather Echols and her son (and current JSG Student) Wilson reconnect with Toby Carleton, Advisory Council member.

Bottom: The Jackson School family of students, alumni, faculty, research scientists and friends show Longhorn pride during the annual Jackson School Tailgate Party in the new Holland Family Student Center.

David "Scotty" Holland (B.S. '57) spoke at the dedication of the Holland Family Student Center on June 15, 2012.

In Memoriam: Scotty Holland (1931-2013)

The entire school mourned the loss of a true friend on January 5. David "Scotty" Holland and his wife Jacque contributed towards the new center that forms the university's main campus geosciences hub, as well as a space for students to study, collaborate and meet with advisers.

Scotty was a Life Member of the school's Advisory Council. He will truly be missed.

Punctuating Excellence:

Students Seek Better Communication Skills

We're over half way to our goal of raising funds for the Writer-in Residence position. The Writer-in-Residence will help Jackson School students strengthen their technical writing abilities, a vital skill for their future careers.

Evidence suggests students are hungry to learn how to communicate more clearly. For several years, geologist and translator Patricia Bobeck (M.A. '85) has taught workshops on writing theses and dissertations for students in the Jackson School. These popular workshops may become a model for part of the eventual Writer-in-Residence position. Evaluations show participants recognize the value of good communication skills to their success as scientists and understand the writing challenges unique to science.

"Scientific writing is its own beast, so that's why this course is very useful. Thanks to JSG for making this happen," wrote one recent student course evaluator.

Other students requested that Bobeck's workshops be expanded: some asked for more classes; some asked for longer classes; still others wanted to cover a broader range of writing topics.

"Writing skills are critically undervalued in scientific writing and graduate students haven't always gone through a liberal arts curriculum that emphasized writing in the first place"
— JSG Graduate Student

The Writer-in-Residence, once fully funded, will be a professional staff member working as a part of our student services team. He/she will teach students to improve scientific technical writing and other key communication skills. The Writer-in-Residence will also help instructors integrate more written work into curricula and offer community-wide training. Serving as an advisor, the Writer-in-Residence will be housed in the Holland Family Student Center and will work one-on-one with students as they learn, practice and perfect the craft of technical writing.

Because we believe in the importance of this position, the Jackson School will provide a 50% match to any gift of $25,000 or more. Corporate matches, as part of the total gift, are eligible to be matched as well. Gifts may be pledged over a three-year period. To support this high-priority initiative, please make a gift online at www.jsg.utexas.edu/alumni/support or contact Ann Flemings as 512-471-1993 or aflemings@jsg.utexas.edu.

We're Raising the Bar

Jackson School to Lead the University in Alumni Participation

The Jackson School is no stranger to setting big goals and seeing them through. Since it was founded in 2005, the program has continually risen in rank (#3 in geology and #6 in geophysics (2012 US News & World Report)), total school funding ($90 million in 2012, up 41%), and student enrollment (up 75% since 2005, 87% for grad students).

Here's another exciting advancement: our alumni have become more involved in the future of the program than ever. In the last five years our alumni giving rate has increased from #13 to #3 (out of 15 UT schools and colleges), just behind the UT School of Law and LBJ School of Public Affairs.

Help us reach 15% participation by 2015 and stand out as the Most Loyal Longhorns!

There are big plans in the works, and every gift matters. When you give — in any amount — you get to earmark your funds for a specific program, directing the school's resources. From the Writer-in-Residence training, to Earth is Calling and the GeoFORCE student outreach efforts, to the Fisher Research Chair and over 200 dedicated endowments, there are plenty of amazing opportunities.

Annual Fund donor, Franz Hiebert (MA '88/ PhD '94), shown above with family, is doing his part to get us to #1 in alumni giving

Help guide the future of the program and make us #1 in participation!

P.S. – Don't forget that gifts from current JSG students and recent grads will be matched—dollar for dollar—by the Jackson School. Factor in your company matching program and you could find that your gift goes much farther. Check out www.matchinggifts.com/utexas to learn more.

Make a Gift to JSG

Connect with Your Past and See the Future

Return to the 40 acres to reconnect with your college years. No late night study sessions or #2 pencils necessary this time though! No need to lose sleep over tough questions from Cloos or dodge flying objects thrown by Folk! It's your turn to quiz the professors and current students.

Tour the Holland Family Student Center and state of the art labs, hear faculty and research scientist talks, and learn about cutting-edge advances in the science of geology. And pack your hiking boots because you'll have the chance to get back in the field on a local trip led by Dr. Charlie Kerans, department professor and BEG senior research scientist.

You will also have time to rediscover the campus that you love. It's true that there's no view like the view from the top, so we are getting you a private tour of the UT Tower. But sometimes the view from the bottom can be amazing as well – especially when you have the band, spirit, and Bevo standing beside you. We have secured exclusive access to the football field to give you a once-in-a-lifetime experience.

We happen to have the perfect space for reconnecting in our beautiful new Holland Family Student Center. Catch up with fellow geo grads over a casual lunch and discover what current students are working on during poster sessions.

Jackson School alumni on Nightcap Night Cruise along Lady Bird Lake during the 2010 All-Alumni Reunion.

Cap off a fun-filled two days with dinner and dancing at the Texas Memorial Museum. We are proud to bring you musical entertainment by Coyote Crude (http://coyotecrude.com), a geology born-and-bred Texas country band, featuring our very own Wilson Echols, currently a junior at the Jackson School.

Round up your classmates and get Hooked on Texas!

For more information, please visit www.jsg.utexas.edu/alumni/reunion or contact Kristen Tucek, Assistant Director of Alumni Affairs (512-471-2223, ktucek@jsg.utexas.edu)

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BEVERAGES WITH BEVO

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Calling all Geoscientists

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April 26th-27th, 2013

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www.jsg.utexas.edu/alumni/reunion

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Upcoming Alumni Events

VIIII Latin American Forum on Energy and the Environment
March 3-5, 2013
Austin, TX

The EDGER Forum
March 4-6, 2013
Austin, TX

Friends and Alumni Network (FANs) Board Meeting
March 8, 2013
Austin, TX

Connect in the Capitol Dean's Reception
March 8, 2013
Alexandria, VA

JSGeo Travel to the Galapagos and Machu Picchu
March 12-26, 2013

BEG Industry Day
March 22, 2013
Austin, TX

Jackson School Society and Hall of Distinction Dinner
March 28, 2013
Austin, TX

Geology Foundation Advisory Council Meeting
March 28-29, 2013
Austin, TX

GSA 2013 South Central Section Meeting
April 4-5, 2013
Austin, TX

Jackson School Alumni Reunion
April 26-27, 2013
Austin, TX

UTIG 40th Anniversary and Symposium
April 28-30, 2013
Austin, TX

Austin Petroleum Exploration Society (APES) Reception sponsored by JSG
May 2, 2013
Austin, TX

"Corefest" BEG Houston Research Center 10th Anniversary Celebration
May 9, 2013
Houston, TX

JSG Alumni Reception at AAPG Convention & Exhibition
May 20, 2013
Pittsburgh, PA

Stay tuned to www.jsg.utexas.edu/alumni for more information about upcoming alumni events near you:

Field trip in San Antonio
Lunch Lecture in Midland
Social Networking Receptions in Dallas, Houston, and Austin

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