

THE UNIVERSITY OF OKLAHOMA

EARTH & ENERGY

FALL 2011

THE FIRST FIVE YEARS

CHARTING THE PROGRESS FOR STUDENTS

**TRACKING
EARTHQUAKES**

A MODEL FIELD CAMP

**ON THE EDGE OF A
FRONTIER**

**MENTEE TURNS
MENTOR**

**REMEMBERING
CY WAGNER**

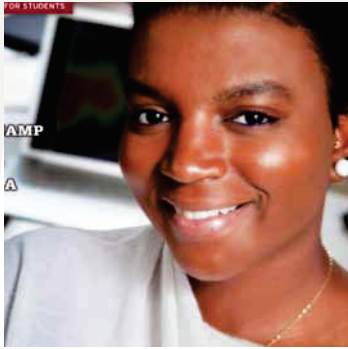
MEWBOURNE
COLLEGE OF EARTH & ENERGY
THE UNIVERSITY OF OKLAHOMA



CONTENTS

ON THE COVER:

Domingas Cristovao Martins, an international student from Luanda, Angola, graduated from the University of Oklahoma in summer 2011 with a bachelor of science degree in petroleum engineering.



04 COLLEGE

- 04 LETTER FROM THE DEAN
- 05 OU DEDICATES VAN DYKE PLAZA
- 06 DAYS HONORED BY COLLEGE
- 07 WORKSHOP ENCORE
- 08 GOERINGER HONORED BY PROVOST
ENERGY INDEPENDENCE
- 09 BOARD OF VISITORS
- 10 A NIGHT OF RECOGNITION
- 11 HONORING A TRAILBLAZER



26 THE FIRST FIVE YEARS

12 FACULTY

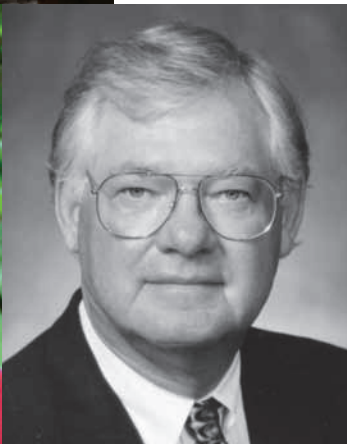
- 12 FROM ALASKA TO AFRICA
INNOVATIONS IN RESEARCH, TEACHING
GEOINFORMATICS PIONEER KELLER CO-EDITS BOOK

13 STUDENTS

- 13 WELCOME BACK, OKLAHOMA STYLE
- 14 TEAMING UP
- 15 STUDENT, TUTOR, RESEARCHER
- 16 173 STUDENTS EARN DEGREES
- 16 FORUM FOR COMMUNICATION
- 17 ENGINEERS TREK FOR CANCER
- 18 PUSHING PAST THE COMFORT ZONE
- 19 A BAYOU-STYLE CRAWFISH BOIL



ENERGY



20 FEATURES

- 20 A MODEL FIELD CAMP
- 22 ON THE EDGE OF A FRONTIER
- 24 A CENTER FOR EARTHQUAKES

28 ALUMNI

- 28 PAYING IT FORWARD
- 29 MENTEE TURNS MENTOR
- 30 NEVER TOO EARLY TO START
- 31 ENGAGING OTHERS TO GIVE BACK
- 32 A BALANCED APPROACH TO SERVICE
- 33 IN MEMORIAM: CY WAGNER JR.
- 36 CLASS NOTES
- 39 WE WANT TO HEAR FROM YOU



EARTH & ENERGY MAGAZINE

Mewbourne College of Earth and Energy
University of Oklahoma
©2011

Produced by: LevyMart Public Relations
Designed by: Old Hat Creative
Photo credits: Shevaun Williams, Robert Taylor

Contact:
Allison Richardson
Director of Alumni Relations
Mewbourne College of Earth and Energy
University of Oklahoma
1510 Sarkeys Energy Center
100 E. Boyd St.
Norman, OK 73019-1015
Phone: (405) 325-3821
Fax: (405) 325-3180
email: arichardson@ou.edu

This publication, printed by OU Printing Services, is issued by the University of Oklahoma. 6,000 copies have been prepared and distributed at no cost to the taxpayers of the State of Oklahoma.

This University in compliance with all applicable federal and state laws and regulations does not discriminate on the basis of race, color, national origin, sex, age, religion, disability, political beliefs, or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid and educational services.

ADMINISTRATIVE STAFF

Larry R. Grillot, Dean and Lester A. Day Family Chair
Barry L. Weaver, Associate Dean and Associate Professor,
ConocoPhillips School of Geology and Geophysics
Ameil Shadid, Director of Development
Allison Richardson, Director of Alumni Relations
Donna Ade, Staff Assistant
Luanne Howk, Financial Administrator
Yoana Walschap, International Outreach Web Support
Constance White, Manager, Administration and Operations
Naila Williams, Administrative Assistant
Andrea Flores, Financial Associate

UNDERGRADUATE STUDENT SERVICES

Linda Goeringer, Coordinator
Elizabeth Ehrhardt, Academic Counselor

IT FIELD REPRESENTATIVE

Lisa Hendrix

Web: <http://www.ou.edu/mcee>
Facebook: OU Mewbourne College of Earth and Energy



WELCOME TO THE FALL 2011 EDITION OF *EARTH & ENERGY MAGAZINE*, WHICH INCLUDES HIGHLIGHTS FROM THE FIRST FIVE YEARS OF THE MEWBOURNE COLLEGE OF EARTH AND ENERGY.

Since 2006, our student enrollment has increased from 460 in 2006 to more than 900 in fall 2011. Such a dramatic increase presents both opportunities and challenges, but I am pleased to report that the college is continuing to move forward as we work to provide the best education and college experience possible.

We have outstanding faculty and staff who work to maintain high quality teaching and research, and currently are working to increase our instructional faculty and supporting resources to meet this significant increase in our student population.

We continue to focus on laboratory, “hands-on” education. This includes:

- the new Bartell Field Camp that was used for the first time this past summer
- upgraded Crustal Imaging Facility, where our students have access to state-of-the-art geosciences and engineering software
- expanded and upgraded PE undergraduate teaching labs, which give our students the opportunity to work with industry-standard equipment
- MI-SWACO fluids lab and similar facilities, which provide practical support to classroom lectures
- and NOV Drilling Simulator, a major addition to the college that fits in well in the ExxonMobil Lawrence Rawl Engineering Practice Facility in the College of Engineering, with which we continue to enjoy a very positive working relationship.

In addition to labs, we now have much improved faculty and student areas, such as the remodeled Youngblood Energy Library, new computer labs and remodeled office and student project spaces in the Energy Center Tower.

Our students continue to excel. For example, at the AAPG international meeting last spring, OU was recognized as having the outstanding student chapter in the United States and at the fall 2010 SPE International meeting, OU again won the PetroBowl, marking the third win in the past four years.

We continue to have strong recruitment of our graduates by a broad range of companies. Many of our students also are successfully pursuing graduate education and careers in academia.

The success of the Mewbourne College is due in large part to the support by alumni and other supporters, particularly Curtis Mewbourne. Corporate support also has been a large factor in the college’s success.

The college is in good shape to meet the needs of our students, and promote energy and earth sciences education at the University of Oklahoma. Our challenge is to maintain our gains of the past five years, and continue to build for the future. I look forward to working with you to meet these challenges.

Larry R. Grillot
Dean and Lester A. Day Family Chair

OU DEDICATES VAN DYKE PLAZA

MANY CONTRIBUTIONS RECOGNIZED

GENE VAN DYKE graduated from the University of Oklahoma more than 60 years ago. But the geological engineering alumnus has never stopped giving back to his alma mater.

On April 18, in recognition of his generous contributions to the university's earth and energy programs, the newly renovated Sarkeys Energy Center plaza was named in Van Dyke's honor.

The Gene Van Dyke Plaza, the renovation of which was made possible by a gift from Van Dyke, includes computer laboratories for earth and energy students, an executive board room for use by alumni, faculty and student leaders, and a new, state-of-the-art classroom.

"The university is grateful to have the opportunity to recognize and honor Gene Van Dyke's long devotion to OU and his provision of important resources to benefit our students in the energy field," says OU President David Boren.

Van Dyke served as president of the Navy Base Officer's Quarters during the tragic 1950 fire that destroyed the former World War II barracks and killed three student residents. After narrowly escaping death himself, he was responsible for personally informing the victims' families.

After his graduation that year, Van Dyke began his oil and gas exploration career, first in Texas and Louisiana, and then in the North Sea and deepwater West Africa. He



Left to right: Janice Van Dyke Walden, Gene and Astrid Van Dyke, OU President David Boren and Mewbourne College Dean Larry Grillot

worked briefly for Kerr-McGee in Oklahoma City and S.D. Johnson Oil Co. in Wichita Falls, Texas, before forming his company, now known as Vanco Energy Co., for which he serves as president and CEO. Today, Vanco Energy has operations offshore of the Ukraine and four countries in West Africa.

A recipient of the 2010 OU Regents' Alumni Award, Van Dyke has made gifts to the Victor E. Monnett Chair, named in honor of the longtime director of OU's School of Geology, whom Van Dyke credits with having influenced him to pursue studies and a career in the oil business. His company sponsors

the Houston radio broadcast of OU football games each year and, in association with the OU President's Associates program, Van Dyke opens his home for the OU-Texas A&M pre-game celebration every other year.

He is active in many professional and community organizations, including the OU Club of Houston, Petroleum Club, Houston Club, American Association of Petroleum Geologists, Association of International Petroleum Negotiators, Society of Independent Professional Earth Scientists, and Houston Geological Society, which in 2000 honored him as a "Living Legend in Wildcatting." ■



TERESA K. AND JAMES C. DAY HONORED BY COLLEGE DEAN'S SUITE NAMED FOR PHILANTHROPIC COUPLE

LONGTIME UNIVERSITY OF Oklahoma supporters James C. and Teresa K. Day, known for their philanthropy and community involvement, were honored Jan. 10 with the naming of the Mewbourne College of Earth and Energy dean's office suite.

The James C. and Teresa K. Day Suite on the 15th floor of Sarkeys Energy Center houses the office of the dean, the college's administrative staff and a conference room.

James Day has provided vision and expertise to the university through service on the Sarkeys

Energy Center Board of Directors and the Mewbourne College's Board of Visitors. In 2000, he joined with his siblings to provide support for the Lester A. Day Family Chair, named in memory of their father, which is designated for the dean of the Mewbourne College.

Day began his more than 30-year career with Noble Corp. in 1977. He was named president and CEO in 1984, and elected chairman of the board in 1992. Under his leadership, the company grew from a primarily domestic drilling company into one of the largest international offshore

companies with operations in 14 countries.

At his 2007 retirement, Noble Corp. made a major gift to the college in recognition of Day's distinguished service and leadership. That year, OU awarded him an honorary doctorate of humane letters in recognition of his professional achievements and service to the university.

Teresa Day lends her time and support to such organizations as the Fort Bend Education Foundation, Boys and Girls Country, and the Court Appointed Special Advocates program. ■

WORKSHOP ENCORE

HIGH DEMAND FOR MISSISSIPPIAN PLAY UPDATES

DEMAND FOR THE Oklahoma Geological Survey's May 18 Mississippian Play Workshop was so high that it was repeated on Aug. 2.

One of the most actively sought reservoirs in Oklahoma, the Mississippian Oil Play has the potential to become one of the most profitable domestic onshore oil plays. Horizontal wells are ideally suited to Mississippian reservoirs, which typically are characterized by low matrix porosity and permeability that are enhanced by

the intermittent presence of natural fracture systems.

Consulting geologist Kurt Rottmann kicked off both workshops with a comprehensive geological analysis that results in a better understanding of the subsurface geometry of productive facies contained within the Mississippian interval and development of a methodology for more reliable prediction.

The workshops also demonstrated how Mississippian reservoirs behave in detail through horizontal well

histories and field studies. These field studies highlighted porosity types, fracturing, completion techniques, reservoir drainage, in-fill drilling potential, and the production characteristics of various reservoir systems.

Other workshop presenters were Kurt Marfurt, OU; Shane Matson, Spyglass Energy Group LLC; Mark Przywara, NuTech Energy; Greg Flournoy, Schlumberger; and Charles Wickstrom, Spyglass Energy Group LLC. ■



TOP HONORS

PROVOST HONORS GOERINGER WITH OUTSTANDING ADVISING AWARD



Dean Larry Grillot nominated Linda Goeringer for the Provost's Outstanding Academic Advising Award.

AS STRONG A STATEMENT as it is, saying that Linda Goeringer is passionate about helping students

navigate through their academic careers still is an understatement. For Goeringer, advising University of Oklahoma students is a calling.

This past spring, Goeringer, the Mewbourne College of Earth and Energy's coordinator of Undergraduate Student Services, was recognized for her efforts with the Provost's Outstanding Academic Advising Award.

In his nomination letter, Dean Larry Grillot calls Goeringer dedicated, highly regarded, conscientious and effective. "Linda has been a key player in efforts to better communicate with our students, assist them in the area of academic advising and handle many other activities related to student needs. In particular, she has organized student services to

be very effective during a period which has seen an 85 percent increase in student enrollment in the college. Her office has continued to be available to students, while showing concern for student welfare and working to address a variety of student problems."

Grillot notes that, in addition to Goeringer's advising responsibilities, she has taken the initiative in such areas as student tutoring, organizing the Dean's Advisory Council, coordinating and managing the college convocation, and acting as secretary for academic appeals and academic misconduct committees as required.

"Many of these extra activities," he adds, "were taken at Linda's initiative to ensure that we are addressing overall student needs." ■

ENERGY INDEPENDENCE SUMMIT FOCUSES ON WOODFORD REGION

STAKEHOLDERS AND EXPERTS gathered to discuss America's path toward greater energy independence at the 2011 Woodford Shale Summit, sponsored by the University of Oklahoma and Interstate Oil and Gas Compact Commission this past March on OU's Norman campus.

The summit focused on key issues in the Woodford Region, a unique reservoir that has tremendous potential for both oil and gas production. Sessions explored the importance of utilizing natural gas and the symbiotic relationship between natural gas and other energy sources, as well as demand management, efficiency and renewables in the development of America's natural gas resources and move toward energy independence.

"Whether firming up wind and solar power, or serving as the new fuel of choice for retired or outdated power generating plants, natural gas will play the key role in meeting our country's future energy demands," says Mewbourne College Dean Larry R. Grillot, who served as host for the summit.

The multi-state IOGCC promotes the conservation and efficient recovery of the nation's domestic oil and natural gas resources while protecting health, safety and the environment. The commission is the oldest and largest state compact in the United States. ■

ADVISORY BOARDS TO MEET NOV. 4

COMPOSED OF UP to 30 active members who are distinguished alumni, corporate leaders and outstanding scientists, the Mewbourne College of Earth and Energy Board of Visitors is representative of the broad scope of earth and energy disciplines in general and geosciences and petroleum and geological engineering in particular.

The board's purpose is to provide critical, constructive advice to the dean and the other members of the College Executive Committee; help shape and actively promote the vision, goals and objectives of the college within the university, state and nation; and assist the college's leadership with issues that impact the future of the college.

FALL 2011 MEETING SCHEDULE

- 10:30 a.m.** **Joint meeting and luncheon**
Mewbourne College of Earth and Energy Board of Visitors

ConocoPhillips School of Geology and Geophysics Alumni Advisory Council

Mewbourne School of Petroleum Engineering Industry Advisory Board
- 1:30 p.m.** **Individual board and council meetings**
- 6 p.m.** **Trailblazer Award dinner**
Molly Shi Boren Ballroom
Oklahoma Memorial Union

MEWBOURNE COLLEGE OF EARTH AND ENERGY 2011-2012 BOARD OF VISITORS

MEMBERS

Chris Cheatwood, Chairman
Brian O'Brien
Douglas Cummings
James C. Davis
James C. Day
James A. Gibbs
Kim Hatfield
Ronnie K. Irani
T.H. McCasland Jr.
Jere W. McKenny

Frank J. Patterson
Conley Smith
Charles Stephenson Jr.
Robert L. Stephenson
J. Mike Stice
Robert Thomas
Gene Van Dyke
Kenneth Waits
Lew Ward III

ASSOCIATE MEMBERS

J. Denny Bartell
Al J. Hirshberg
Robert McKenny
Bill Z. Parker
Pamela S. Pierce
Ted Sandridge
Cyril Wagner Jr.

EX OFFICIO MEMBERS

Craig Koontz
Sharon Woods Minor

MEWBOURNE COLLEGE OF EARTH AND ENERGY

A NIGHT FOR RECOGNITION

Ten individuals were honored this past November at the 2010 Mewbourne College of Earth and Energy Distinguished Awards Dinner for their extraordinary support of the University of Oklahoma and service to the industry and community.

James Henry, Brian O'Brien, Charles Stephenson, Gene Van Dyke and Cy Wagner were selected as recipients of the Distinguished Alumni Award on the basis of their involvement with the college in the form of academic, scientific or practical contributions in their chosen field; achievements in business; and/or past or ongoing involvement with the college.

Robert Allen, Douglas Cummings, James C. Day, S. Kim Hatfield and Kenneth Waits each received the Distinguished Service Award as a result of their involvement with the college in the form of classroom speaking; advisory board membership; student mentoring, internships and hiring; other classroom or college advocacy; financial contributions; and/or support of student activities.



Charles and Peggy Stephenson

HONORING A TRAILBLAZER

STEPHENSON TO BE RECOGNIZED AT NOV. 4 DINNER

ONE OF OKLAHOMA'S most successful and philanthropic native sons will be honored with the Mewbourne College of Earth and Energy's 2011 Trailblazer Award.

Charles Stephenson, of Tulsa will be recognized as part the biennial dinner celebration slated for 6 p.m. Nov. 4 at the Molly Shi Boren Ballroom in Oklahoma Memorial Union.

A 1959 OU petroleum engineering graduate, Stephenson founded

Vintage Petroleum Inc., from which he retired as chairman of the board, president and CEO. The company was sold in 2006 to Occidental.

Stephenson and his wife, Peggy, are among the university's most loyal and generous supporters. Their gifts have helped build the Stephenson Research and Technology Center and the Stephenson Life Sciences Research Center on the Norman campus, and the Peggy and Charles Stephenson Oklahoma Cancer Center at the OU

Health Sciences Center in Oklahoma City. The couple also endowed a chair in petroleum engineering. Stephenson is a Sarkeys Energy Center Founder.

Established in 2003, the Trailblazer Award honors exceptional individuals in the energy industry who have pioneered operational or scientific practices, procedures and developments for the industry, enhancing the quality of life for Oklahoma citizens, the nation and the world. ■

FROM ALASKA TO AFRICA

KATIE KERANEN, assistant professor of geophysics, has two new grants from the National Science Foundation.

One grant supports the study of earthquakes and the major fault system along the subduction zone plate boundary in southwest Alaska. To collect data this summer, Keranen and colleagues from Lamont Doherty Earth Observatory flew on a small plane to eight sites on the southwest Alaskan peninsula, installed broadband seismometers and recorded seismic sources – earthquakes and airgun shots from a ship collecting seismic reflection

data. The data are being used to analyze local earthquake sources in this region, which has produced some of the world's largest recorded earthquakes in the past.

The second NSF grant supports research into the deformation of the African continent in Ethiopia, where Keranen will deploy similar instruments to study the East African Rift system and the resulting basins, both within the rift and on the rift shoulders. The five-year project began in September.

Keranen also is working on research projects in western Nevada

that are funded by grants from the U.S. Department of Energy and the Oak Ridge Associated Universities consortium. Under the DOE-funded grant, she is examining geothermal prospects in western Nevada. Fieldwork includes collection of seismic reflection data, using explosive and weight-drop sources, and gravity data to map basin and fault structures and to evaluate geothermal fluid pathways. The ORAU grant supports the use of new and existing gravity and magnetic data to evaluate a possible impact crater site near Alamo, Nev. ■

INNOVATIONS IN RESEARCH, TEACHING

MAYSAM POURNIK is exploring ways to develop more environmentally friendly methods of enhancing gas and oil recovery from rock, especially shale.

Pournik, an assistant professor of petroleum engineering, focuses his research on hydraulic fracturing, matrix acidizing and acid fracturing, and the mechanics of fracture closure.

Hydraulic fracturing involves the high-pressure injection of liquids (usually water, but other fluids, including gases, also can be used) carrying solid particles into rock formations to create fractures. When the pressure is released, the particles

keep those fractures – or channels – open, enabling the extraction of gas and oil.

Acid fracturing uses a similar high-pressure injection of acid to etch cracks in the rock in an uneven fashion that will keep the channels open without the need for solid particles. The process has proven successful in carbonate formations; Pournik is exploring whether it will work in shale formations, which can contain a significant amount of acid-soluble minerals. Matrix acidizing utilizes low injection pressure with the aim of etching the rock near the producing

well to enhance flow capacity of the rock matrix.

On the teaching side, Pournik has adopted an innovative method for gauging real-time student feedback, administering surveys and quizzes and even taking attendance. Each student in his lecture classes receives an electronic response pad, through which they can answer questions and Pournik can elicit responses that indicate whether they grasp the concepts being discussed and make necessary changes to improve their understanding. “It is nice to continuously see how the students are learning,” he says. ■

GEOINFORMATICS PIONEER KELLER CO-EDITS BOOK

GEOINFORMATICS PIONEER and Oklahoma Geological Survey director Randy Keller is co-editor of *Geoinformatics: Cyberinfrastructure for the Solid Earth Sciences* (Cambridge University Press, 2011). The book, which Keller edited with Chaitanya Baru of the University of California, San Diego, provides an accessible introduction to the applications of cyberinfrastructure in the Earth sciences for readers without specialist computer knowledge and presents numerous international case studies to demonstrate the benefits of geoinformatics projects across a broad spectrum of geoscience disciplines. ■



WELCOME BACK, OKLAHOMA STYLE

SAMSON SPONSORS BACK-TO-SCHOOL BARBECUE

TULSA-BASED SAMSON

Investment Co. has a long and storied history with the University of Oklahoma and the Mewbourne College of Earth and Energy.

Samson's founder, the late Charles Schusterman, was a 1958 petroleum engineering graduate. The Schusterman family has generously supported OU in many areas, from the acquisition of the Schusterman Center in Tulsa to endowing student scholarships and faculty chairs and professorships. One of Samson's most recent gifts funded construction of the study hall at the ConocoPhillips School of Geology and Geosciences Bartell Field Camp in Colorado.

One of the company's most unique gifts comes in the form of sponsoring the Mewbourne College of Earth and Energy's Welcome Back Barbecue.

The fifth annual event, complete with free food and T-shirts, live music

and student organization information, was held Aug. 31 on the Brian E. and Sandra L. O'Brien Plaza.

The idea for sponsorship of the back-to-school barbecue for students came out of a lunch discussion in early 2010 between MCEE development director Ameil Shadid and Samson representatives about ways in which the company could continue supporting the college and its students. "Ameil said, 'We have an opportunity that might be a good fit for Samson,'" recalls Samson HR adviser Sarah Phelps. "We immediately recognized that it was a perfect fit in terms of supporting students in an informal, fun atmosphere to kick off the semester for them in a positive way. Last year and this year we brought 10 Samson employees with us, most of whom are graduates of the college. It's been really fantastic to have them there."

Samson has been recruiting OU students for decades. "The university's premier programs make it easy to recruit top graduates," Phelps says.

"We have recruited across disciplines for many years, and from engineering in particular for the past eight years. We also have a formal internship program for petroleum engineering and geology and geophysics students as well as development programs for entry-level professionals."

Kevin Morris, Samson vice president for human resources, emphasizes the enormous value of interacting and collaborating with OU on multiple levels. "Our long-term success is very much entwined with the long-term success of our OU alumni," he says. "There is no place we would rather recruit and no place from which we get better recruits." ■

TEAMING UP

ZUMWALT, BURGET A FORMIDABLE PAIR



Blake Burget and Ashley Zumwalt

LEGENDARY FOOTBALL COACH

Vince Lombardi knew a little about teams. "Individual commitment to a group effort – that is what makes a team work, a company work, a society work, a civilization work."

Ashley Zumwalt and Blake Burget know a little about the value of individual commitment to a team effort. For the past two years, they have proven time and again that they are a team to be reckoned with.

The two petroleum engineering seniors first met in a sophomore lab. "I was in a group of five and Ashley was in a group of three," Burget recalls. "She asked our professor, Dr. Sondergeld, if she could have someone from another team and he asked me if I would be willing to move.

I was reluctant at first, but Ashley's reputation as smart, efficient and a hard worker preceded her, so I joined the team."

The two quickly realized they had similar communication and work styles. "Very few people got As in that class, but we did," he adds. "We became good friends and thought we'd be a good team for other projects."

Those projects included participating in an international online petroleum engineering competition in which, with teammate and fellow PE senior Kylie Bohanan, they ranked in the top 15 of 700 teams and presenting a commercialization strategy for a an oil and gas software to an eight-company consortium in San Francisco.

The software, the Quantitative GeoGenome™ Mineralogy Simulator, was created by [Larry W. Brummet/ ONEOK Chair in Poromechanics and] petroleum engineering Professor Younane Abousleiman. QGGMS was selected for commercialization by OU's Center for the Creation of Economic Wealth during spring 2011. Zumwalt, a CCEW alumna and team leader that semester, and Burget, a CCEW intern recruited by his pal, both were assigned to the project.

"The software accurately predicts the rock properties useful for hydraulic fracking and well-bore stability," Zumwalt explains. "When we had the opportunity to present it to the consortium in San Francisco, we were able to educate companies

that included ConocoPhillips, Schlumberger, Halliburton, Saudi Amoco and Total, on what QGGMS does and how it could benefit them. It was exciting to see technology take shape in our area of expertise."

As if all of that weren't enough, already this fall the two have traveled to Alberta, Canada, to compete in an oil and gas industry challenge and co-chaired the annual Society of Petroleum Engineers' golf tournament, all while carrying full course loads and serving as teaching assistants, Burget for the introduction to engineering course and Zumwalt an entrepreneurship course in the Michael F. Price College of Business. Zumwalt also serves as vice-chairman of the Campus Activities Council and is taking flight lessons. She expects to have her private pilot license by the time she graduates in May 2012.

Both have accepted post-graduation employment, Zumwalt with ExxonMobil in Houston and Burget with Newfield Exploration in Denver. That their futures are bright is a hard point to argue.

No matter what the future holds for them, though, the two have established a bond they expect to last a very long time.

"Blake is my best friend," Zumwalt says. "We don't know where life will take us, but it will be good."

And it just may offer them a chance or two to team up again. ■

STUDENT, TUTOR, RESEARCHER

HIGH SCHOOL ASSIGNMENT INTRODUCES A CAREER

A HIGH SCHOOL assignment led Ellen Rosencrans to the decision that geology was for her.

The Edmond, Okla., native and daughter of a geophysicist at Chesapeake Energy Corp., was tasked with selecting a career and interviewing someone in that field. Her father asked a geologist in his company to talk with her. "I loved everything she told me, so I thought I would give geology a try as a career," Rosencrans recalls. "I just love it."

Now in her junior year in the ConocoPhillips School of Geology and Geophysics, Rosencrans is working in the paleomagnetism lab of CPSGG director R. Douglas Elmore.

The job was meant to be hers. As a student in Elmore's

sedimentary petrology class in spring 2011, Rosencrans asked him to write a letter of recommendation for a position in the Research Experience for Undergraduates program at Wisconsin university. She didn't get it, but when she told Elmore and thanked him for his efforts, he said he had a place for her in his lab. She started working there this past summer.

The honors student also is carrying a 16-hour course load and tutors freshman geology students and non-majors enrolled in Introduction to Geology through the University College Action Center.

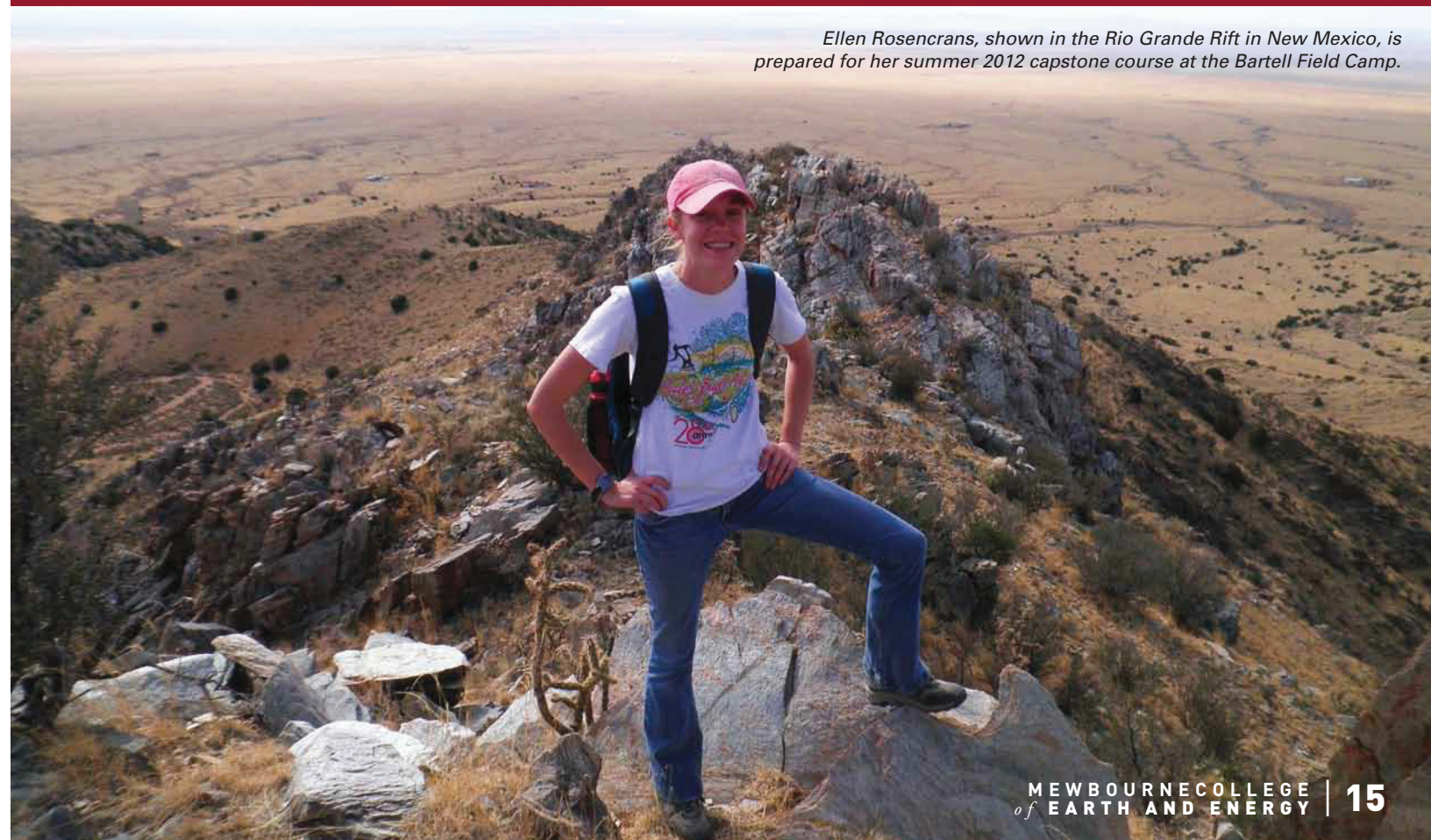
She is looking forward to next summer, when she plans to attend the six-week capstone course at

the Bartell Field Camp near Cañon City, Colo., which was under construction when she visited on a 2010 field trip. "I can't wait to go back," she says.

While Rosencrans hasn't precisely mapped out the course of her geology career, her tentative plans include graduate school and working in the energy industry.

"I'm not ruling out teaching, though," she says. "I was able to help [geology] Professor Mike Soreghan at the ExxonMobil Bernard Harris Summer Science Camp, 'Earth Cycles: A Whole-Earth Approach to Enhancing Learning of the Geosciences for Middle School Students.' That experience made me consider a career in education." ■

Ellen Rosencrans, shown in the Rio Grande Rift in New Mexico, is prepared for her summer 2012 capstone course at the Bartell Field Camp.





173 STUDENTS EARN DEGREES

ONE HUNDRED SIXTEEN STUDENTS PARTICIPATED IN THE MEWBOURNE COLLEGE OF EARTH AND ENERGY SPRING 2011 CONVOCATION ON MAY 14 AT THE PAUL F. SHARP CONCERT HALL IN CATLETT MUSIC CENTER ON THE OU NORMAN CAMPUS. ANOTHER 11 NEW GRADUATES TOOK PART IN THE DEC. 17, 2010, GRADUATION RECEPTION HELD IN THE SARKEYS ENERGY CENTER EAST ATRIUM.

FORUM FOR COMMUNICATION

2011-2012 DEAN'S ADVISORY COUNCIL

Initiated by Dean Larry Grillot in fall 2007, the Dean's Advisory Council provides a forum for undergraduate and graduate student leaders from the Mewbourne School of Petroleum and Geological Engineering and the ConocoPhillips School of Geology and Geophysics to communicate to the dean issues of concern and for the dean to keep students informed of college activities and issues and leadership to establish programs to enrich the college experience for students.

DAC REPRESENTATIVES FOR 2011-2012:

- **Matt Miller, president**
Pick and Hammer
- **Ethan Plunkett, president**
Society of Petroleum Engineers
- **Kylie Bohanan, *Earth Link* editor**
MPGE
- **Emilio Torres Parada, president**
American Association of Petroleum Geologists
- **Trevor Ingle, president**
Pi Epsilon Tau
- **Travis Cude, *Earth Link* editor**
MPGE
- **Yoryenys Del Morro, president**
Society of Environmental Geologists
- **Jacob Bower, president**
American Association of Drilling Engineers
- **Bagdat Toleubay, *Earth Link* editor**
CPSGG



ENGINEERS TREK FOR CANCER

SPE RAISES RECORD AMOUNT FOR CANCER RESEARCH

WEARING OIL-FIELD coveralls donated by Halliburton, a team of 15 student members of the University of Oklahoma chapter of the Society of Petroleum Engineers walked through the night on April 9-10 to raise \$17,500 for cancer research as part of the 2011 OU Relay for Life.

Over the past three years, the SPE team steadily has increased its donation through generous contributions from alumni and industry corporate sponsors.

This year's team also created and sold Engineers Club Bingo Night T-shirts and homemade cookies, helped organize a benefit

concert and the night of entered two male participants in the Mister Relay contest, who raised an additional \$165 by asking for donations on Campus Corner while dressed in drag.

The \$17,500 donation is a record for both SPE and an individual team at OU, says Ethan Plunkett who, with 2011 MPGE graduate Kristin Weyand, served as team captain.

"One of our most beloved and respected professors in the petroleum engineering program has successfully battled cancer," says Ethan Plunkett, one of SPE's two team captains. "Although our team

members participate in support of their own friends and family who have been affected, this has been one of the biggest motivators for our team."

Plunkett, who serves as 2011-2012 SPE president, has participated in Relay for Life since high school. "Five members of my family have had cancer, and I have always enjoyed raising funds to support research.

"I know we are on the verge of curing this disease," he says. "I will do everything I can to make sure SPE increases its goal for Relay for Life 2012." ■

PUSHING PAST THE COMFORT ZONE

Q&A WITH KRISTIN WEYAND



*Mewbourne College 2011 Outstanding Senior
Kristin Weyand and Dean Larry Grillot*

KRISTIN WEYAND (B.S. PETROLEUM ENGINEERING, 2011) WAS THE MEWBOURNE COLLEGE OF EARTH AND ENERGY'S 2011 OUTSTANDING SENIOR. SHE CURRENTLY IS AN ARTIFICIAL LIFT ENGINEER FOR CONOCOPHILLIPS IN FARMINGTON, N.M.

have students from all ethnicities and backgrounds, which I think is a great asset to the program.

In spring 2010, I spent five months living and studying at the Middle East Technical University in Ankara, Turkey. OU has established some awesome exchange programs with partner universities all over the world. I decided on METU because it offered courses in petroleum engineering that transferred as credits toward my degree and the courses were taught in English.

Q. How did that experience impact you personally and professionally?

A. I had traveled internationally before studying abroad, but the experience of living in another country—one where English was not widely spoken outside of the university setting—was an eye-opening experience. I've always strived to force myself outside of my comfort zone, and I definitely achieved that. I met students from European and Asian countries as diverse as Kazakhstan, Iraq, Sweden, Belarus and Bosnia-Herzegovina. During the semester, I spent a lot of time traveling inside of Turkey. It is a beautiful country, and I found the people to be extremely warm and welcoming, especially once I attempted to

communicate in Turkish.

Perhaps the most incredible aspect of the country was the history. Civilizations from the Hittites and Assyrians through the Romans, early Christians and Seljuk Turks have made their mark on the land and left behind amazing relics and structures.

I hope my experiences living abroad will give me a leg up in my aspirations to work internationally for a large petroleum company. It also was a test for me: I now know that I would be able to live for a period of time away from friends, family and comforts of home.

Q. Describe your position at ConocoPhillips.

A. I am an engineer in the Artificial Lift Group for the San Juan Business Unit in Farmington, N.M. ConocoPhillips's assets in the San Juan Basin include more than 10,000 natural gas wells, and nearly three-quarters of those wells utilize plunger lift to aid in production. My team specializes in optimizing our plunger-lifted wells. I currently am responsible for our ongoing plunger controller upgrade project, a multi-million-dollar program that will include nearly 700 projects over three years.

SEE WEYAND CONTINUED ON PAGE 34

Q. You participated in the University of Oklahoma's Study Abroad program. Where did you go and what did you study?

A. When I started college, I planned to study abroad for at least a semester. Today, so much business is conducted globally that a true understanding and appreciation of other cultures is extremely important, especially in our business. You can see that just by looking at the students in the petroleum engineering program at OU. In the middle of Oklahoma, we



A BAYOU-STYLE CRAWFISH BOIL

A CRAWFISH BOIL IN OKLAHOMA SOUNDS AS UNLIKELY AS A PIG ROAST IN NEW YORK CITY. BUT EVERY SPRING SINCE 2007, THE UNIVERSITY OF OKLAHOMA STUDENT CHAPTER OF THE SOCIETY OF PETROLEUM ENGINEERS HAS HOSTED A CRAWFISH BOIL OF WHICH EVEN GULF COAST BAYOU DWELLERS WOULD BE PROUD. ■

ON A WARM, cloudless Saturday this past April, an estimated 500 MCEE students, faculty and staff devoured 600 pounds of crawfish, plus bowls of jambalaya and plates of corn on the cob and potatoes, at the Fifth Annual OU SPE Crawfish Boil outside on the plaza level of Sarkeys Energy Center.

The free end-of-semester celebration was catered by an Alexandria, La.-based company and sponsored by Crescent Services LLC of Oklahoma City and HB Rentals of El Reno, Okla. Live entertainment was provided by Dolomite, a band that

included 2010-11 SPE president John Ammon (B.S. petroleum engineering, 2011) on electric guitar, SPE vice president and petroleum engineering senior Jon Clark on drums, and social chairman and petroleum engineering senior Darryl Blackburn on guitar and lead vocals.

"This event is so important for our college because it gives everyone a chance to socialize outside of a classroom environment. Building relationships with coworkers and colleagues is one of the most important aspects of our business today," Ammon says. "Besides

Saturday [football games] at Owen Field, the crawfish boil is the most exciting event on OU's campus."

Blackburn agrees.

"The crawfish boil is the biggest purely social event of the year for SPE," he says. "It's an opportunity for students, faculty and staff to just hang together and have a good time. Every year we have an even better turnout."

And what of the mounds of crustaceans and fixings?

"There was not a drop of anything left," Blackburn says.

"That made clean-up easy." ■



A MODEL FIELD CAMP

Geology and geophysics students and faculty at the University of Oklahoma have traveled to southern Colorado for field study for decades. They have operated out of rented facilities and even shared a camp with another university, but they never had a true home. Until now, that is.

On June 11, nearly 100 people gathered for the dedication of the ConocoPhillips School of Geology and Geophysics Bartell Field Camp

with a daylong celebration that included tours by ATV and on foot, a trio of delicious meals and heartfelt remarks by proud alumni, faculty and students.

Named in honor of OU geological engineering alumnus J. Denny Bartell and his family, who made the lead gift for the project, the field camp is located on a 71-acre site about five miles outside Cañon City, Colo. Situated on the northeastern edge of the Wet Mountains and overlooking the

Cañon City Embayment, a structural reentrant in the Colorado Front Range, the camp offers magnificent views of Pike's Peak to the north and the Great Plains to the east.

The idea for the camp germinated from a chance encounter between Bartell and CPSGG director and professor R. Douglas Elmore on a flight from Houston to Oklahoma City in 2008.

"I threw out the idea of having a summer program that involved both ancient and current

sedimentary processes," Bartell recalls. "One thing led to another and we decided we should build a camp in Colorado. I said I would put up the money for the base and we would pass the hat among the troops for the accoutrements."

Bartell well remembers the field camp facilities available to him as an OU geology student.

"It was a modest old Civilian Conservation Corps camp on Lake Murray [the creation of Lake Murray State Park in 1937 was a CCC project]. "Actually, 'primitive' is the word that comes to mind," he says.

"There was no hot water other than a holding pan on the roof that the sun had heated. The first person back to camp got the hot water."

The camp that now bears his name is far different. It consists of a dining hall/kitchen/office building, a study hall, 10 student cabins, two student bathhouses, and faculty/staff cabins with private bathrooms.

"The camp is beyond all expectations," says Bartell, who didn't see the facility until the dedication. "The most wonderful part is that there is still room to expand and amplify what has been done."

He credits Elmore with making the most of available resources.

"We all need to tip our caps to Doug," Bartell adds. "He stretched every dollar two times and did an outstanding job."

What Elmore didn't do was cut corners.

"Denny told me, 'Doug, don't skimp. Make it very nice,'" Elmore

remembers. "I listened to him. We weren't extravagant by any means, but we do have a very nice camp."

The benefits of the Bartell Field Camp are many. First and foremost, it provides a base for an unparalleled hands-on, real-world field experience for geology and geophysics students.

In both disciplines' capstone courses conducted at the camp, students operate "The Thumper," an apparatus attached to the back of a modified all-terrain vehicle that when triggered provides a shock to the ground, producing seismic waves that can be picked up by geophones.

"Geology and geophysics students collect seismic data and process and interpret it from out in the field," Elmore explains. "Many of them will never collect seismic data again, but they will have done it once at the Bartell Field Camp. They'll have experienced the whole process."

OU provost and senior vice president Nancy Mergler saw the impact of that experience at the camp dedication.

"One has to see geologists close to rocks to truly understand their passion for their discipline," she says. "Rock formations are like their books, and to see them interpreting these formations to others is fascinating."

In addition to the real-world field experience provided to students, another benefit of having its own camp is that CPSGG can better manage and control its own success and provide a competitive advantage



over other programs.

"One hallmark of a premier geology program is to have its own field camp. With the Bartell Field Camp, we can manage and control our own success and have a competitive advantage among our peers. And the entire university has a facility for research and retreats," Elmore relates.

"Getting the camp up and running took an immense amount of time, but having it open and successful is very satisfying," he adds.

Bartell concurs. "It's a wonderful facility," he adds. "The alumni involved are very proud, and OU can be very proud." ■



ON THE EDGE OF A FRONTIER



In the world of oil and gas exploration and production, a decade is but a blip on a timeline.

But only a decade has passed since the oil and gas industry began pursuing production from shale, long ignored because of its low permeability, which allowed only small volumes of gas to flow naturally and made producing more viscous oil virtually impossible.

Not so anymore. Today, shale gas development is ahead of oil, but still in the early stages because accumulations are difficult to characterize and commercially produce using conventional exploration and production techniques.

The Mewbourne School of Petroleum and Geological Engineering has seized upon the opportunity to progress scientific knowledge and field applications in this new scientific frontier. In collaboration with Oklahoma City-based Devon Energy Corp., MPGE's rock physics laboratory – formally known as the Integrated Core Characterization Center or IC3 laboratory – has emerged as a world leader in rock physics and

petrophysics research, particularly in core analysis.

“For the past six years, we have had a very good working relationship with Devon, which has supported us enormously financially in shale research as well as with data, core samples and field experience,” says Carl Sondergeld, MPGE professor and Curtis Mewbourne Chair, who with MPGE director and Eberly Chair Chandra Rai, directs the laboratories.

During that period, Devon has invested more than \$20 million into the rock lab, much of it for specially designed equipment, to help ensure that the laboratory stays at the forefront of shale analysis.

“Because shales are so fine-grained, their properties are very different from those of a conventional reservoir, so techniques we’ve used previously to measure properties don’t work on shales, so we have to reinvent techniques and technologies to make these measurements,” Sondergeld explains.

“We employ micro-scale and nano-scale technologies used in the semiconductor industry to design and



From top: Geochemistry graduate student Paul Bowen, professor Carl Sondergeld and doctoral fellow Mark Curtis

build unique equipment to address the challenges of shales.”

An example of purchases funded by Devon is the special dual-beam scanning electron microscope that has an integrated focused ion beam. With this technology, university researchers can reconstruct three-dimensional images of fine-scale pores structures of shales, determine how pores are connected and how much material within the shale is organic, all of which is important in production from shale.

“The lab has provided us with a unique and invaluable tool for the exploration and evaluation of shale formations,” says Jeff Hall, vice president of exploration and exploitation for Devon Energy. “This is the type of technology that allows us to move forward with new drilling and well completion innovations. The geological and engineering challenges we face today are far greater than anything we have seen in the history of our industry. This lab helps us to assess the production potential of formations and to find ways of producing the oil and natural gas with the greatest efficiency.”

Three years after the original collaboration with Devon, MPGE established similar relationships with Apache Corp. and Cimarex Energy. Six other companies – ConocoPhillips, Encana, Reliance Oil & Gas, Total, Statoil and Pioneer Natural Resources – have since joined a dedicated consortium to study shales known as the Unconventional Shale Gas Consortium. Scientists from

consortium member companies regularly bring challenging problems to the OU lab which, Sondergeld notes, helps students and furthers research objectives.

“The whole move to shale was a different way of thinking. These materials are impermeable, requiring hydraulic fracturing – or fracking – to get the gas out of them,” Sondergeld says.

“Drilling a horizontal well in shale that ultimately goes down one to two

“THE LAB HAS PROVIDED US WITH A UNIQUE AND INVALUABLE TOOL FOR THE EXPLORATION AND EVALUATION OF SHALE FORMATIONS.”

JEFF HALL

VICE PRESIDENT OF EXPLORATION AND EXPLOITATION DEVON ENERGY

miles costs between \$4 million and \$8 million. The companies have certain economic expectations, but it’s very difficult to forecast the economic return because they can’t see down the well. Anything we can do to help them mitigate their risk is really money in the bank to them. And even little changes we make have tremendous economic implications. Drilling strategies and completion processes can be changed based on what we learn in the lab.”

While the companies reap economic benefits, graduate students in the IC3 lab and undergraduate students in the adjacent Apache Petrophysics Lab have extraordinary opportunities to conduct research on important and interesting topics. “Their work allows them to publish and present at conferences, which gets them recognized as valued individuals in the industry and enhances OU’s reputation,” Sondergeld says.

“I think we now are globally recognized as a leading shale research center.”

Two major industry publications agree. Both the *Journal for Petroleum Technology* and *American Oil & Gas Reporter* feature the OU rock lab in their respective June 2011 issues. In its story about the prominent role of industry-supported university research in defining the structure and elements in shale, *JPT* singles out OU as “an example of the competitive drive to understand these challenging rocks.” And the *Reporter’s* cover story, “Advanced SEM Technology Clarifies Nanoscale Properties of Gas Accumulations in Shales,” refers to OU as “an early adopter of the FIB/SEM technology in collaboration with Devon Energy Corporation [that uses] the technology to make observations about tight shales.”

Another measure of OU’s dominance in shale research is its annual shales conference, which draws up to 300 attendees each year.

“At this year’s conference,

SEE FRONTIER CONTINUED ON PAGE 34



A CENTER FOR EARTHQUAKES

Excerpted with permission from *Sooner Magazine*, Spring 2011, Published by The University of Oklahoma Foundation Inc.

While mythology is replete with explanations for how and why earthquakes happen, science tells us that they occur in response to forces that build up over long periods of time when two bodies of rock slide past each other. A large earthquake produces slips measured in tens of meters; a small one can produce a quake with displacements as tiny as a millimeter.

Oklahoma has had—and continues to have—its share of earthquakes. The earliest documented tremor occurred prior to statehood on Oct. 22, 1882, near Fort Gibson. The state's largest recorded earthquake, a 5.5 magnitude near El Reno on April 9,

1952, caused damage to the State Capitol Building in Oklahoma City and was felt as far away as Austin, Texas, and Des Moines, Iowa.

The second largest, with an epicenter approximately five miles east of Norman, occurred at 9:06 a.m. on Oct. 13, 2010. With a magnitude of 4.7, the tremor was felt as far north as Kansas City and as far south as Dallas.

On that sunny fall morning, Oklahoma Geological Survey research seismologist Austin Holland was working nonstop, assimilating and analyzing data and fielding a barrage of media inquiries. He patiently and repeatedly explained the what, when, where, why and how in

terms an anxious public could readily understand.

Earthquakes are assessed based upon data collected at seismic stations, each of which is equipped with a seismometer (also known as a seismograph) that records ground motion as seismic waves go by. The OGS currently has nine seismic stations deployed around the state.

"The wave signal is converted into data we can shoot through the air via modem or satellite and receive into our central recording computers," explains Holland.

"We analyze that data and make some assumptions to determine how much energy was released in the earthquake to arrive at the magnitude number."

The West Coast, the New Madrid Fault in the Mississippi Valley and the Charleston, S.C., vicinity are the most active earthquake hazard areas in the continental United States. Holland says Oklahoma is No. 2 in the mid-continent area and No. 4 or 5 in all of the lower 48 states.

The OGS began running seismograph stations in Oklahoma in partnership with volunteers in 1961. The OGS Observatory in rural Tulsa County south of Leonard, part of a national network of state-of-the-art seismic observatories, records the state's earthquakes, as well as those with magnitudes of 5.5 or greater anywhere in the world.

Since 1977, the OGS has recorded and located more than 2,500 earthquakes in the state. On Jan. 15, 2010, two earthquakes nine minutes apart rocked eastern Oklahoma County near Jones. They measured 4.0 and 3.8 magnitude, respectively.

"Earthquakes of the size of the Jones events have the potential of occurring almost anywhere in Oklahoma at any time," says OGS director Randy Keller. "On average, about 50 measurable earthquakes occur each year in Oklahoma, with only a few strong enough to be felt."

Holland explains that there are many ways to arrive at an earthquake magnitude. The methods used by both the USGS and the OGS are among a handful of scientifically accepted magnitude measurement standards.

Keller likens the physics of measuring earthquakes to that of measuring tornadoes. "For a tornado, the scale is based on wind speed. For earthquakes, it's the release of stress in the earth," he explains. "Neither method results in perfect measures. But it's even more difficult to observe the deep earth than the atmosphere."

The OGS constantly strives to provide the most precise earthquake

information possible. Those efforts are being aided by Earthscope, a multi-year initiative of the National Science Foundation through which thousands of seismic, GPS and other geophysical instruments are being deployed to study the structure and evolution of the North American continent and the processes that cause earthquakes and volcanic eruptions.

Through Earthscope, the OGS is "adopting" four new seismographic stations to complement its existing nine. Holland and Keller will make good use of the valuable information the Earthscope stations will provide.

"Our goal is to learn as much as possible about earthquakes and earthquake processes in Oklahoma so that we can understand and reduce earthquake risks to Oklahomans," Holland says.

"I don't think prediction will come in my lifetime, but increasing that knowledge will help us move toward prediction." ■

OGS director Randy Keller



OGS research seismologist Austin Holland

MEWBOURNE COLLEGE

MEWBOURNE COLLEGE OF EARTH AND ENERGY

**THE
FIRST
5
YEARS**



NAMED IN HONOR OF CURTIS MEWBOURNE

CHARTERED: Jan. 1, 2006

COMPONENTS

- ConocoPhillips School of Geology and Geophysics
- Mewbourne School of Petroleum and Geological Engineering
- Oklahoma Geological Survey
- Sarkeys Energy Center

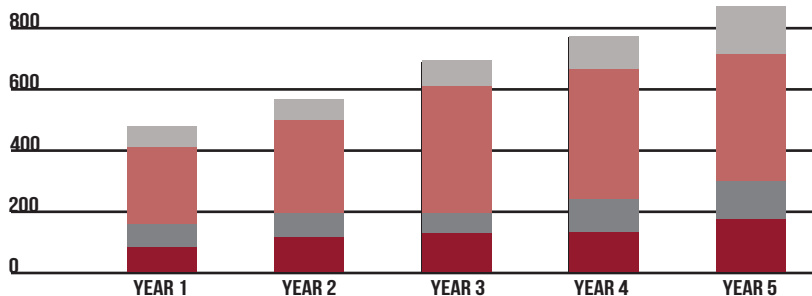
OBJECTIVE

- Provide an academic environment in earth sciences and engineering, energy education and research that contains the full breadth of the University of Oklahoma educational experience
- Investigate the state of Oklahoma's land, water, mineral and energy resources

ACCOMPLISHMENTS

MEWBOURNE COLLEGE OF EARTH AND ENERGY STUDENT ENROLLMENT

MPGE GRADUATE | MPGE UNDERGRADUATE | CPSGG GRADUATE | CPSGG UNDERGRADUATE



FALL 2011 ENROLLMENT: 957

144 CPSGG UNDERGRADUATES

591 MPGE UNDERGRADUATES

115 CPSGG GRADUATES

107 MPGE GRADUATES

OF EARTH AND ENERGY



- Facilities and infrastructure
 - Bartell Field Camp
 - Crustal Imaging Facility
 - PE undergraduate teaching labs
 - Mi-Swaco Fluids Lab
 - NOV Drilling Simulator
 - Mineralogy and Sedimentary Petrology labs upgrades
 - Youngblood Energy Library remodel
- Student lounge areas
 - Gene Van Dyke Plaza
 - Atrium
 - Level 2
- New computer labs
 - Gene Van Dyke Plaza
 - Level 10
- Energy Center Tower
 - Levels 10-15 remodel
- Levels 7-9 upgrades
- Computer wiring and wireless upgrade
- Gene Van Dyke Plaza meeting and conference rooms
- Elevator upgrades
- New fire safety alarm system
- Selected improvements at OGS Core Facility

FACULTY

MPGE



CPSGG

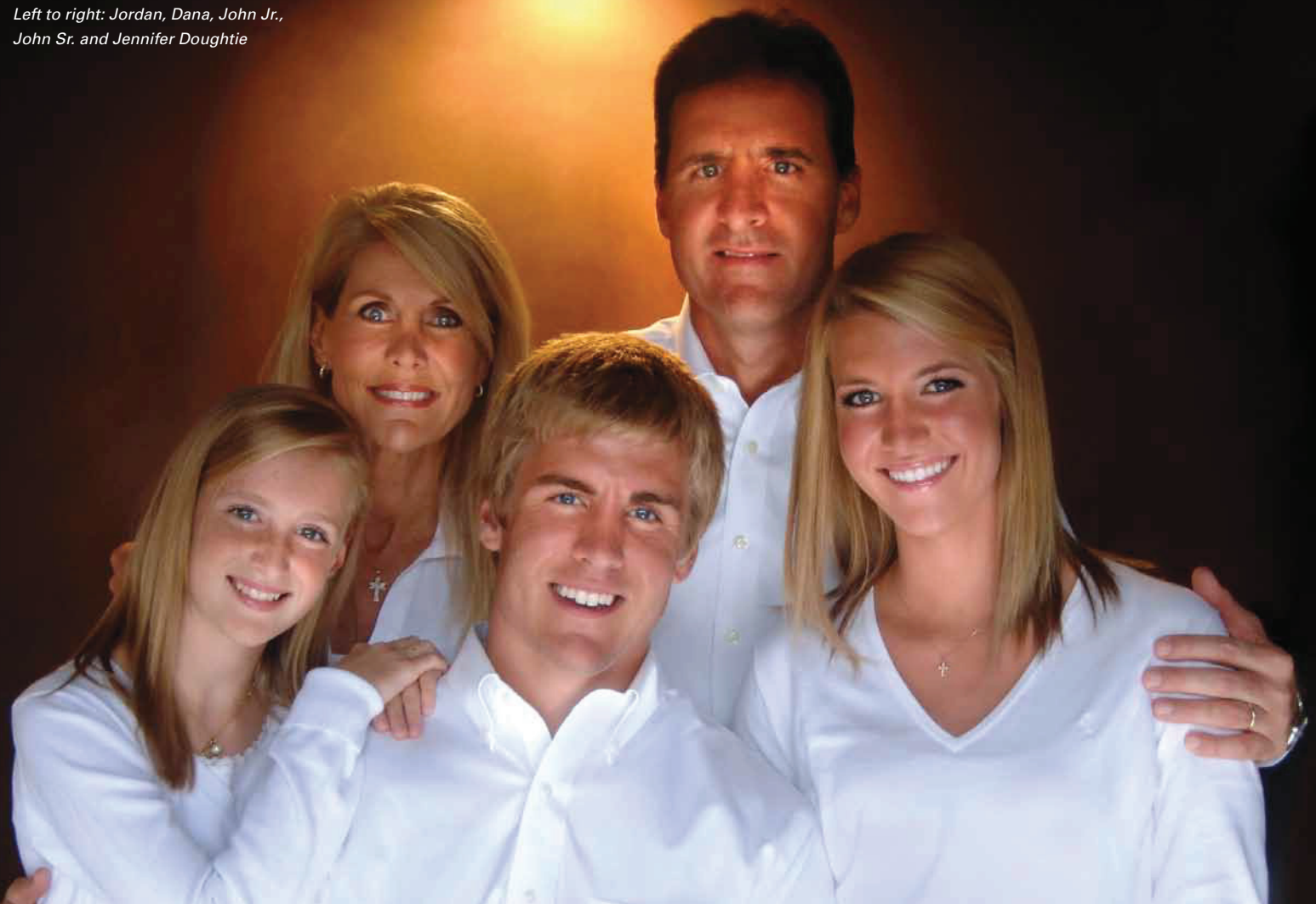


ADMINISTRATION

- Assumed management of scholarships and fellowships
- Coordinated financial system across college
- Developed Student Services
- Standardized IT support

GOALS

- Add 20 new scholarships in 2011-2012
- Create fellowship positions for MPGE and CPGG
- Increase laboratory support endowment fund
- Grow unrestricted funds for use in areas of greatest need
- Increase participation in Annual Fund, which supports:
 - Alumni outreach
 - Annual scholarships
 - Convocation
 - Dean's Student Advisory Council
 - Distinguished Alumni and Service Awards Dinner
- *Earth and Energy* magazine
- Student chapter sponsorships
- Student travel
- Trailblazer Award Dinner
- Welcome Back Barbecue



PAYING IT FORWARD

EASING BURDEN ON STUDENTS IN NEED

If anyone understands the plight of students who may not have the financial wherewithal to get through school without assistance, it is John Doughtie.

So Doughtie (B.S. geology, 1984) and his wife, Dana, have established scholarships to lighten the burden for a number of current and future University of Oklahoma students.

Their \$350,000 in commitments thus far supports endowed and annual scholarships in the ConocoPhillips School of Geology and Geophysics as well as the

Jeannine Rainbolt College of Education and the university's Sooner Heritage Scholarship program, which provides support for students of middle income families who still need a helping hand with college expenses or who have more than one student attending college. "It is important that all of these students have the opportunities to pursue their chosen careers," Doughtie says.

He has firsthand knowledge of just how important that support can be. As an undergraduate, he was a

fixture at the OU financial services office applying for loans and grants. "I knew everybody who worked there," he jokes. He also got to know longtime OU philanthropists Sandra and Brian O'Brien through their son, Tim, who was Doughtie's roommate. "Sandra and Brian provided me with some financial support the last two years of college so Dana and I established a \$100,000 endowed geology scholarship in their honor that awards \$5,000 in scholarships each year," he explains. "I want to **SEE DOUGHTIE** CONTINUED ON PAGE 35 ■"

MENTEE TURNS MENTOR

ERICKSON RELISHES ADVISORY ROLE

AS A PETROLEUM engineering undergraduate, Eric Erickson (B.S., 1997) knew the mentoring he was receiving on campus and off would serve him well in his career.

"In addition to the wonderful faculty who provided mentorship, I also had key industry mentors who helped guide and influence me," Erickson recalls. "First and foremost, my father, Larry Erickson, was instrumental in keeping me focused on the prize of a degree and good job in the business. His lifelong passion for oil and gas became a part of me and caused me to become ever more enthused with the business as I progressed through my education at OU."

Another major influence was – and still is – MPGE alumnus Steve Richards (B.S. petroleum engineering, 1974), whom Erickson first met while representing a group of juniors and seniors at an [MPGE] Industry Advisory Board meeting. "Steve's guidance, wisdom and generosity afforded me a true boost toward the career of my dreams," Erickson states. "And his passion for interns and new hires continues to motivate me to help young engineers succeed."

Erickson enthusiastically continues that mentorship tradition wearing two hats: chairman of the IAB Mentoring Committee and principal and vice president of business development at Raptor Petroleum, a company he co-founded earlier this year.

"The Mentoring Committee's goal is to provide a resource for petroleum engineering students seeking answers to questions for which they don't yet have personal experience," he explains. "We are blessed to have a pool of talented oil and gas professionals from all facets of our industry, ranging from experienced line engineers to CEOs of large corporations as well as entrepreneurs. As those who have been through some of the ups and downs of the industry and know how to navigate the sometimes choppy waters, we are able to share that knowledge and experience with students."

He notes that as the oil and gas business is on the cusp of losing much of its technical and business expertise to retirement in the near future, mentoring is more valuable than ever. "I always avail myself to those in this business seeking guidance on any number of topics," he says. "I never leave a mentoring opportunity without having shared something I hope is insightful, and usually I gain insight through a student's or young professional's fresh perspective. Simply having helped someone make the right choices for himself or herself makes me feel as though I've made a positive impact."

MPGE, Erickson says, provided him with the tools necessary to be successful through its strong academic program and exposure to a broad network of professionals. And



Eric Erickson

he delights in being part of an active alumni board that offers some of those same tools to current students. His message to other alumni is simple: "We all have a lot to be grateful for. I encourage everyone to try and give a little back to the college and its students, the industry and their respective communities. Whether it be time, talents or gifts, we all can contribute to each other's success.

"I am blessed and grateful to have been afforded an opportunity to attend a great university and earn a degree from a program that equipped me to succeed," he adds. "I want to help others achieve a similar level of satisfaction with their careers and life." ■

NEVER TOO EARLY TO START

SUPPORTING THE COLLEGE IN MULTIPLE WAYS



Karen, Gracie and Cody Owens

OKLAHOMA CITY NATIVE Cody Owens is home again.

After graduating from OU with a bachelor of science degree in petroleum engineering in 2003, Owens joined Mewbourne Oil Co.'s operation office in Perryton, Texas, for a year followed by another year and a half in the company's Hobbs, N.M., field office. In both locations, he worked on the drilling, production and completion side of the business. After two years on the reservoir side in Mewbourne Oil's Tyler, Texas, headquarters, Owens moved again, this time to his

hometown, where the company has one of three exploration offices.

"I really enjoyed the field experience in Perryton and Hobbs," says Owens from his Oklahoma City office. "There's nothing like being where the action is and learning things on a first-hand basis. I wouldn't trade that foundation for anything. It really carried me forward in my engineering career."

Today, as a reservoir engineer, he works side-by-side with geologists to evaluate well prospects from both the reservoir engineering and economic perspectives. His work doesn't take him to the field much anymore, but it is just as interesting and rewarding as his years in the Anadarko and Permian basins.

"I love being involved in originating ideas for the company and finding opportunities to drill in western Oklahoma," he says.

Being home with family and friends has another advantage. Owens and his wife, Karen (B.S. petroleum engineering, 2006), became parents in August.

"We aren't sure what having Gracie will do to our fall football Saturdays in Norman," he says with a laugh. "But we have season tickets and will come as often as we can."

Regardless of the frequency of their visits to campus, the couple are proud OU and MCEE alumni who support the college through unrestricted gifts and contributions to the MCEE Deans

Fund and MPGE Directors Fund. And Karen maximizes their donations by taking advantage of the three-to-one Educational Matching Gift Program offered by her employer, ExxonMobil subsidiary XTO Energy.

"We both received scholarships when we were in school and want to do our part to help others," Cody Owens explains.

Their support takes non-financial forms as well.

Through Mewbourne Oil Co.'s internship program, Owens has many opportunities to visit with students about the direction in which the college is going and what they are learning in the classroom and laboratory. "I gain from them as much as I hope they gain from me," he says. "And it's fun to be around young people with a fresh, unique perspective."

He plans to further his interaction through capstone project ideas he is providing to MPGE. Through the capstone experience, he hopes he can provide data, answers and maybe even some advice.

Owens encourages other young alumni to become engaged with their alma mater.

"OU graduates like me with a few years of work experience under our belts have been exposed to all aspects of the industry. We can pass on that knowledge to young people in college now," says Owens. "We all need to be as involved as we can." ■

ENGAGING OTHERS TO GIVE BACK

CHALLENGE BECOMES OPPORTUNITY

WHEN SHARON MINOR completed her master's degree in geology from the University of Oklahoma in 2000, she was unable to find an energy industry job for six months.

"The oil and gas industry wasn't hiring at the time," recalls Minor, who also earned a bachelor of science degree in geology from OU in 1997. "I didn't do an internship and only five companies came to campus to recruit." She had a part-time job in the university's development office while she knocked on doors. "Finally, somebody opened the door and gave me a chance," she says.

That chance was a three-month internship with Louis Dreyfus Natural Gas, a company that she says typically didn't hire anyone with less than 10 years experience because it had no training program. Minor was an exception to that rule. "Dreyfus offered me a job at the end of my internship. I had a good mentor and learned a lot very quickly," she says.

These days, Minor, a senior staff geologist at Devon Energy Corp. and chairman of the ConocoPhillips School of Geology and Geosciences Alumni Advisory Council, makes sure that anyone she mentors is immediately immersed in the environment.

"I try to connect them with geologists, engineers, landmen and others in the field so they can get some experience right away," she explains. "A lot of major energy

companies won't let new hires work close to rigs for three years. Independents allow them to do more. I have new hires watching rigs within the first month."

That might mean joining Minor in her work with the Cana Team assigned to the Woodford Shale in Oklahoma's Anadarko Basin or the Northridge Team in the Arkoma Basin in the eastern part of the state. "I work as a development geologist, figuring out where on our leased properties we are going to drill wells," says Minor.

"Most of what I do – subsurface mapping from existing information on wells in the area – is done from right here in the Oklahoma City office, but occasionally I get to go out into the field."

Development geology has been her focus since she began her career with Dreyfus and continued at Dominion Exploration, which purchased Dreyfus, through her move to Devon four years ago.

"I really enjoy what I do," she says.

Minor arrives at the office at 6 a.m. so she can get home to Norman in time for another passion – the Alaskan malamute, Labrador retriever mix and Boston terrier that complete her family with husband, Rick, a district sales manager for a leading provider of oxygen therapy equipment and services. "He travels a lot, so I usually feed and exercise the dogs at the end of the

Sharon Minor



day," she says.

As she begins her two-year term as chairman of the Alumni Advisory Council, one of Minor's priorities is to engage more of her peers – geology and geophysics graduates in their 30s and 40s – in giving back to the school.

"Because of the fluctuations in the late 70s and early 80s, the energy industry lost a lot of people who never came back. So there is a gap between the older alumni who have consistently been involved for decades and my generation," Minor explains. "I want to see our age group become more involved." ■

A BALANCED APPROACH TO SERVICE

CULTIVATING EXCELLENCE FROM WITHIN



Craig Koontz

Craig Koontz has a lot on his plate as general manager of International Business Services for Anadarko Corp. Still, he carves out time to serve on the Mewbourne School of Petroleum and Geological Engineering Industry Advisory Board, this year as its chairman.

“I have a passion for helping students and young professionals learn about the energy industry and develop professionally,” says Koontz (B.S. petroleum engineering 1980, M.S. petroleum engineering 1982), a 30-year industry veteran.

He has been doing that for nearly a decade. After returning home after an assignment in the North Sea for his then-employer, Kerr-McGee Corp. (which was acquired by Anadarko in 2006), Koontz was approached by a company vice president about representing Kerr-McGee on the MPGE board. He agreed to do it, beginning his tenure in 2003. A two-year term as vice chairman preceded his service as chairman.

“One of the board’s objectives is to benefit students as much as possible,” Koontz explains. “As we look at comparable entities at other universities, we perceive that often boards are populated with people who are very well-off financially and contribute to the universities in that manner. That’s a very important part of what boards do. But the distinction for us is that we’re not totally focused on the money side.

We try to help faculty and students in a more intimate way, so we try to get the right mix of people who can provide financial support, plus younger talent who reflect the demographic shift in the energy industry, people who have time to contribute and accomplish our goals, those who can help promote MPGE in the industry, and others who can ensure we embed students into the industry by providing jobs.”

The Industry Advisory Board has several initiatives under way. Nine committees – the chairs of which

constitute the board’s executive committee – provide MPGE in such areas as alumni engagement and fundraising, as well as helping students with capstone projects, internships and employment.

The Capstone Committee solicits industry for technical challenges or projects that are screened and assigned to student teams to solve during their semester-long Capstone course. “I had the privilege to serve as chair of the Capstone Committee for three years,” Koontz relates. “It is an interesting exercise for all parties striving to integrate efforts among industry, faculty and students through the course and is always a challenge to get the right kind of projects that can help prepare students for the transition from academics to industry.”

He says the Internship Committee can’t take credit for the more than 90 percent success rate in students receiving internships over the past few years, but it has been instrumental in rounding up opportunities for a number of students. The Scholarship Committee assists MPGE faculty to develop award criteria and select recipients.

Focused on cultivating relationships between students and industry representatives, the Mentorship Committee serves students by helping them understand the energy industry and mentor them

SEE KOONTZ CONTINUED ON PAGE 35



IN MEMORIAM
CY WAGNER JR.
 REMEMBERING AN INDUSTRY LEGEND

LEGENDARY OILMAN AND

University of Oklahoma geology alumnus Cyril "Cy" Wagner Jr. died Aug. 30, 2011, in Midland, Texas, at the age of 77.

Born and raised in Tulsa, Wagner earned his bachelor's degree in geology in 1956. In 1962, he formed Wagner & Brown Ltd. on a handshake with business partner Jack Brown. Based in Midland, Wagner & Brown is among the largest privately held independent oil and gas exploration and production companies in the nation.

As an investor and entrepreneur, Wagner also engaged in real estate, diversified manufacturing and investments.

Wagner, with his wife, Lissa, are longtime supporters of the university. Their gifts created Lissa and Cy Wagner Hall, where all student academic services now are housed;

the Cy and Lissa Wagner Sooner Heritage Scholarship endowment; an endowed professorship in geology and geophysics; and a Presidential Professorship that honors outstanding teachers. Their generosity also provided for improvements in the Laurence S. Youngblood Energy Library and renovation of the Wagner Dining Hall, which serves the university's student-athletes.

The couple also are OU Energy Center founders, Distinguished OU Associates and founding members of the Seed Sower Society, and major donors to the Great Expectations Campaign for Sooner Sports and the Fred Jones Jr. Museum of Art. In addition, Wagner was a longtime member of the Mewbourne College Board of Visitors and also served on the OU International Programs Center's Board of Visitors.

In recognition of his steadfast and generous support to the university, Wagner received an honorary degree in 2006.

Wagner's service to his profession and community included serving as chairman of the All-American Wildcatters Association and on the boards of many corporate and charitable entities, including the Texas Medical Center, Chase Bank of Texas, Pennzoil Corp., Rexene, El Paso Chemical, the Kelsey-Seybold Clinic, and Midland Memorial Hospital.

He was a member of the Oklahoma Hall of Fame and Petroleum Hall of Fame; recipient of the American Academy of Achievement's Golden Plate Award and Permian Basin Petroleum Association's Top Hand Award; and, with Brown, honored at the 2010 Permian Basin International Oil Show. ■

WEYAND CONTINUED FROM PAGE 18

Q. How has your transition from college to the workplace gone?

A. My transition has gone smoothly, mostly due to the fact that I interned with ConocoPhillips for the previous two summers. There's definitely been a learning curve, but it's extremely satisfying to be contributing meaningfully to my company through my daily work.

Q. What about your OU experience stands out as preparing you for success, both in school and out?

A. My participation in the Society of Petroleum Engineers contributed the most to my success in and out of school. Networking is a huge aspect in our industry, and there is no better place on campus to meet your fellow classmates than through SPE. The organization also gave me incredible

leadership and event-planning opportunities and helped develop my passion for philanthropy.

I attended the Annual Technical Conference and Exhibition three of my four years in school, including ATCE 2010 in Florence, Italy, as the captain of the Petrobowl Team. I also traveled to Barcelona, Spain, as the scribe for an SPE-sponsored shale gas conference in spring 2011.

I continue to be involved as the secretary for the SPE Four Corners section.

Q. What advice do you have for current MCEE students?

A. Get involved while on campus and take advantage of the amazing opportunities offered by the college and university. Academics should come first, but college life is much more satisfying when you try new experiences. ■

FRONTIER
CONTINUED FROM PAGE 23

SEM Technology Clarifies Nanoscale Properties of Gas Accumulations in Shales," refers to OU as "an early adopter of the FIB/SEM technology in collaboration with Devon Energy Corporation [that uses] the technology to make observations about tight shales."

Another measure of OU's dominance in shale research is its annual shales conference, which draws up to 300 attendees each year.

"At this year's conference, someone remarked that from any good shale conference you leave with more questions than answers," Sondergeld relates. "For the past 70 years, we have been studying reservoirs. For the past 10 years, we've been studying shales. We are rapidly accumulating a body of knowledge, but we have so much more to learn." ■



DOUGHTIE CONTINUED FROM PAGE 28

recognize the people who helped me and pass it on for generations.”

Doughtie’s successful career in the energy industry that the O’Briens and others help make possible includes seven years at Solatex Resources Ltd., and another 10 as president of his own company, Linder-Doughtie Energy. He sold Linder-Doughtie in late 2001 and early the following year joined LLOG, a premier private exploration and production company in the Gulf of Mexico and one of the top 10 private oil and gas producers in the United States. He currently manages LLOG’s Houston office.

He oversees five consulting groups that generate in the Gulf of Mexico and onshore Louisiana and Texas and enjoys being an active, hands-on geologist. “I’ve always enjoyed the exploration side of the business,” he says.

“I like interpreting the geologic data and providing the reserve analysis for some of LLOG’s key fields.”

Two of the Doughties’ three children plan to follow him into the industry. Jennifer, an OU sophomore, and John Jr., a junior at the Colorado School of Mines, both are majoring in petroleum engineering. “John most likely would have gone to OU if he hadn’t had the opportunity to play football in Colorado,” Doughtie says. The youngest sibling, sixth-grader Jordan, likely will head to his father’s alma mater. “She says she wants to be a school teacher, so there’s no better place to get a teaching degree than OU,” he says. “She always has been a Sooner fan.”

While the Doughtie children are lucky enough to not need financial assistance to complete their degrees,

hundreds of others have benefited or will benefit from their parents’ generosity. “We wanted to give to the geology school, but we also looked at other areas within the university that have a need,” Doughtie explains. “We saw that need in the College of Education, where Sandra O’Brien is very involved. Dana is a former teacher, so supporting future educators is important to her. We also wanted to support the university’s efforts to enable all Oklahoma students to attend OU, so we contribute to the Sooner Heritage scholarship program.

“Creating these scholarships is one of the most rewarding things we have done. It is fun for us to be able to help good students in different fields. We feel that God has blessed us so that we can be a blessing to others.” ■

KOONTZ CONTINUED FROM PAGE 32

as they approach the transition from school to workplace.

The Fundraising Committee seeks to address unmet needs within MPGE.

Three other committees round out the board: ABET, which provides support in ensuring the school maintains its accreditation; Faculty Search, which assists in recruiting and hiring professors; and University Communications and Engagement, which reaches out to the energy industry for professionals to come to OU to speak with students.

The Industry Advisory Board seeks to stay continuously engaged with the school. Once a month, the Executive Committee conducts a

45-minute conference call that helps maintain a level of commitment and accountability. “We want to make sure we are progressing on our initiatives and doing all we can to support the school,” Koontz explains. “We go around the ‘table’ and discuss status and direction of committee initiatives as well as receive updates from [MPGE director] Dr. [Chandra] Rai on any new or emerging issues within the school.” Koontz calls MPGE the feedstock for the industry, delivering talent that helps supply energy to the world.

“As a board, we want to support the school as much as possible. Each of our members has a passion for helping

MPGE be a world-class provider of energy professionals,” he says.

Aside from his work on the Industry Advisory Board, Koontz has considerable interaction with MPGE graduates and students who join Anadarko as new hires or summer interns.

“We had several interns in this summer. I was privileged to have had the opportunity to work closely with a passionate emerging professional, Michael Erifeyiwa, who is a graduate student from Nigeria,” he relates. “Experiencing student’s energy, drive, enthusiasm, creativity and extraordinary talent is tremendously rewarding.” ■

CLASS NOTES

1960s

60|61|62|63|64|65|66|67|68|69

As supervisor of the Interagency Energy Team of the U.S. Department of Interior Bureau of Land Management in Silt, Colo., **Allen Crockett (B.S. geology, 1967)** is responsible for environmental evaluations and permitting of oil and gas projects. He joined BLM in 2006 after 31 years in consulting. He holds a doctoral degree in ecology and evolution from the University of Colorado and a juris doctorate from the University of Denver.

Since graduating from OU, **John Everett (B.S. geology, 1962)** earned master's and doctoral degrees at the University of Texas, Austin, and held positions with Mobil Oil and the U.S. Army. He was involved in worldwide geologic exploration with Earth Satellite Corp. for 35 years, and in 2005 formed Exploration Signatures to look for oil and gas with **Dan Duggan (B.S. geology, 1962)** and others. He and his wife, Barbara, have five children and 12 grandchildren, and lead active lives in Fort Collins, Colo., and Cape Cod, Mass.

Edgar Pacheco (B.S. petroleum engineering, 1962), of Santa Cruz, Bolivia, worked the oil patch for 35 years for three companies in several countries. For the past 14 years, he

has provided reservoir engineering services through his company, Pacheco Consulting. He plans to travel to Denver for the 2011 SPE Annual Technical Conference in Denver and would like to meet other college alumni who will attend.

Donald Reese (B.S. geology, 1960, M.S. geology, 1963) retired in 1990 after 27 years with Chevron Corp. He visited 47 states during the first 10 years of retirement. He resides in Midlothian, Texas.

John Yeager (B.S. petroleum engineering, 1962) is a retired attorney.

1970s

70|71|72|73|74|75|76|77|78|79

John Carpenter (B.S. geology, 1973) is chief technology officer at the Georgetown University McDonough School of Business. He retired as a commander in the U.S. Navy after 22 years of service, which included combat in Vietnam and Desert Storm. During his military career, he commanded the Navy's successful effort to divert the lava flow from the April 1992 eruption of Mt. Etna in Sicily.

Victor Agbe-Davies (M.S. geology, 1978) is a consulting geologist in Houston. Previously, he was general manager of exploration

for the joint interest team at Emerald Energy Resources Ltd. He also served as president of the Nigerian Association of Petroleum Explorationists in 2008-2009.

James "Jim" Harrell (M.S. geology, 1976) retired two years ago after 30 years of teaching geology at the University of Toledo, where he continues his research in archaeological geology as an emeritus professor. During the past couple of years, he has made several trips to Egypt and Saudi Arabia for fieldwork and has been working on a book about ancient Egyptian mines and quarries.

Paul Hunt (B.S. exploration geophysics, 1977) is vice president of exploration at Denali Oil & Gas in Houston. With his wife, Cindy, and son, Brian Paul, he rode the "Hotter 'n' Hell Hundred," a 100-mile bike ride around Wichita Falls, Texas, in August 2011.

Alexander "Sandy" Kunzer (M.S. geology, 1970) retired in 2001 after a career with Shell Oil, the U.S. Army Corps of Engineers and the U.S. Bureau of Reclamation searching for oil and building and repairing dams and other water infrastructure. He and his wife, Betsy (B.S. biology, 1966), are enjoying retirement with travel, photography and volunteering from their base at the foot of the

9,500-foot-high Huachuca Mountains in southern Arizona.

After 28 years with Kerr-McGee Corp., **Tom Miller (B.S. geology, 1978)** currently is exploitation manager at Anadarko Petroleum Corp. He has spent time in Oklahoma City, Houston and Halifax, Nova Scotia, and now is now enjoying the beauty of the Rocky Mountains in Denver. He has five grown sons, four of whom are OU graduates.

Carl Pomeroy (M.S. petroleum engineering, 1979), vice president of engineering at ERG Operating Co., lives in Tulsa and works in Houston and Santa Maria, Calif. He has four children, one grandchild and three pugs.

Fred Wagner (B.S. petroleum engineering, 1978) is an associate engineer with ExxonMobil Production Co. in Houston.

1980s

80|81|82|83|84|85|86|87|88|89

John Pat Boyd (B.S. petroleum engineering, 1980) lives in Alva, Okla., where he has started Boyd Engineer for horizontal drilling, completion, workover, production and reservoir engineering in northern Oklahoma and the southern Kansas Mississippian.

Ronald Woods (B.S. geology, 1980) lives in Yukon, Okla., and is a senior geologist with Equal Energy. He is about to have various prospects (generated as an independent) drilled in Oklahoma. His daughter, Jessica, is in her second year at OU.

1990s

90|91|92|93|94|95|96|97|98|99

Ali Al-Hadad (M.S. petroleum engineering, 1993) recently was promoted to assistant manager for offshore drilling operations at Qatar Petroleum. He lives in Doha, Qatar.

Brett Dawkins (B.S. petroleum engineering, 1995) is an Oklahoma City-based reservoir engineer with Chesapeake Energy Corp.

Patrick Doherty (B.S. geology 1996, M.S. geology 2000) is chief geoscientist at ConocoPhillips Alaska in Anchorage. His wife, Jenny, is a petroleum geologist, also with ConocoPhillips Alaska. They are expecting their first child, a girl, in October.

Eric Kubera (M.S. geophysics, 1997) is an operations geophysicist at Nexen Petroleum USA in Plano, Texas. He and his wife, Jill Naberhaus Kubera (B.A. elementary education, 1997), have three sons, Jordan and Owen, 7, and Nathan, 4.

2000s

00|01|02|03|04|05|06|07|08|09

Steven Cobb (B.S. petroleum engineering, 2011) is an operations engineer for Pioneer Natural Resources U.S.A. in Midland, Texas.

Kathryn Gardner-Vandy (B.S. geology, 2005) expects to earn her doctoral degree in May 2012 from the University of Arizona's Department of Planetary Sciences. Her dissertation is titled "Partial Melting on FeO-rich Asteroids: Insights into Initial Stages of Planetary Differentiation."

Jonathan Gilbert (B.S. petroleum engineering, 2008) is a reservoir engineer with ExxonMobil in St. John's, Newfoundland, Canada, where he works offshore eastern Canada assets.

Sarah Harris (B.S. petroleum engineering, 2010) is a project manager for ONEOK in Tulsa, where she manages more than \$50 million in projects. Her daughter, KinLynn Elizabeth, was born April 7, 2011.

Keystone Hughes (B.S. petroleum engineering, 2007) has been promoted from production engineer to asset manager at Chesapeake Energy Corp. in Oklahoma City. He was recently engaged and plans to marry in June 2012.

CLASS NOTES

Paul Munding (B.S. petroleum engineering, 2003) is an asset manager at Chesapeake Energy. He and his wife, Andrea, live in Norman with their son, Luke. They are expecting a daughter in November.

Ryan O'Dell (B.S. petroleum engineering, 2007) is an exploitation engineer with Merit Energy Company in Dallas. He and his wife, Megan, are expecting their first child, Emma Mae, in December.

Oyetunde Oyewole Oyewo (M.S. natural gas engineering and management, 2009), is a pipeline integrity project coordinator for ONEOK in Tulsa. He and his wife are expecting their first child, a boy, in late 2011.

Since graduating from OU in 2006, **Adela Porter (B.S. petroleum engineering)** has been an operations engineer at Devon Energy Corp. in Oklahoma City. She works completions in a horizontal shale play and production over an old conventional gas field of approximately 110 wells.

Karen Schmuhl Walker (B.S. petroleum engineering, 2006) married **Josh Walker (B.S. petroleum engineering, 2001)** in May 2011. She is an asset manager at Chesapeake Energy Corp.

Rehan Shahreyar (M.S. petroleum engineering, 2004) lives in Karachi, Pakistan, where he is deputy chief drilling engineer for

Pakistan Petroleum Ltd. He is married and has two daughters, Rania Rehan, 4, and Alaina Rehan, 2.

Bielenis Villanueva-Triana (M.S. petroleum engineering, 2011) traveled for two months in Colombia before beginning her job as an analyst for Rystad Energy, a consulting firm in Oslo, Norway. She recently worked on a project that included analysis of North American shale plays.





We want to hear from you!

SEND US YOUR NEWS SO YOU CAN . . .

- JOIN A WEB COMMUNITY AND STAY CONNECTED WITH FRIENDS AND COLLEAGUES
- FIND OUT WHAT'S GOING ON IN YOUR COLLEGE AND SCHOOL
- LEARN ABOUT REUNIONS AND GROUP EVENTS
- JOIN ALUMNI AT OU FOOTBALL TAILGATE PARTIES AND PROFESSIONAL MEETINGS
- SIGN UP TO RECEIVE THE ANNUAL MAGAZINE

PLEASE RETURN YOUR INFORMATION TO:

Allison Richardson, Director of Alumni Relations
 Mewbourne College of Earth and Energy
 University of Oklahoma
 Sarkeys Energy Center, Room 1510
 100 E. Boyd St.
 Norman, OK 73019-1015
 You also can email your update to mcee@ou.edu
 or visit our website at <http://www.ou.edu/mcee>

CONTACT INFORMATION

Name _____ Grad Yr _____ Degree _____

Major _____ Adviser _____

Permanent Address _____

Cell Phone _____ Email Address _____

Business Name _____ Location _____

Business Phone _____ Your Title _____

WHAT'S NEW WITH YOU?

Keep us updated with your address, phone number and email. Tell us about your latest activities and accomplishments, such as a new job, marriage or new baby.

MEWBOURNE
COLLEGE OF EARTH & ENERGY
THE UNIVERSITY OF OKLAHOMA

100 East Boyd, Room 1510
Norman, OK 73019-1015

ADDRESS SERVICE REQUESTED

NON-PROFIT
ORG.
US POSTAGE

PAID

UNIV. OF
OKLAHOMA

