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 Moehrer, Dean

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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
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 alumni 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.

“When I first learned about GeoFORCE, 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.
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.

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.

2014 Advancing Excellence 3
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.
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 Punnette (MS ’10). (Right) Julia Gale (BEG researcher), Yaser Alzayer (MS student) and Lauren Copley (MS student).
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).
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.

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.
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