



THE UNIVERSITY OF TEXAS AT AUSTIN

Civil, Architectural and Environmental Engineering

CAEE alumni news and features

FALL 2010

www.caee.utexas.edu



this issue

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Chair's Message



Sharon L. Wood

The students have returned to campus and the excitement for the fall semester is noticed by everyone. CAEE business continues as usual, but this fall, the undergraduate programs in civil and architectural engineering will be evaluated by ABET. Soliciting feedback from our many constituents and evaluating if we are meeting the needs of the engineering profession has been enlightening. I am convinced that we are preparing our students to meet the challenges that they will face as engineers and that they have the capabilities to be the future leaders of the profession.

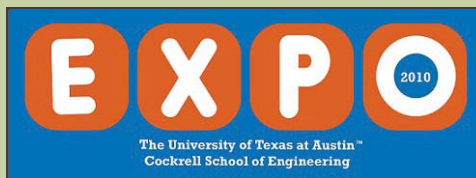
In this newsletter, you will learn about new educational experiences for our students. Undergraduate students from across the Cockrell School participated in the Projects for Underserved Communities courses in 2009-10. They planned, designed, and constructed water systems for schools in Peru and Ghana, and will be developing a new set of projects for the 2010-11 academic year. Four students in David Maidment's graduate course on hydrology helped the residents of Sanderson, Texas by developing a preliminary floodplain analysis for the town. Their work was recognized by Representative Ciro D. Rodriguez (TX-23) in the Congressional Record of the 111th Congress in July.

The newsletter also highlights the accomplishments of Celina Dozier, a PhD student in environmental and water resources engineering. She received financial support from endowments at UT during her first year, and was recently awarded a prestigious graduate research fellowship from the National Science Foundation for the next three years of her graduate studies. Financial support from endowed graduate fellowships allows us to attract outstanding students to our program, and gives them the opportunity to develop a research program to meet their own goals. Increasing the number of CAEE's endowed graduate fellowships is one of my highest priorities for the coming years.

In the middle of September, students representing the Friends of Alec (FOA) will begin calling CAEE alumni. Funds designated for CAEE through the annual fund effort are critical for our success, and are used, in part, to support undergraduate activities such as the concrete canoe and steel bridge competitions and our annual ethics briefings for the alumni. I would like to challenge our alumni and friends to reach 10% giving participation for the 2011 academic year, an increase of approximately 400 gifts compared with this past year. Join me in supporting our exceptional students, remarkable faculty and distinctive alumni programming by visiting www.cae.utexas.edu to make a gift online.

Thank you again for the continued support of our alumni, friends, corporate partners and CAEE parents. We could not achieve our vision without you.

Calendar of Events



September 21-22

Fall Engineering Expo

Frank Erwin Center

EXPO continues to grow each year, making it one of the largest student-run career fairs in the nation. EXPO is an excellent opportunity for students and employers to speak informally about available positions.



L-R: Wesley Young (MSCE 1989), Walter (MSEHE 1970), and Sylvia Chiang (MCS 1971) celebrate Walter's induction into the Academy of Distinguished Alumni last fall.

October 21

Alumni Banquet & Academy Induction Ceremony

Etter-Harbin Alumni Center



December 4

Graduation Reception

School of Nursing

Graduating students and their families are invited to attend an open house reception before commencement. Look for an invitation in the mail later this fall!

Announcements & Briefs

1970 BS CE & BS ARE 40-Year Reunion

Graduates from the class of 1970, their spouses, and former professors attended a two-day reunion organized by Tom Rioux (BSCE 1970, MSCE 1973, PhD 1977) this past spring. They attended a luncheon with Sharon Wood, department chair, and Jerry Speitel, associate dean. Many stayed on campus to tour labs, visit museums and go up on the Tower's observation deck.



Alumni from the 1970 BS CE & BS ARE Class reunited at Salt Lick BBQ in Austin on March 6, 2010.

STEER 2010 Honor Karl Frank

The STEER 2010 reunion celebrated the career of Professor Karl H. Frank with a two-day seminar and BBQ at the Ferguson Structural Engineering Laboratory (FSEL) on March 4-5, 2010. Dr. Frank joined the faculty in 1974 as an assistant professor and retired in May as the Warren F. Bellows Centennial Professor in Engineering. He supervised more than 60 graduate students during his academic career and served as director of FSEL from 1991 to 1994 and from 2003 to 2007.



Alumni, students, faculty and guests attended STEER 2010 to discuss current projects and career paths. A special forum was held to discuss engineering responsibility with panel members Karl Frank, Larry Griffis (BSCE 1970, MSCE 1972), Randy Poston (BSCE 1978, MSCE 1980, PhD 1984) and Joseph Yura.

The STEER committee presented Dr. Frank with a scrapbook, highlighting memorable moments from his career and summarizing his influence on the careers of

his students. "Karl is perhaps the best research engineer that I've ever met," says Associate Professor Todd Helwig (BSCE 1987, MSCE 1989, PhD 1994). "He is able to quickly see the most simple and effective way to measure or capture the structural behavior either in the laboratory or the field. He has played a huge role in the success and capabilities of Ferguson Structural Engineering Laboratory over the past 30 years. I think he sets the standard that we should strive towards in terms of dedication and sharing expertise with our colleagues." To view more photos and the scrapbook, please visit: www.fsel.engr.utexas.edu/about/events/steer_2010

Academy to Induct New Members

Ten graduates of the department will be inducted into the Academy of Distinguished Alumni on October 21, 2010 during the annual alumni banquet. The inductees are **Sergio M. Alcocer** (PhD 1991), **James W. Canning** (BSCE 1979), **Grace Robinson Chan** (BSCE 1981), **John P. Connolly** (PhD 1980), **Jeannie L. Darby** (PhD 1988), **H. Chik Erzurumlu** (MSCE 1962, PhD 1970), **Robert L. Lytton** (BSCE 1960, MSCE 1961, PhD 1967), **Lisa Carter Powell** (MSCE 1987), **Jack P. Randall** (BSCE 1972, MSCE 1975) and **Fadlo T. Touma** (PhD 1972). All alumni are invited to attend the banquet. For banquet ticket information, please contact Laura Klopfenstein at klopfenstein@mail.utexas.edu or (512) 471-1279.

2010 Ethics Seminar Series

In April and May, the department held its fourth annual CAEE Ethics Seminar Series in four cities across Texas.

More than 500 alumni attended the seminars, which was a record turnout. Dr. David W. Fowler discussed "Lessons Learned from the Big Dig Failure." He was in Boston at the time of the collapse and was a frequent resource for reporters from the Boston Globe,



due to his expertise in forensic engineering. In addition to summarizing the technical aspects to the collapse, Fowler emphasized the many ethical decisions that were made.

We would like to extend our sincere thanks to the following individuals who helped to arrange the seminars: Jon Herrin (BSCE 1981, MSCE 1982) of L.A. Fuess in Dallas; Kristi Grizzle (BSCE 2000, MSCE 2003) of Walter P. Moore in Houston; and Sam Dawson (BSCE 1983) and Gene Dawson (BSCE 1957) of Pape-Dawson Engineers in San Antonio. The ethics seminars and many other activities are made possible by gifts to CAEE through the Friends of Alec Annual Giving Program. For more information, please visit: www.engr.utexas.edu/giving/foa

Feature

WEST TEXAS Floodplain Study

Students Lend a Hand to the Citizens of Sanderson

The morning of June 11, 1965, residents of Sanderson, Texas woke up to a wall of water rolling down the canyon.

The town was instantly devastated by a flash flood - 28 people were killed, homes and businesses destroyed, and lives changed forever. For many of the town's inhabitants, the flood is still fresh in their memories.

The town of Sanderson in Terrell County, Texas, is a community of just over 1,000 people. While the flood was almost 50 years ago, the loss of family or friends gripped nearly everyone. Today, townspeople honor those lost with a plaque in the courthouse that displays their names.

The storms generated in this arid region remain high intensity and short in duration, often resulting in flash flood events - dry creek beds can become raging rivers in a matter of minutes. Fortunately, eleven flood-control dams were constructed by the Natural Resources Conservation Service (NRCS) in the 1970's to protect Sanderson against another catastrophe. While the flood problem has been resolved, there has not been a floodplain analysis since the completion of the dams and citizens still pay expensive flood insurance. Each household pays approximately \$700 annually.

Although the county is larger than the state of Rhode Island, it is desolate and the community does not possess the capacity or means to remap its flood zones. This prompted U.S. Congressman Ciro D. Rodriguez (TX-23) to request help from UT-Austin with Sanderson's flood mapping. Elyn Perrone, Congressional Liaison within the office of UT's Vice President for Research, identified CAEE Professor David Maidment as the go-to person for flood mapping as he has chaired two committees for the National Academies to review floodplain mapping practices within the Federal Emergency Management Agency (FEMA).

After looking over the initial data, Maidment realized this required a team effort so he opted to make this a term project for his graduate hydrology class. During spring break this past March, Maidment and his four students (Rachel Chisholm, Cody Hudson, Laura Hurd and Marcelo Somos Valenzuela) travelled to Sanderson to view the terrain and dams firsthand and to meet with local officials and citizens, who were pushing for new flood maps. Upon their arrival, students also met with survivors of the storm and were moved by their accounts of that tragic morning and the aftermath.

The team later met with Trent Street, State Design Engineer from the NRCS Temple District and collaborating engineer from AECOM, Glenn Wright, to gather more data. They also consulted with Melinda Luna, floodplain mapping coordinator for the Texas Water Development Board, who has been leading the state's efforts in floodplain mapping through LIDAR terrain data.



L-R: Cody Hudson, Marcelo Somos Valenzuela, Glenn Wright (AECOM), Professor David Maidment, Laura Hurd, and Rachel Chisholm





Edelmira Calzada (pictured) recalls how the flood "was like the end of the world".

Other survivors remembered how the flood bent and snapped the railroad tracks like twigs and how no one from the outside world knew about the flood until a naval air station in Corpus Christi picked up the town's mayday.

Sanderson was a sad place for a long time afterward.

The main objective of their study was to determine if the 100-year floodplain was altered by construction of the flood control dams that were built upstream. Once back on campus, they divided the project into four areas of study: mapping, hydrology, dam hydraulics and river hydraulics.

"It was clear that being part of this project would be both a great way to help others and to learn more about the floodplain delineation process", said graduate student Cody Hudson. For the study, he worked with hydraulic modeling of the flow through the dams. His modeling also determined how much the dams have reduced flood discharges downstream.

The team concluded that the effect of the dams and the resulting modification of the Sanderson floodplain needs to be reviewed by FEMA so that it can be validated as a reasonable reflection of the current conditions there. In addition, the water surface elevations computed in that study need to be laid out on up-to-date digital terrain data so that the extent of inundation during the 100-year flood can be mapped out properly.

Maidment feels that his work on floodplain mapping reports with the National Academies has impressed upon him that an important determinant of an accurate flood water elevation is an accurate land surface elevation. That being said, he is of the opinion that official updating of a digital floodplain map for Sanderson will require registered professional engineering, and surveying and mapping services.

While the formal floodplain analysis is now in the hands of others, Maidment's team and their preliminary work greatly helped the City of Sanderson reduce the cost and time frame of the project. At the same time, the students were able to gain valuable experience by completing hands-on coursework. "I now understand how to conduct a proper flood study using ArcGIS", said graduate student Laura Hurd. "I am hoping to use this in a future job, because I see how flood insurance maps can affect a community and individuals."

"Based on the values in the FEMA Blue Book, I estimate that the contribution of Dr. Maidment's group is approximately \$35,000," says Wright.

The team was recently commended by Representative Rodriguez in the Congressional Record for their work. He recognized the students "for their outstanding contributions to my district and their dedication to academic success" and stated that "their academic work will directly benefit the people of Sanderson and Terrell County. The community of Sanderson is very appreciative and I am proud to acknowledge their work."

For a more in-depth overview of each student's study, please visit: <http://repositories.lib.utexas.edu/handle/2152/7854>



Feature

International Service Learning Projects: Progressive Course Serves as Guide

It is one thing to remind students of the importance of global experience but quite another to set them on the path to gaining this type of exposure firsthand. Two visionary engineering professors created a course from the ground up to provide students the opportunity to hone their engineering, project and leadership skills while providing vital services to distressed communities.

CAEE Professor Jim O'Connor and Janet Ellzey, Vice Provost for International Programs and Professor in the Department of Mechanical Engineering, developed a two course sequence, Projects for Underserved Communities (PUC). This cross-disciplinary program includes planning and design components, with each lasting a semester. Students then have the opportunity to implement the project on site during the summer.



Cynthia Castro, civil engineering senior, helps prepare the irrigation system that was built at the only school in Santa Cruz, Peru.

In fall 2009, 25 students from virtually all engineering disciplines across the Cockrell School participated in the first PUC course, focusing on project selection and planning. As future engineers, our students are taught that planning is a critical aspect of achieving a positive result. They employed the stage-gate process under the guidance of Ellzey and O'Connor, whose expertise is in project management. In other words, the service learning project is developed by the students, not the faculty. The students generate their own ideas about possible project concepts, gather data, and evaluate project feasibility – all before hashing out the details.

"It was enjoyable to be more of a facilitator than an instructor," says O'Connor. "I was there to remove rocks from the road and give students the confidence to anticipate issues and reduce risk so that they could be successful."

After presenting their ideas to an advisory board of outside engineering professionals, students recommended school-related water projects in Santa Cruz, Peru and Patriensa, Ghana and began the extensive design phase. With the help of CAEE Lecturer John Burgin, they designed projects that are responsive to the functional, economic,

social and cultural needs of these communities. Burgin led students through water resources planning as well as management and network optimization.

By the end of the semester, they were prepared to begin executing their designs in Peru and Ghana. In June 2010, the two teams completed new water distribution systems at the different locations. The impact of their work hit them immediately—they had improved sanitation for more than 1,100 Peruvian and Ghanaian children, who now have access to clean drinking water.



Community leader and project volunteer Pasor Kofi tries out the new potable water system for a primary school in Patriensa, Ghana.



One of the greatest challenges to PUC students was financing their projects as they were responsible for raising funds for materials and travel costs. In the beginning, their fund-raising knowledge was limited but once they started thinking broader than bake sales, help arrived. Family, alumni and friends were asked to contribute gifts, frequent flier mileage, time, and technical expertise. The teams secured support from the university and private sectors, collected donations and hosted a benefit concert. Members of the CAEE Academy of Distinguished Alumni also donated funds and mileage as Academy president Mary Lou Ralls Newman (BSCE 1981, MSCE 1984) spearheaded an effort to assist the students.

Earlier this year, PUC received a 2010 International Award for Innovative Practices in Higher Education from the American Council on Education's University Design Consortium. Meanwhile, a new group of students eagerly prepares for the next sequence beginning in August 2010.

To read more about these projects, please visit www.utexas.edu/international/puc

Faculty Achievements



Chandra Bhat



Todd Helwig



Kara Kockelman



Des Lawler



David Maidment

Chandra Bhat was elected to the Academy of Distinguished Teachers at the University of Texas at Austin. The Academy was established in 1995 and demonstrates the university's commitment to excellence in teaching. Fewer than 5% of the tenured faculty in the university are members. Chandra is one of seven new members selected in 2010 and will be the ninth member of the Academy from the Cockrell School of Engineering.

Todd Helwig (BSCE 1987, MSCE 1989, PhD 1994) received the 2010 Special Achievement Award from the American Institute of Steel Construction. The award honors individuals who have demonstrated notable achievements in structural steel design, construction, or education. He also received the ASCE Moisseiff Award for 2010 along with Professor Emeritus Joseph Yura. The award recognizes a paper for contributions to structural design or improved construction of engineering structures. Their paper, "Global Lateral Buckling of I-Shaped Girder Systems," with co-authors Reagan Herman (MSCE 1995, PhD 2001) and Chong Zhou, appeared in the September 2008 issue of the ASCE Journal of Structural Engineering.

Kara M. Kockelman and **Ellen M. Rathje** were each recently awarded the 2010 ASCE Walter L. Huber Civil Engineering Research Prize. The Huber Prize is awarded to members of the American Society of Civil Engineers for notable achievements in research related to civil engineering. Preference is given to younger members who can be expected to continue fruitful careers in research.

David Maidment received the 2010 Award for Exemplary Contributions to Water Resources Data and the Information Systems Award from the American Water Resources Association. David was recognized for his outstanding contributions to the application of Geographic Information Systems to water resources engineering and sciences. After receiving the award, it was announced that the award would be renamed in his honor.

Des Lawler received the Lifetime Achievement Award from the Water Environment Association of Texas. His research contributions to improving general water quality and supply were also recognized by the American Membrane Technology Association with the Water Quality Person of the Year Award.

"Projects for Underserved Communities: Engineering Solutions for Global Needs" was selected as one of the four winners of the American Council on Education's 2010 International Awards for Innovative Practices in Higher Education. **Jim O'Connor** (PhD 1983) and Janet Ellzey (BSME 1978, MSME 1980) developed the two-semester course.

Ellen M. Rathje and **Kenneth H. Stokoe** received the C. A. Hogentogler Award for 2010 from ASTM. The award recognizes a paper of outstanding merit related to the behavior of soil or rock. Their paper, "An In Situ Method for Evaluating the Coupled Pore Pressure Generation and Nonlinear Shear Modulus Behavior of Liquefiable Soils," with co-author Brady Cox (PhD 2006), appeared in the January 2009 issue of the Geotechnical Testing Journal.

Kenneth H. Stokoe was selected by the ASCE Geo-Institute Board of Governors to receive the 2010 H. Bolton Seed Medal. He was recognized "for contributions to geotechnical earthquake engineering including the behavior of soils subject to dynamic loads and the development of laboratory and in situ methods for measuring the dynamic properties of soils."

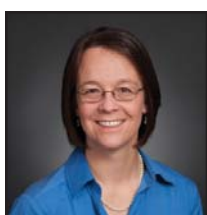
Jorge Zornberg was elected President of the International Geosynthetics Society (IGS). His 4-year term started in May 2010.

For more information on faculty awards, please visit:

www.cae.utexas.edu/news-events



Jim O'Connor



Ellen Rathje



Ken Stokoe



Jorge Zornberg



Joe Yura

Student Spotlight



Securing Clean Water for All:

Ph.D. Student Celina Dozier Gains Expertise to Help Others

Clean water scarcity in developing nations, particularly in Africa, is a problem that doctoral student Celina Dozier aspires to eradicate. She hopes to use her knowledge to teach others about sanitation and the ways in which water can be treated.

Early in her education, Celina cultivated a strong passion for the sciences. Her scientific aptitude and desire to improve others' living conditions led her to pursue an undergraduate degree in Chemical Engineering at Florida A&M University. As an undergrad, she wrote her honors thesis on treating water contaminated with trichloroethylene, a solvent often used for cleaning metal parts. Afterward she decided to complete an MS in Environmental Engineering at UC Berkeley, where she completed a project that measured iodinated disinfection by-products of iodine tablets used to disinfect water.

Impressed by the fact that the Environmental & Water Resources Engineering (EWRE) graduate program at University of Texas at Austin is continuously ranked as one of the best environmental engineering programs in the country, Celina decided to pursue her PhD here. She is currently developing a treatment method for water contaminated with pharmaceuticals and personal care products. Activated alumina, a material with a high surface area, will be used to adsorb these contaminants from the water and then UV/TiO₂, an advanced oxidation process, will be used for photodegradation.

During her first year at UT, Celina was supported by the Earnest and Agnes Gloyna Endowed Presidential Scholarship and a Graduate School Diversity Recruitment Fellowship. She was recently awarded a graduate research fellowship from the National Science Foundation and the

Agnes T. and Charles F. Wiebusch Fellowship from UT. The support of these fellowships enables Celina to maintain a strong focus on her research and to accomplish her personal goals. "As a graduate student", she says, "it's important to have funding to sustain you throughout your studies. Being awarded these fellowships means that I can use my time to concentrate on the progress of my research."

Between her master's and doctoral studies, Celina worked with the Florida Department of Environmental Protection in Tallahassee. As a pretreatment engineer, she travelled throughout the state to inspect wastewater plants and to ensure that various industries were properly treating water before discharging it. Through this experience, she learned that possible environmental negligence was taking place in her hometown of Jacksonville. She noticed that many industries that used and processed toxic chemicals were situated within predominantly poor, African-American neighborhoods. This discovery inspired Celina to add environmental law classes to her course schedule at UT.

Her civic-mindedness is nothing new. During her formative years, she witnessed those closest to her lending a hand to underserved communities. Celina grew up in a community oriented family with her grandmother serving as a Florida State representative and President of the Jacksonville Chapter of the NAACP. She was raised with an awareness of social injustices and the importance of helping others. Celina's family also imparted on her the importance of education. Her family began preparing her for college in their family-owned day care center and ensured that she attended highly competitive college preparatory schools in middle and high school.

She feels that the EWRE program is ideal for earning a graduate degree, because her colleagues are welcoming and friendly, and collaboration between faculty and students is highly encouraged. After completing her Ph.D., Celina plans to become a professor in environmental engineering, focusing on research that ensures clean water is available to all, especially in developing nations where help is needed the most.

If you are interested in exploring how to [establish a graduate fellowship](#), please contact Kelsey Evans at (512) 471-4921 or kelsey.evans@mail.utexas.edu



The University of Texas at Austin hosted the 2010 Texas/Mexico **Concrete Canoe** competition this year, which brought together students from 13 universities to compete in a two-day event. The UT-ASCE Concrete Canoe Team placed third overall and was awarded first place for the technical paper and third place for aesthetic presentation and the ethics paper. The competition encourages students to apply the engineering principles that they learn in the classroom, along with team and project management skills, to design, construct, and race a concrete canoe. Students also participate in presentations in which they describe their construction methods, materials used, and lessons learned over the course of the project.

The UT-ASCE **Steel Bridge** Team placed third overall at the Texas-Mexico Regional Competition and was awarded first place in the lightness category. Students design, fabricate and construct a steel bridge for this competition. The bridge is then loaded with 2,500 lb of steel angles to test its strength and stiffness.



Alumni

Outstanding Young Alumna: Andrea J. Schokker, Ph.D. 1999

Established in 2003, the Outstanding Young Alumnus/Alumna Award recognizes a graduate of the Department of Civil, Architectural and Environmental Engineering under the age of 40 who has distinguished himself or herself with outstanding service and contributions to the engineering profession.

Andrea Schokker, Professor and founding Head of the Department of Civil Engineering at the University of Minnesota Duluth (UMD), has been at the forefront of this new program since 2008. In this role she wears many hats - establishing a quintessential yet innovative curriculum, hiring a cohesive faculty, outfitting labs, and participating in the construction of a new, gold-certified LEED building that will eventually house the department and serve as a hands-on learning tool.

Schokker is considered an international authority on post tensioned grouts and is the author of a book on concrete sustainability that sold out shortly after its release. Her research in durability of post-tensioned bridges has been implemented into several U.S. codes and guide specifications. In addition to her responsibilities at UMD, she serves on the Board of Direction for the American Concrete Institute (ACI) and has served as the principal technical resource for the American Segmental Bridge Institute (ASBI) Grouting Certification Training program since 2001.

At UT CAEE, Schokker's doctoral research provided the basis for improvements in grouting technology for post-tensioned concrete construction in the U.S. After receiving her Ph.D. in 1999, she began her academic career at Penn State University in the Department of Civil and Environmental Engineering, where she remained until her move to UMD. She has received the ACI Young Member Award for Professional Achievement, the Post-Tensioning Institute Outstanding Educator Award, and the ASBI Leadership Award. Schokker will be recognized in October 2010 at the Alumni Banquet.



The civil engineering building on the University of Minnesota Duluth campus opened in the summer of 2010. This state-of-the-art building has exposed structural elements, making it a learning tool.

Alumni

Alumni Profiles: Three Distinct Paths

Belal "BJ" Jarun (BSCE 1979)

Becoming a civil engineer was the obvious choice for Belal "BJ" Jarun. Growing up in Kuwait, he was intrigued by workers building high-rise structures. While attending a small junior college, he dreamed of attending UT Austin. After working hard to receive a high GPA, he was transferred to UT CAEE. Due to financial necessity, he hit the books hard, graduating in three years, three months and felt as if he were "on top of the world". After many years of struggle, moving back and forth between the U.S. and Kuwait (including narrowly



escaping the brunt of Iraqi invasion in 1990), he and his young family returned to Austin, where he found work on the Texas state capital extension project. In 1996, he established his own specialty contractor construction firm, the American Pan Enterprises Company (APEC). Headquartered in Palmetto, Georgia, the \$40M company now employs 600 professionals and constructs concrete formwork for commercial structures throughout the southeast and southwest. Major projects include the CONRAC parking facility and international terminal at the Hartsfield-Jackson International Airport in Atlanta. BJ's firm recently completed work on UT campus at the Norman Hackerman Building and the Student Activity Center. He says, "I could have never told you that this would be a possibility, I am deeply moved to build at the University of Texas."

Larry O'Donnell (BSARE 1980)

The professional career of Larry O'Donnell has never been typical thanks to his willingness to take on new challenges and opportunities. He grew up working for the family business in real estate development and construction, which influenced him to become an engineer. After graduating with his BSARE, he went to law school and practiced for eight years. Larry then worked for Baker & Hughes, Incorporated, a large oil and gas service company. He was later recruited to Waste Management as part of a new



management team to help turn-around the troubled \$13B company. He rose through the ranks and has served for 6-1/2 years as President and COO of this organization, which is the largest environmental services, recycling, and renewable energy company in North America. During his time in these roles, the company's financial performance greatly improved, as has its safety record and team environment. He was also instrumental in the expansion of the renewable energy segment. "I am a perfect example of never knowing quite where your career can lead you if you keep an open mind to opportunities", he says. Larry was also featured on the CBS program "Undercover Boss," where he experienced what it's like to be an entry-level worker in his company. "I believe that being successful in business is all about the people," he says.

Karen S. Steingraber

(BSCE 1976, MSEHE 1981)

Karen Steingraber is the founder and president of TERRA Engineering, Ltd. based in Chicago. Founded in 1992, the woman-owned, full service engineering firm provides expertise on projects domestically and abroad in Egypt, England, Italy, Lebanon, Malaysia, Qatar, Saudi Arabia, Singapore, South Korea and United Arab Emirates. TERRA also provides services for private and public clients, including many municipalities throughout the Midwest and has been a leader



in environmental innovations.

As president, Karen is responsible for directing civil engineering projects, including site development and infrastructure. Her projects include site work for public buildings, hospitals, retail, commercial facilities, and housing. She has overseen infrastructure projects which have focused on new roads, utilities, and parking and transportation facilities. Additionally, her leadership role entails overall office quality-control, directing marketing activities. Prior to founding TERRA, she served as City Engineer in the Public Works Department in Austin, Texas. She also managed a 3,000-acre infrastructure project in Saudi Arabia as a Senior Associate/Department Head of Perkins & Will, a commercial architectural design firm. Karen currently serves on the Advisory Board of the Department of Civil Engineering at Bradley University.

Alumni Updates

CAEE alumni have varied professions and interesting careers.

Faculty, current students, and fellow graduates are always interested in learning about the lives alumni lead after they leave UT.

If you have an update you'd like to share - a career change, promotion, retirement, marriage or baby, please e-mail Laura Klopfenstein at klopfenstein@mail.utexas.edu or visit our website at www.caee.utexas.edu/alumni

Annabella is the daughter of Diego (MSCE 2006) and Cassia Gorgazzi



Let us know about your future engineer and we'll send you a free t-shirt, compliments of the **Friends of Alec Annual Giving Program.**

50's

William (Dub) Thomas, Jr. (BSCE 1959), is enjoying retirement on Houston County Lake and fishing one of the best lakes in Texas.

70's

Charles Wirtanen (BSCE 1971), who joined Stanley Consultants, Inc. in 2006, has been promoted to manager of the Austin office's Site/Civil Department.

80's



John Connolly (PhD 1980) has been elected to the National Academy of Engineering. The award recognizes his contributions and expertise in the development of

integrated water quality models used for remediation and management planning for large contaminated water bodies.

John Cullinane, Jr.

(PhD 1989), has been named deputy director at the U.S. Army Engineer Research and Development Center (ERDC) and, in connection, will become ERDC's newest member of the Senior Executive Service (SES).



Victor Torres Verdin

(MSCE '82, PhD '84) is the founder and CEO of three engineering companies in Mexico. They are the *Torres, Consultores en Ingeniería*, specializing in transportation planning, traffic engineering, and public transportation; the *Evaluación Integral de Obras Civiles*, specializing in highway design, pavement engineering, and other public works projects; and the *Ingeniería Latinoamericana de Pavimentos*, specializing in pavement evaluations.



90's

Sandra Akmansoy (BSCE 1996, MSCE 1997) is pleased to announce the birth of Kenan Prieto on September 9, 2009.

Nolan R. Rome

(BSARE 1999) recently opened a Phoenix, Arizona office for the Dallas-based MEP consulting firm,

ccrd partners, and is also pleased to announce the birth of his first future engineer, Chauncey Reid in March 2010 with wife Amanda.



Melanie Sattler (MSEHE 1993, PhD 1996) is the first female faculty member to be awarded tenure in the 50 year history of the Civil Engineering Department at UT Arlington.

00's

Jeremiah Fasl (BSCE 2006, MSCE 2008), is the recipient of the 2010 Nevada Medal for his paper "Development of Rapid, Reliable, and Economical Methods for Inspection and Monitoring of Fracture-Critical Steel Bridges".



IN MEMORIAM

Michael Henney (BSARE 1983) Project Manager at J. E. Dunn Construction in Parker, CO, died May 28, 2010 in a private plane crash. Michael's family has established the *Michael Alan Henney Endowed Memorial Scholarship in Engineering* to benefit future CAEE students. To make a gift, please call Kelsey Evans at 512-471-6151 or visit: www.engr.utexas.edu/giving and indicate in the comments box that gift is "Memorial for Michael Henney, Endowed Scholarship."

2010 Student & Faculty Awards



The following awards were presented at the eighth annual Civil, Architectural and Environmental Engineering Spring Banquet in April 2010:



ARE Leadership Award

Nicholas W. David

Awarded to an architectural engineering student who demonstrated outstanding leadership in campus and community activities

CE Leadership Award

Margaret A. Cook

Awarded to a civil engineering student who demonstrated outstanding leadership in campus and community activities

Werner W. Dornberger Academic Excellence Award

David M. Wald & Sean M. Donahue

Awarded to the architectural engineering student who started at UT-Austin as a freshman, has the highest GPA in the class and is completing the degree in four years

John A. Focht Academic Excellence Award

Erik Andreas Mantor

Awarded to the civil engineering student who started at UT-Austin as a freshman, has the highest GPA in the class and is completing the degree in four years

Department Teaching Award

Richard Corsi

Presented to a faculty member who has excelled in teaching and has demonstrated exceptional motivation of students in the classroom

Ervin S. Perry Student Appreciation Award

Howard Liljestrang

Presented to a faculty member who best meets the ideals of "an excellent teacher and good friend"

Outstanding Teaching Assistant/Assistant Instructor Award

Eleanor Reynolds

Presented to a TA or AI who has shown exemplary dedication and motivation in their teaching

Staff Excellence Award

Daniel Quiroz and Griselda E. Trevino

Presented to staff members who have distinguished themselves and who have contributed significantly to the department's teaching, advising, mentoring, and/or research efforts



Civil, Architectural and
Environmental Engineering

For more on the Department of Civil, Architectural & Environmental Engineering, or for information on ways to get involved with UT CAEE, please contact Laura Klopfenstein at 512-471-1279, or by e-mail at: klopfenstein@mail.utexas.edu