

Advancing Excellence

Update from the Development & Alumni Office at The University of Texas at Austin's Jackson School of Geosciences - No. 12, Summer 2014



Alumni and Friends of the Jackson School,

Heading into the school year, I always look forward to seeing a new crop of students in the Jackson School's halls, classrooms and labs.

The young people we educate are the future of the field. And as our field continues to grow and evolve, it is vital that we attract bright students from all sectors of society. Unfortunately, that has not always been the case for the geosciences.

The truth is, less than 30% of students take any geoscience in middle school or high school, and minority groups are particularly underserved. That's why I am so supportive and proud of our GeoFORCE program, which is entering its 10th year. GeoFORCE introduces young people to the geosciences and helps them pursue a college education and a rewarding career. Most of its participants are minorities. All come away with an appreciation for the geosciences.

This amazing program wouldn't be possible without the generosity of our alumni and friends. I thank you for supporting GeoFORCE and other critical school endeavors, like student field experiences and research initiatives.

As you will read in this issue, the cutting edge research being conducted at the Jackson School sets us apart from other academic institutions. With state and federal funding on the decline, we depend on our supporters to help us address critical research funding needs, from facilities renovations at the Bureau of Economic Geology to Rapid Response missions to undergraduate research programs.

You should be proud of what you've helped the Jackson School accomplish. We continue to strive to become the preeminent geosciences program in the world. With your help, I am confident we will get there.

Warmly,

Sharon Mosher, Dean



GeoFORCE Houston 12th grade students visiting Leesylvania State Park, VA.

GeoFORCE Forges Ahead Challenge Gifts Help Pave the Way

When the Jackson School first launched GeoFORCE, we were pioneering new territory. We saw a pressing need to build a diverse workforce pipeline, but there was no established roadmap. Now, 10 years later, the program has exceeded our wildest expectations. Boasting unparalleled student success metrics, GeoFORCE was even featured as an exemplary workforce development program in two separate 2013 reports from the National Academy of Sciences. The question we are faced with now is how to ensure the program's future.

GeoFORCE is a unique, experiential program that takes high schoolers from two disadvantaged areas of the state — inner-city Houston and rural Southwest Texas — on field trips for four summers, visiting geologically significant sites around the country. As a result, potential geologists are introduced to the profession, and students from disadvantaged areas find a path to college and rewarding careers.

Now entering its 10th year, GeoFORCE aims to raise money for two new endowments to help the program continue in perpetuity: *Friends of GeoFORCE* and the *GeoFORCE endowment in Honor of Doug Ratcliff*. ConocoPhillips has generously offered a 1:1 match for the first \$50,000 raised from individuals, and an anonymous donor has offered to match the following \$500,000 raised. Combining these funds with your own employer's matching program can make every gift go even farther.

"Thanks to annual gifts from companies, foundations and individuals, we have been able to provide this opportunity every year for the past decade. If we want to ensure that GeoFORCE is sustained in future decades, building an endowment is essential," says Samuel Moore, director of diversity and outreach.

Continued page 2

THE UNIVERSITY OF TEXAS AT AUSTIN

JACKSON

SCHOOL OF GEOSCIENCES

GeoFORCE (continued)

GeoFORCE needs stable, recurring revenue to supplement annual support from companies, foundations and individuals, which can fluctuate from year to year.

“The endowment will make sure the program is there even if times get rough and annual contributions slow down,” says Eleanour Snow, associate director of diversity and outreach.

Addressing an Industry Dilemma

A 2014 report from the American Geological Institute predicts that about half of geoscience professionals will retire between 2015 and 2022. Combine that with a booming industry and a lack of geoscience students — especially those from diverse racial backgrounds — and you have a profession at a crossroads.

GeoFORCE addresses this complex issue by recruiting young people from diverse communities into its program. Eighty percent of GeoFORCE participants are members of minority groups.

Since its inception, GeoFORCE has delivered robust success metrics.

- 100% high school graduation
- 96% college matriculation; 94% sophomore persistence
- 64% college STEM majors (science, technology, engineering, math) – more than double the national average
- 16% college Geoscience majors – more than 50 times the national average

GeoFORCE is more than an introduction to the geosciences for its participants; it’s a path to college and a career. The program offers high school students advice on applying for college and help preparing for the SAT and ACT. After high school, GeoFORCE helps students transition to college and into the workforce.

“Before GeoFORCE, I didn’t know what geology was,” says Victoria Fortiz, a GeoFORCE alumna and current Jackson School senior.

That’s part of the problem, Snow says.

“Students are not hearing about geosciences when they’re in high school,” she says. “And the really smart kids who are very good at sciences don’t know this is another option for them because what they see is AP biology, AP physics, AP chemistry, and they think that’s it.”

Now Fortiz, a first-generation college student from Eagle Pass, is on the verge of graduating, with plans to go to graduate school to study geological oceanography. “GeoFORCE gave me my career path,” she says.



GeoFORCE alumnus and current Jackson School PhD student Jeff Sitgreaves at a field site on the Pecos River in Val Verde county, near Del Rio, TX. Jeff attributes his current career aspirations to his GeoFORCE experience.



GeoFORCE alumni Isaac Jimenez (left) and Marissa Vara (right) at the Jackson School spring 2014 graduation ceremony.

GeoFORCE alumna Marissa Vara, who grew up in Uvalde, graduated from the Jackson School in May with a degree in geological sciences. She is interning with the Texas Commission on Environmental Quality this summer and plans to sail on an Antarctica research expedition in October. Afterward, she plans to attend graduate school and become a marine geologist.

When Vara first learned about GeoFORCE, her father was reluctant to allow his youngest child to travel from home, but her mother encouraged Vara to take advantage of the opportunity.

“Truthfully, I was not particularly excited about spending a week looking at rocks, so I viewed the first two years of GeoFORCE as an opportunity to obtain new life experiences, like taking my first plane ride,” Vara recalls. “It was during my junior-year trip to Oregon, however, that I became hooked on geology.”

That’s a common trajectory, say Snow and program assistant Ann Merriman. “It’s amazing to see the change in what they’re learning and taking out of the experience,” Merriman says.

At the end of every year, students write essays about their experiences. During their first couple of years, students tend to focus on the life skills they have developed during the trips — remembering to bring their cell-phone chargers, packing their own bags, and setting their own alarms. That focus shifts during their final years in the program.

“By the time they’re older, they’re talking more about being confident in their science knowledge and academic skills,” Snow says.

Jeff Sitgreaves of Brackettville was the program’s first geology graduate. Sitgreaves earned his undergraduate degree in 2013 from the Jackson School, where he is now attending graduate school. He is interning this summer at ExxonMobil and plans to pursue a career in the energy industry.

“I wouldn’t be in the geosciences if it weren’t for GeoFORCE,” says Sitgreaves.

“My first year, I thought this is kind of interesting. The second year, this is cool. Then by the third year, yes, this is what I want to do” — Jeff Sitgreaves, PhD student.

More information about GeoFORCE is available at www.jsg.utexas.edu/geoforce.

To make a gift, please visit us online or contact your Development & Alumni team (listed on page 7). Please also stay tuned to www.jsg.utexas.edu for details about a special event in spring 2015 to celebrate GeoFORCE’s 10 year anniversary.



Dr. Rodolfo Prieto Cedraro (left) shown above with friend and mentor Prof. Bill Fisher

In Memoriam: Dr. Rodolfo Prieto Cedraro (1953-2014)

It is with great sadness that we announce the passing of Dr. Rodolfo Prieto Cedraro (PhD '87).

To honor his memory and long-lasting friendship with Prof. Bill Fisher, his family and friends have established the Rodolfo Prieto Cedraro Memorial Excellence Endowment Benefitting the William L. Fisher Chair. Members of the Jackson School community are invited to help support this initiative through a charity golf tournament scheduled for Saturday, October 4, 2014 at Cinco Ranch Golf Club, Katy, TX. Special thanks to the tournament organizing committee: Marinela de Prieto, Winston Carrillo, Carlos Sánchez, Edgar Peláez, Alan Black, Alexander González, Milton Méndez, and Ricardo Rámirez.

For more information, please contact Belle German at (512) 471-1993 or bgerman@jsg.utexas.edu.

Legacy of a Loyal Longhorn

Our planned gift will sustain excellence for future generations

I am a real Longhorn, earning my bachelor's and master's degrees in geology from The University of Texas in the mid-1950s. It was an honor to study at one of the finest geology departments in the country. I still marvel at the esprit de corps among geology students during my time at UT, as well as the world-class faculty and staff who inspired us to be the best.

I strongly believe that the most rewarding gift you can give a young person is the opportunity to be educated at a top-rate university like UT. A good college education can never be taken away. That's why Vada and I have included a bequest to our will that will add to the Vada A. and Walter V. Boyle Graduate Fellowship in Petroleum Geology endowment we created to support graduate students studying petroleum geology.

We are loyal donors and have contributed to other school initiatives, such as the Holland Family Student Center. However, we view our planned gift to the Jackson School as the culmination of our philanthropy. We have no doubt that our bequest will further a legacy of excellence within UT geosciences, helping young people achieve their hopes, dreams, and goals long after we are gone.



Walt Boyle (BS '54, MA '55) with wife Vada showing Longhorn pride at the 2013 Jackson School All-Alumni Reunion. Walt and Vada view their planned gift to the Jackson School as the culmination of their philanthropy.

The world of geosciences has been good to us, and our planned gift is one important way for us to give back to the university that helped us accomplish so much.

If you feel the same way, please consider making a planned gift to UT, such as a bequest or other estate-related gift. To explore options, please check out the Gift Planning website at giving.utexas.edu/giftplanning or contact Belle German (512-471-1993; bgerman@jsg.utexas.edu) or Karen Cochran (512-471-6010; kcochran@jsg.utexas.edu) so that they can answer any questions you may have. And if you have already made plans, please let UT know so that you can be recognized, like Vada and I, as part of the Texas Leadership Society

Sincerely,
Walt Boyle

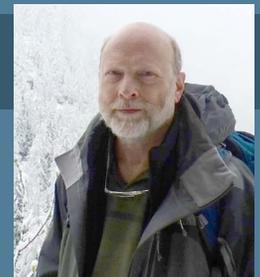
Planned Gift Helps Fund Long-term Collaboration

UT alumnus and research scientist David Arctur has turned to estate planning to complement two new inter-related endowments – the **David K. Arctur Endowment for Digital Preservation of Geoscience Collections** and **David K. Arctur Endowment for Innovations in Interoperability and Digital Preservation**. With one endowment at the iSchool and the other at the Jackson School, these two funds will work together to foster cross-campus collaboration for the curation and inventory of geologic samples.

A recent marriage led Arctur to re-examine his will and think long-term about the future. "I knew I wanted to leave something to my two sons, but I also wanted to make an impact at UT," he says.

Arctur's background in data management and Geographic Information Systems (GIS) had exposed him to the question of how to preserve records, fossils, and data. He knew that the Jackson School recently acquired five million geologic samples from the College of Natural Sciences. "These specimens need curation and inventory, which presents a challenge but also unique opportunities to nurture collaboration," he says.

"We can digitize this data so that we know where these specimens came from, who discovered them and make them available online to students and others around the world," says Arctur.



Arctur further decided to include these two endowments in his estate plans. This way, he has the pleasure of watching the collaboration begin now and the satisfaction of knowing his gift will have an even greater impact in the long term. "My hope is that these endowments will promote a collaboration that goes beyond what we have started here," he says.

David hopes that his initiative will inspire others to leave their collections to the Jackson School and provide financial support for the curation and preservation of those collections.

"This planned gift addresses a real need in the Jackson School that will continue to increase as our geologic collections grow. We are profoundly grateful to David for his generosity and thoughtfulness as it enhances our goal of becoming the preeminent geosciences school in the world," says Sharon Mosher, dean.

To explore estate gift options, please contact Belle German at 512-471-1993 / bgerman@jsg.utexas.edu or Karen Cochran at 512-471-6010 / kcochran@jsg.utexas.edu.



San Antonio Friends & Alumni (FANs) Chapter takes a field trip to Stone Oak Park in San Antonio, TX.

Jackson School Family on Campus and Around the Globe



(Above) The Jackson School recognizes its newest graduates at the Spring 2014 Commencement Ceremony. (Left) Dean Sharon Mosher emotionally congratulates Brandon Okafor on MS degree completion. (Right) Research professor Sean Gulick with new BS graduate Julie Zurbuchen. (Below Left) 2014 Undergraduate Honors Research Program field trip to the Colorado Plateau, led by Profs. Daniel Stockli and Mark Cloos. (Below Right) Scott Tinker (director, Bureau of Economic Geology) presents 2014 BEG Alumnus of the Year Award to Bonnie Weise (BS '74, MA '79) at AAPG alumni reception in Houston, TX.



4 Jackson School of Geosciences





The Jackson School recognizes friends and inducts newest giving society members at the annual Evening of Thanks celebration in Austin, TX. (Left) Dean Sharon Mosher inducts Earle McBride into the Hall of Distinction. (Right) Bob Loucks (PhD '76), Dan Smith (BS '58) and Chuck Williamson (PhD '78) reconnect during event reception.



(Above) More than 200 UT alumni attended the "UT@Chevron" reception in Houston, TX to celebrate the company's university partnership program and learn more about how to get involved with the Jackson School and other UT colleges. (Below) More than 300 alumni, friends and students attended the AAPG alumni reception in Houston, TX. (Left) Tricia Alvarez (PhD student), Luke Fidler (MS '11), Kristie Ramlal (MS '13), Kadira Singh (MS '10) and Stefan Punnett (MS '10). (Right) Julia Gale (BEG researcher), Yaser Alzayer (MS student) and Lauren Copley (MS student).



Why Jackson School research matters — and how you can help



Prof. Philip Bennett works as part of a Rapid Response team in the Philippines to study saltwater contamination in drinking wells resulting from Typhoon Haiyan.



The BEG facilities renovation campaign will more than double the space for core examination and analysis, helping to address a more than two-month backlog of core viewing requests.



2014 MG&G Field Course students aboard the R/V Manta in Galveston, TX.

Global energy demands are skyrocketing along with the population, multiplying the effects of natural disasters and environmental trends. The result: geoscience research is more important than ever. With two-thirds of the Jackson School consisting of dedicated research units (the UT Institute for Geophysics and the Bureau of Economic Geology), and leading research conducted at the Department of Geological Sciences, the school has never been more essential.

That's the good news. The bad? Even as human need for geoscience expertise is growing, government research budgets are sharply declining. A January report by the National Science Foundation found that federal research expenditures dropped 7.1 percent from fiscal 2012 to fiscal 2013.

The number of geoscientists is shrinking, too. Already there are more jobs than geosciences students, and it's only going to get worse. The American Geological Institute predicts that half of geoscientists will reach retirement age in the next five to 10 years.

So with less money for research and fewer people qualified to conduct it, what's the solution?

The Jackson School is turning to private philanthropy to help fill the gap. With support from alumni and friends, the school can continue its important work, whether it's maximizing fuel resources, boosting humanitarian efforts after natural disasters, or training the next generation of geoscientists. Here is a look at some of the Jackson School's current research fundraising efforts.

The Jackson School's Bureau of Economic Geology (BEG) is one of the top energy and environmental research institutions in the world. The BEG is seeking to upgrade research facilities in order to enhance capabilities ranging from energy resources and land management to mineral mapping, geochemistry, and subsurface nanotechnology.

When natural disasters strike, time is limited, and not just for rescue efforts. Geoscientists also need to quickly step in, analyze the event, and determine how to limit casualties in the case of future disasters. In order to enable swift action, the Jackson School is building a **Rapid Response Mobilization Fund** endowment. Seeded by Dr. James Austin, this initiative will help quickly send personnel and equipment to the sites of geo-hazards around the globe.

A central tenet of the Jackson School is the integration of teaching and research. Both can be achieved with programs that train the next generation of scientists.

The **Marine Geology and Geophysics (MG&G) Field Course** is an intensive, 3-week program that takes 16 students annually to sea, enabling them to experience the full cycle of research, from data collection, processing and interpretation to presentation of scientific findings. The Jackson School is seeking to connect with companies, foundations and individuals to fund annual operating expenses and contribute to the program's endowment.

Alumnus Carlotta Chernoff (BS '92, MA '95) has made a lead gift to support undergraduate research in honor of Professor Bill Carlson, who retires in August. The **Undergraduate Honors Research Program**, which Carlson founded, will be one of the beneficiaries of the endowment. The program enables undergraduates to work with faculty and scientists in conducting independent research and writing a thesis.

For more information about supporting these — or other — Jackson School research endeavors, please contact your Development & Alumni team (listed on page 7).

Upcoming Alumni Events

Continuing Ed Talk & Luncheon
Tuesday, September 9
Midland, TX

GSA Alumni Reception
Monday, October 20,
6-8pm
Mahony & Sons Burrard
Landing, 1055 Canada
Place #36
Vancouver, British Columbia

SEG Alumni Reception
Tuesday, October 28,
6-8pm
Bubba Gump Shrimp Co.,
1600 California St.
Denver, CO

Alumni and Friends Tailgate Party
Saturday, November 8
UT v. West Virginia
Geology Building,
23rd and San Jacinto
Austin, TX

AGU Alumni Luncheon
Wednesday, December 17,
12-2pm
Thirsty Bear Brewery,
661 Howard St.
San Francisco, CA

4th Annual Student Research Symposium
Saturday, February 7,
8:30am-4:30pm
Texas Union Ballroom,
24th and Guadalupe
Austin, TX



Stay tuned to www.jsg.utexas.edu/alumni for information about networking receptions, educational talks, and outreach efforts in your area.

You can also check your inbox and mail box for chapter event invitations.

Make sure the Jackson School has your current contact information!

For details about any event, please contact Kristen Tucek at alumni@jsg.utexas.edu or 512-471-2223.

Jackson School Development & Alumni Team

Belle German
Director of Development & Alumni Relations
(512) 471-1993, bgerman@jsg.utexas.edu

Karen Cochran
Associate Director of Development
(512) 471-6010, kcochran@jsg.utexas.edu

Jazmine Leon-Wing
Assistant Director of Corporate & Foundation Relations
(512) 232-8085, jleon-wing@jsg.utexas.edu

Kristen Tucek
Assistant Director of Alumni Relations and Annual Giving
(512) 471-2223, ktucek@jsg.utexas.edu

Georgia Sanders
Development Specialist
(512) 474-1282, gsanders@jsg.utexas.edu



If each alumnus gave just 25 cents per day to the Jackson School, we could provide full scholarship support for half of an entire freshman class.



Annual gifts enable students to take part in life-changing field experiences, like the 660 Field Course led by Dr. Mark Helper (shown above).

The Other Side of the Coin

Imagine the difference that could be made if each one of our 4,500 alumni decided to give back to the Jackson School this year.

Let's put those geoscience skills to work and do some simple math. If each alum gave \$100 this year, just a little more than \$8 per month – 25 cents per day – the total raised would equal a whopping \$450,000. The power of multiplication is amazing. What's even more impressive is how far this money can go.

11 Prestigious Graduate Fellowships

Geoscience programs are largely measured by the quality of their graduate students, and providing full fellowship support is essential to compete with peer schools for top candidates. \$450,000 per year could provide full fellowship support for 11 new graduate students and help further cement the Jackson School's reputation as a top-tier program.

45 Undergraduate students supported for an entire year of classes

Tuition and fees for a 12-hour course load costs each of our undergraduates more than \$5,000 in the fall semester alone, leaving many students saddled with debt upon graduation. If every alum gave \$100 this year toward scholarships, we could ensure that 45 undergrads got a full ride for the year. That's basically half the size of this year's freshman class!

90 Students fully funded on field courses

Many of you remember the life-changing experiences that the 660 Summer Field Camp provides, but you may not remember the program's \$5,000 price tag per student. If each alum gave \$100 per year, the Jackson School could fully cover 90 students participating on field courses, including 660, the Hydro Field Camp, and the Marine Geology & Geophysics Field Course.

Here's the bottom line. Every time you ask yourself whether a modest gift can really make a difference at the Jackson School, remember all of the students, faculty, staff and research scientists who depend on your support. Because of the generosity of the Jacksons, we do not ask for your help to "keep the lights on." We ask you to be part of our continued success. And while we greatly appreciate the big gifts, it is the sum total of all contributions that will push us to the top. And just think of how much farther your gift can go when combined with corporate matching programs...

To make your annual gift today, visit us online at www.jsg.utexas.edu.

The University of Texas at Austin
Jackson School of Geosciences
2305 Speedway, C1160
Austin, TX 78712-1692
www.jsg.utexas.edu

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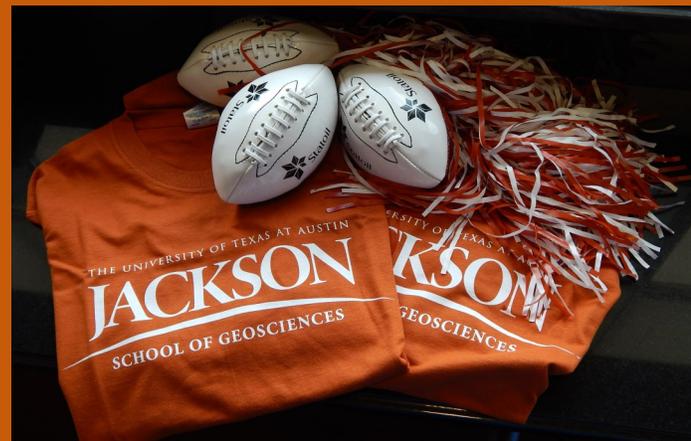
Save the Date for the annual Jackson School Tailgate Party!



UT v. West Virginia
Saturday, November 8, 2014

2 Hours Prior to Kick-off

Jackson Geological Sciences Building
23rd & San Jacinto



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