To date, 238 students and scholars from 55 countries have traveled to Bethlehem for the singular chance to teach, study or conduct research through the civil and environmental engineering program at Lehigh.

Source: Alumni Association, Office of International Affairs, July 2014
TAKING STOCK, MOVING FORWARD: 
THE VIEW FROM FRITZ 201A

ON BEHALF OF THE DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING (CEE) AT LEHIGH, it is my pleasure to welcome you to this CEE Tour in Review 2013-14. It has been an eventful year for CEE, a time of fresh starts and auspicious undertakings. We celebrate them in this commemorative print publication and online as well, at www.lehigh.edu/cee.

I write to you for the first time as CEE’s new chair after 25 years as a professor and researcher at Virginia Tech. I feel fortunate indeed to leave one esteemed university for another. The legacy of civil and environmental engineering at Lehigh is as long and time-honored as the University itself—150 years long, to be exact, next year.

As a civil engineer who appreciates history, I view the chance to lead this venerable program as an exciting new chapter in my career. It’s quite humbling to come to work every day in Fritz Engineering Laboratory, the administrative home of a department that now sprawls across three buildings and two campuses. Built in 1909 and designated by the American Society of Civil Engineers as a historic civil engineering landmark in 1991, the lab that John Fritz built set the standard for all the university and research labs to come. Today, CEE at Lehigh continues the Fritz tradition of ingenuity and progress with a reach and impact far greater than one would expect from a department of this size. As the map on the back cover attests, our alumni, faculty and students have distinguished themselves, and Lehigh’s reputation, all across the globe.

While we take pride in our past, we are equally taking stock of our present and future, which is bright. Our department is rich in the resources upon which every academic enterprise thrives: talented students, an outstanding faculty and a dedicated staff. That we continue to attract such exceptional people to our educational and research mission is a testament to the enduring strength and success of our program.

As CEE moves forward, so, too, does the university. This fall, Alice Gast, Lehigh’s 13th president, and S. David Wu, dean of the P. C. Rossin College of Engineering and Applied Science, began their own new career chapters: Alice as president of Imperial College London and David as provost of George Mason University in Virginia. The Lehigh brand is stronger for their stewardship; our graduates enter the workforce and graduate school in high demand. As we wish Alice and David well, we look forward to the influx of new ideas and leadership headed to Lehigh at a time of rapid change in higher education.

Unfortunately, we are also mourning the loss of our beloved department chair, Gary Lennon, who passed away on April 14th. Lennon was a “get-’er-done, no nonsense” approach to new challenges that matched well with visionary leadership. His affinity for listening and consensus-building, coupled with the tenacity to see ideas through to reality, lengthened a resume that was always more about disposition than ambition.

“I think ‘willing’ rather than ‘ambitious’ or ‘seeking,’ is a better way to characterize how I came to hold such positions,” says Lennon.

A talent for developing high-quality academic programs didn’t hurt, either. Lennon counts among his most important leadership contributions his service as chair of the committee that established the Bachelor of Science degree in environmental engineering; the latest revisions to the first-year engineering course curriculum; and the creation of the PEAKS (Integrated Degree in Engineering, Arts and Sciences) program.

Acquired skills in matters of accreditation and assessment are another point of pride. Working closely with CEE faculty members, in 2001 Lennon was lead author of the department’s first ABET (Accreditation Board for Engineering and Technology) report focused on new, outcomes-based criteria. In 2010, as associate dean, he led the coordination of all 30 Lehigh engineering programs that subsequently received ABET’s full, six-year accreditation, and in 2013 helped earn Lehigh a “superior” rating from the Middle States Commission on Higher Education in his role as deputy provost.

A 34-year-long career and three major university teaching awards to his credit, these days Lennon is looking forward to applying his experience to some brand-new Lehigh initiatives. Among them: the development of a new online modeling course and the exploration of an active learning classroom environment.

Visit www.lehigh.edu to learn more about Lennon and his work.

SPECIAL COLLECTIONS AWARDED GRANT FOR CIVIL ENGINEERING PROJECT

Soon, a broad, new audience will have unprecedented access to the history of civil engineering at Lehigh.

A grant awarded to Lehigh University Special Collections from the Mellon Foundation has provided $93,700 to fund “Bridge and Building Forensics: Civil Engineering Archives at Lehigh University.” The two-year project will create finding aids for six civil engineering collections, including the papers of John Blair, Blair Birdsall, Willis Slater, and the Council on Tall Buildings and Urban Habitat. Descriptions of postcards depicting American bridges and a series of photographs showing laboratory testing will round out the collection.

Lehigh received the grant through the Cataloging Hidden Special Collections and Archives Program of the Council on Library and Information Resources (CLIR). CLIR works to expand access to information, however recorded and preserved, as a public good.

The descriptive information that award recipients create will eventually be linked and interoperable with all other projects funded by the grant program. This year, 21 institutions received grants, including Amherst College, Columbia University, the Newberry Library and Princeton University.

Leading the grant project for Lehigh are Lois Fischer Black, curator of special collections, as principal investigator; and Ilhan Citak, archives and special collections librarian, as project manager.

WELCOME BACK, LENNON

Jerry Lennon rejoined the active faculty ranks in spring 2014 after a three-year hiatus from teaching. Since 1998, when then-dean Harvey Stenger asked him to serve as associate chair of CEE, the professor of water resources engineering has served in four administrative positions, none of which he actively sought. Like the C. J. McIntosh Chair of Lehigh administration, Lennon was recruited for his reputation as the “go-to guy” who could help execute strategic goals.

The organizational hats that Lennon wore grew in size and responsibility. He first served two three-year terms as CEE’s associate chair, staying on an additional year after each one to transition a new dean and a new department chair, respectively. In 2005, then-dean S. David Wu tapped Lennon to become the associate dean for undergraduate studies in the P. C. Rossin College of Engineering and Applied Science. Then, after receiving multiple nominations, he assumed the post of deputy provost for academic affairs in 2010. Lennon now returns to the department where he started in 1980 to teach, conduct research and serve as CEE’s next faculty graduate program coordinator. Looking back on the arc of his executive career, Lennon credits a “get-’er-done, no nonsense” approach to new challenges that matched well with visionary leadership. His affinity for listening and consensus-building, coupled with the tenacity to see ideas through to reality, lengthened a resume that was always more about disposition than ambition.

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CEE ADVISORY BOARD CONVENED

CEE leadership recently sat down with some of its distinguished alumni to take stock of the department and consider how best to move it forward. On May 6, 2014, Dennis Olesko, P.E., Rossin Professor and Chair of the Department of Civil and Environmental Engineering, convened his first CEE advisory council. Representing CEE leadership with him were Clay Naito, P.C. Rossin Professor and Chair of the Department of Civil and Environmental Engineering; Fritz Fritz, Associate Professor and Associate Chair, Professional Associate, Transportation Business, HDR Engineering, Inc.; Mark J. Tarnowski, P.E., LEED AP BD+C, as a Senior Principal with Thornton Tomasetti, participated in the meeting via Skype.

Board members Tim Martin, President, EcoTech Marine, and William T. Thieman, P.E., LEED AP BD+C, IT, a project engineer at Herzog Philips Construction Company, round out the six-member advisory council.

The goal of the meeting was twofold: to bring the advisory council up to speed on the status of CEE at Lehigh and to acquire feedback on the department’s educational objectives, capstone programs, ABET (Accreditation Board for Engineering and Applied Science) accreditation, process, outreach efforts and topics for future meetings. Highlights included:

► A review of student census data showing a healthy upward trend for academic year 2014-15. The numbers reflect a 25 percent uptick in civil engineering enrollments compared to 33 percent on the environmental engineering side. The 2014 U.S. News and World Report rankings revealed that Lehigh civil engineering programs placed 22nd and 20th for graduate and undergraduate programs at schools that offer doctorates, respectively.

► S. David Wu, dean of the Lehigh College of Engineering and Applied Science (ACEAS), stopped by to talk with the council about interdisci- plinary and study abroad opportunities within the College.

► Over the lunch break, the alumni board members had the opportunity to interact with many CEE faculty and student club members. Six student leaders impressed with club presenta- tions about the ACEAS Student Chapter; the Steel Bridge team; Chi Epsilon; Engineers Without Borders; Bridges to the World; and Engineers Without Borders.

► Assistant professors and new faculty members Davin Boccot (structures), John Fox (environmental) and Spencer Quar (materials) spoke with the council about their under- graduate research experiences.

RIVALRY? WHAT RIVALRY?

Lehigh-Lafayette may be the longest-running competition in college football history. But when it comes to shared academic pursuits around civil and environmental engineering, this rough-and-tumble rivalry turns downright, well, civilized.

Consultative collaborations between the two schools occur regularly throughout the year. Students, faculty and alumni join forces for meetings, trips, social gatherings, bridge tours and more.

A new highlight of the Lehigh-Lafayette CEE partnership is the Kappe Lecture Series. Inaugurated in 1989 by the American Academy of Environmental Engineers and Scientists (AAEES), the series pro- vides an annual forum on college campuses where today’s practitioners can share their knowledge with future environmental engineers. Last fall, the CEE departments from both schools and the Environmental Engineering and Scientists. Student involvement in the meeting continued back at Fritz with two capstone project present- ations from civil and environmental engineering seniors.

► Assistant professors and new faculty members Davin Boccot (structures), John Fox (environmental) and Spencer Quar (materials) spoke with the council about their under- graduate research experiences.

In a novel outreach to CEE under- graduates, six clubs threw a party on the steps lawn in August 2013. CEE’s newest students were treated to fun, food, a chance to meet new friends, and a one-stop shop for learning more about club opportu- nities within the department. Visit bit.ly/CEEstudentclubmeetings to learn more about CEE’s many student clubs and societies.

THE FIRST-EVER CEE CLUBS PICNIC

The Lehigh Preserve is an online, open-access archive of disser- tations, historic photographs, posters, catalogs and more. The Preserve is now also the new online home to searchable versions of Fritz Lab and ATLSS Research Center reports, as well as CEE doctoral dissertations and master’s theses. The Preserve supports the University’s mission by expanding access to scholarly materials from Lehigh authors and design- ing academic communications worldwide. Visit bit.ly/CEE prescribe to browse the entire catalog of the civil and environmental engineering collection.

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MEET PANOS DIPLAS
P.C. ROSSIN PROFESSOR AND CHAIR OF CEE

Q: After 25 years as a professor and researcher at Virginia Tech, what attracted you to CEE at Lehigh?
A: Lehigh’s reputation for engineering in general and civil and environmental engineering in particular is well known. Our department has had a profound influence on both disciplines. The medium size of the department also played a role in my decision to make the move. It affords me the opportunity to maintain my research activities, although at a reduced level. Research is important to me. Its challenges are demanding, but at the same time intellectually rewarding and invigorating. It also allows me to interact with students, which I believe is the main reason most of us chose to work in a university setting.

Ultimately, I was ready for a new challenge, and I believe 25 years of experience prepared me for it. I would not have pursued this job earlier in my career.

Q: Looking back on your time at Virginia Tech, what makes you most proud?
A: My students. The chance to educate a good number of undergraduates in the area of water resources engineering, and collaborate closely with my graduate students, was the highlight of my time there. I never tire of hearing from them about the progress they’re making and the careers they’ve prepared for me for. I would not have pursued this job earlier in my career.

Q: You’ve been CEE chair for a year now. Have you learned anything surprising in that time?
A: The CEE department at Lehigh has a long and distinguished history. I’ve learned a lot about operations, having participated in a wide range of departmental, university and professional activities at Virginia Tech. Taken together, I feel well prepared to represent CEE throughout Lehigh, the broader engineering community and out in the world. I also hope that my expertise in water resources engineering will enhance research efforts in that area.

Q: What individual strengths do you bring to the leadership of the department?
A: Having been active in research and teaching for a long time, I feel that I can better relate to the faculty who are in the trenches, doing the real work on the department’s behalf. I’ve also learned a lot about operations, having participated in a wide range of departmental, university and professional activities at Virginia Tech. Taken together, I feel well prepared to represent CEE throughout Lehigh, the broader engineering community and out in the world. I also hope that my expertise in water resources engineering will enhance research efforts in that area.

Q: What are your aspirations for CEE going forward?
A: Attract the best students and equip them, through academic and practical experiences, to advance the professions of civil and environmental engineering. Pursue research that anticipates and contributes to the new discoveries and findings upon which societal well-being depends. Increase our outreach efforts to industry, alumni and their families so they may share in our successes. Preserve and grow our reputation for excellence.

Visit bit.ly/PDiplas to learn more about Diplas and his work.

“...I hope that my expertise in water resources engineering will enhance research efforts in that area.”

— PANOS DIPLAS

I was also surprised to learn that Lehigh is home to the very first hydraulic engineering laboratory ever built at an American university. It was constructed in 1887 by Mansfield Merriman, who was a pioneer in hydraulic engineering research, a polymath and a prolific author. Among his many works are the classic book Treatise on Hydraulics, which went through 10 editions, and the first edition of the ASCE handbook of civil engineering. Interestingly, Merriman was also the first chair of civil engineering at Lehigh.

Both Fritz and Merriman clearly understood the importance of engineering laboratories for research, testing and training. They were certainly way ahead of their time.
Every fall, Lehigh welcomes alumni back to campus for homecoming weekend. Last fall, alumna Tara Troy arrived for a longer stay, as a member of the CEE faculty.

What it is to have former professors as colleagues? “It’s been a little surreal, actually,” says Troy. The assistant professor’s hiring reflects the resurgence of water resources research at Lehigh. Together with Panos Diplas, the P.C. Rossin Professor of Civil and Environmental Engineering and society. She takes a holistic approach to the work, a perspective that ties in her training in hydraulics and hydrology.

Professor of Civil and Environmental Engineering

After a childhood spent playing with Legos and reading about the largest structures ever built, Spencer Quiel knew from an early age that civil engineering was his calling. That calling took on new purpose during Quiel’s sophomore year at the University of Notre Dame. The events of September 11, 2001, defined his graduate work at Princeton University and his career ever since.

Quiel completed his dissertation in structural engineering on a Department of Homeland Security (DHS) graduate fellowship. His dissertation research focused on the response of steel building structures to fire. His dissertation advisor was Lehigh alumna Maria Garlock ’91, Ph.D. ’03, an associate professor of civil and environmental engineering at Princeton.

During his DHS fellowship, Quiel spent two months at the Building and Fire Research Laboratory at the National Institute of Standards and Technology. While there, he collaborated on a study of the role of fire in the collapse mechanism of the World Trade Center’s Twin Towers.

After Princeton, Quiel worked in the Washington, D.C., office of Hattem Consulting Engineers, a firm that specializes in protective design for structural and infrastructure systems. At Hattem, he contributed to numerous projects on extreme load resistance of critical structures, including government facilities, embassies, hospitals and a long-span bridge.

Today, Quiel’s research specializes in structural resistance to extreme loads, particularly fire, blast and progressive collapse. He continues to consult with his colleagues at Hattem, and the real-world design practice has inspired several of his research projects that are currently underway at Lehigh’s ATLLS (Advanced Technology for Large Structural Systems) Center.

“For being a smaller, private university, Lehigh really competes on its ‘weight class’ in structural engineering research because of its resources for experimental testing and computational modeling,” says Quiel. “When you have both resources in one place, it helps generate ideas and momentum that culminate in something that has impact within the profession.”

Much of his excitement about joining the structural engineering faculty is its legacy in the field.

MEET SPENCER QUIEL

ASSOCIATE PROFESSOR

STRUCTURAL ENGINEERING

An alumnus who earned his doctorate in geotechnical engineering at Lehigh in 2000, Perzivou has often worked as an adjunct professor for his alma mater, teaching graduate courses in geotechnical engineering while serving on the faculty at other colleges. He’s glad to be back in front of Lehigh students.

Mesut Perzivou, CEE’s new professor of practice in civil engineering, is all of the above. His hiring brings industry, government and academic experience to the faculty.

Although the appointment is new, the philosophy is familiar to Perzivou and his work.

MEET MESUT PERZIVOU

PROFESSOR OF PRACTICE

By definition, a professor of practice at Lehigh is someone who adds instructional value to university programs, enhances the research or professional missions of their departments, and/or permits Lehigh to expand its course offerings, often in cutting-edge areas.

Perzivou’s hires are averaging around 150 undergraduates a semester. In many ways, they find him quintessentially Lehigh: serious, technically active, and eager to expand their horizons. What’s most striking to him is how the student’s interests have evolved since he walked in their shoes.

And that’s why he’s here.

Perzivou’s hiring addresses a growing demand from students for courses that apply the principles of civil and environmental engineering to their industry ambitions. Interest in business and construction courses is particularly high. That’s why classes such as Construction Management, Planning and Engineering Economics, and Advanced Project Management are now standard offerings in the CEE curriculum—one that will surely evolve with the professor of practice role as well as the times.

By responding to today’s needs, we’re increasing our appeal to a bigger crowd,” says Perzivou. “These first couple of years will be my time to learn more about what is needed and how I can contribute.”

Visit bit.ly/EPERZIVO to learn more about Perzivou and his work.

IN MEMORIAM

LE-WU LU

PROFESSOR AND CHAIR EMERITUS

Le-Wu Lu, who gained international renown for his research into the strength and behavior of building structures during a Lehigh career that spanned six decades, died July 27 at the age of 81.

Lu, the Bruce G. Johnston Professor Emeritus of Structural Engineering, received eight major awards, published more than 250 journal articles and conference papers, and supervised or co-supervised 24 Ph.D. students during his academic career. He also served as chair of the department of civil and environmental engineering and as an investigator for Lehigh’s Chinese Bridge Project.

Throughout his research and teaching career, Lu’s expertise helped expand Lehigh’s global reputation for structural engineering. He is best known for his extensive studies on the seismic response of steel building structures, precast concrete structures, innovative structural systems, composite steel-concrete structures, structural connections, and the repair and retrofit of structures.

Research by Lu and his Lehigh colleagues has been cited thou-
sands of times, according to Google Scholar, and continues to influence codes and specifications, design recommendations, and the work of practitioners and professional organizations.

Lu was a leader of a number of professional engineering societies, including the American Society of Civil Engineers, the Earthquake Engineering Research Institute, and the International Association for Structural Safety and Reliability. He held administrative positions on committees of many of these organizations.

He was also a member of the original Joint Committee on Tall Buildings, which later became the Council on Tall Buildings and Urban Habitat. He was particularly proud of serving on the organizing committee that brought the Council’s first International Conference on Tall Buildings to Lehigh in 1972.

Active well into his retirement, Lu served as one of six principal investigators for Lehigh’s Chinese Bridge Project, where he helped teach two courses on modern Chinese fiction, a hobby of his. He also helped the Lehigh Library Material Center organize a donation of more than 2,000 Chinese books.

Lu is survived by his wife, Dorothy Lu; a daughter, Julia; a son, Paul; and one grandchild.

To honor his memory, the department has established the Le-Wu Lu Endowed Prize Fund for Civil and Environmental Engineering Students. Visit bit.ly/CivilFunds to make a gift.
James Ricles, the Bruce G. Johnston Professor of Structural Engineering, was recently awarded a special achievement award by the American Institute of Steel Construction (AISC) for his work related to the design of steel structures for earthquake loading, including moment-resisting connections and self-centering frames. Ricles was one of eight top structural steel professionals recognized by AISC at the 2014 North American Steel Construction Conference in Toronto. The awards honor individuals who have accomplished notable achievements in structural steel design, construction, research or education.

The AISC accolade is the latest recognition among many Ricles has received through the years, including the National Science Foundation Presidential Young Investigator Award (1991-1996); the NASA Research Fellowship Award (1990-1991); and an American Institute of Steel Construction National Fellowship (1987). In addition, between 1987 and 2003, Ricles won the James F. Lincoln Arc Welding Foundation Award for Arc Welded Design eight times. Visit bit.ly/DFrangopol to learn more about Ricles and his work.

**RICLES HONORED FOR “SUBSTANTIAL IMPACT” ON STEEL INDUSTRY**

Dan Frangopol, the Fazlur R. Khan Endowed Chair of Structural Engineering and Architecture and professor of civil engineering, has had an active 2014. Highlights of his prodigious year include:

- An honorary doctorate received June 5 from the Ghoseh Asacs Technical University of Iasi (TUI) in Iasi, Romania. The award cited Frangopol for “remarkable scientific merits [in] the development of civil engineering, especially in the field of structural engineering” and for contributing to the development of cooperation between the faculty of civil engineering from TUI and one of the country’s top universities, TUI has the longest tradition of engineering education in Romania.
- An honorary professorship awarded May 13 from Dalian University of Technology (DUT) in Dalian, China. DUT is one of China’s leading universities for engineering and applied science.
- The 2014 James R. Croes Medal awarded in October by the American Society of Civil Engineers (ASCE) to Frangopol; Sunyong Kim ’11 Ph.D., his former doctoral student; and his current Ph.D. candidate Mohamed Soliman. The team won for their paper, “Generalized Probabilistic Framework for Optimum Inspection and Maintenance Planning,” which was published in the March 2013 issue of the Journal of Structural Engineering.

The Croes Medal is one of the two most prestigious awards given by ASCE to one of more than 7,000 papers published by ASCE in all of its 34 journals in the preceding year. It was established in 1912 to recognize ASCE papers that make a definitive contribution to engineering science.

For more information about Dan Frangopol and his work, visit bit.ly/Dfrangopol.
In 2010, Lehigh University became one of seven schools to receive an ADVANCE Institutional Transformation Grant from the National Science Foundation (NSF). Lehigh’s winning proposal, “Building Community Beyond Academic Departments,” focuses on harnessing the university’s interdisciplinary strengths to enhance recruitment, retention and the advancement of women faculty in the science, technology, engineering and mathematics (STEM) fields.

Ever since the grant’s inception, two CEE faculty members have been leading the ADVANCE charge.

Sibel Pamukcu, professor of geotechnical engineering, was the first to serve ADVANCE as co-director and co-principal investigator (Co-PI). Looking back, Pamukcu cites the awareness she helped raise as her proudest accomplishment. “We started a conversation about the importance of diversity and the need to increase the number of women faculty in STEM areas. As a result, many more people now know and understand what ADVANCE is all about.”

In June 2013, Kristen Jellison, associate professor of environmental engineering (pictured left), became the sole director of the ADVANCE program. Jellison has steadily built upon the foundational work of her predecessor, who remains a Co-PI. On Jellison’s watch, ADVANCE has helped facilitate search committee orientations; advised on mentoring programs for associate professors; helped raise as many engaged department chairs; and planned for the sustainability of the program going forward.

Through the success of the LU-WISE (Women in Science Engineering) program, ADVANCE has also helped foster a strong community among Lehigh’s female STEM faculty.

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March 2014 marked 50 years since the Great Alaska Earthquake of 1964, which caused the largest and most devastating recorded tsunami ever to strike the Pacific Coast. Researchers have made great strides toward understanding the destructive power of these dangerous waves since then. Yet engineers could only estimate the forces at work when debris struck a home or a similar structure under tsunami conditions—until now.

In a lab at Lehigh’s ATLLS (Advanced Technology for Large Structural Systems) Engineering Research Center, CEE Assistant Professor of Structural Engineering Clay Naito, an associate professor of structural engineering, spent eight weeks in China during spring 2013 as a visiting scholar at Tongji University in Shanghai. He also visited several other universities in his role as senior faculty adviser to the office of international affairs at Lehigh. Naito’s mission: initiate collaboration on a three-year research project to study how geothermal deep foundation systems perform in cooling-dominated environments (like Qatar’s). The proposal was selected for funding by the National Science Foundation’s Advancing Research Innovation program.

PAOLO BOCCHINI, PRIDE OF THE ALMA MATER

Few academic institutions are steeped in tradition like Italy’s University of Bologna, which was founded in 1088. For example, it is the custom to inaugurate each academic year by inviting a prominent public figure to give the lectio magistralis, a speech by a master teacher or expert. Recently, the school also known as the Alma Mater Studiorum—the very first, the oldest in Europe’s oldest university—instead invited five young, successful alumni to give their own version of the inaugural speech.

Representing the Alma Mater Studiorum was Paolo Bocchini, associate professor of structural engineering (pictured far left.)
RECEIVES NSF CAREER AWARD

The five-year grant will support the development of mobile sensor technology for structural condition assessment.

SHAMIM PAKZAD, an associate professor of structural engineering, has received a five-year CAREER Award from the National Science Foundation (NSF) to support his research on the development of mobile sensor technology for structural condition assessment.

Pakzad’s research aims to create an entire class of new methods for understanding how structural systems behave using mobile sensors to collect data. His CAREER project will focus on the predictive methods we're using to very good at estimating these behaviors,” says Naito.

Another Naito team, consisting of Ph.D. candidate Kourosh Mahashirahmohammad and graduate students Nicola Carey and Mustafa Fikria, placed second in the Big Beam Contest. Their work, which assessed structural condition in real time has far-reaching implications for society.

“Our communities need structures and systems that are more resilient to hazards, disruptive events and the deterioration that occurs as a result of wear and tear,” he says. “The goal of my research through this CAREER project is to use the novel capabilities of mobile sensors to address those needs.”

Future engineers will also benefit from Pakzad’s CAREER award. Research outcomes of the project will be incorporated into a comprehensive educational plan for undergraduate students. “Our students will be well-prepared to work in structural health monitoring and design,” says Pakzad.

In the short term, the research team plans to continue developing the hardware and software for data collection and analysis. In the long term, the team hopes to create a portable system that can be used to monitor the structural condition of bridges and other critical infrastructure.

Graduate student Tom Matarazzo (left), Shamim Pakzad and Babette Hohrath '15 inspect a beam designed to simulate a highway bridge and provide mobile sensing data.

Clay Naito, associate professor and associate chair of civil and environmental engineering, guided three teams of graduate students to high-placed finishes in two national competitions.

Last October, an accurate calculation of the blast resistance of a six-inch reinforced concrete wall earned his team first place in the simplified analysis group and second place in the simplified prediction group at the American Concrete Institute’s Blast Blind Prediction Contest. The team consisted of Ph.D. candidates Patrick Tschirky and Pierluigi Olmiati, who is currently a student in Italy. Their work, which assessed structural safety following an explosion, has significant relevance to the public. “Our placement in this contest shows that the predictive methods we’re using are very good at estimating these behaviors,” says Naito.

Another Naito team, consisting of Ph.D. candidate Kourosh Mahashirahmohammad and graduate students Nicola Carey and Mustafa Fikria, placed second in the Big Beam Contest. Their work, which assessed structural health monitoring and design, was a significant achievement in the field of structural engineering. The team’s accurate calculations of capacity and placement in this contest shows that the predictive methods they are using are very good at estimating these behaviors,” says Naito.

Additional resources on this topic can be found at the following links:

Visit bit.ly/SPakzad to learn more about Pakzad and his work.

This was the first national win for Lehigh, which leap-frogged from its former spot at sixth place.

Cash prizes are awarded based on factors such as design efficiency, accurate prediction of capacity and placement in this contest shows that the predictive methods we’re using are very good at estimating these behaviors,” says Naito.

Another Naito team, consisting of Ph.D. candidate Kourosh Mahashirahmohammad and graduate students Nicola Carey and Mustafa Fikria, placed second in the Big Beam Contest. The teams earned $2,000 and $750 respectively to fund their educational pursuits.

The beams were generously produced by PCI Producer Member Prestressed Concrete Institute (PCI), which views the Lehigh support as an investment in the future of the prestressed concrete industry. "The students have to design a beam that will withstand a certain loading while considering its cost and constructability," says Gary Lehman, NPP plant manager. "They’re involved in the process from design to fabrication to final testing, which helps prepare them for the real-life engineering ahead."

This top research journal showcased the work of a Lehigh master’s student in its cover. Michael German, a Fulbright fellow pursuing his Ph.D. in environmental engineering at Lehigh, is the lead author of a paper on waste neutralization featured on the March 5, 2013, cover of Environmental Science & Technology. The study is co-authored by Anup Dangi, who advises German, and CEE alumnus John Donohue. "This is a very rare recognition for a graduate student or even faculty, for that matter," said DenBiqueta. Visit techengineer.washington.edu to learn more about their global efforts in groundwater remediation.

FULBRIGHT FELLOW’S RESEARCH RECEIVES “RARE RECOGNITION”

Russ Vignali ‘14, a student in the Integrated Business and Engineering program, was selected to represent the College of Engineering at the 2014 Honors Convocation. The high-honors student and star track athlete was also the president of Lehigh’s founding chapter of Bridges to Prosperity (see feature, p. 16). Vignali, who graduated as a president’s scholar, is using his bachelor’s-from-five-year-to-earn-a-master’s degree in environmental engineering.

The student club/organization advisory award recognizes those who significantly contribute to a student organization outside of their primary job responsibilities. These advisors provide support, guidance and mentorship that empowers the organization to effectively lead and self-govern. CEE proudly recognizes advisor recipients Rick Weisman, professor of water resources engineering; Kristen Sullivan, associate professor of environmental engineering, and Dan Zemski, engineering technician, for their continuing contributions to the Lehigh Chapter of Engineers Without Borders.

CEE’S VIGNALI REPRESENTS RECAES AT 2014 HONORS CONVOCATION

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STRUCTURES GRAD STUDENTS LAND TOP PLACEMENTS IN CONCRETE COMPETITIONS

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In May 2014, a three-minute pitch at a National Science Foundation conference earned doctoral candidate Ryan Smith second place in a competition designed to school young researchers in the art of the funding proposal. Smith attended the conference on a grant he earned for the marketing of his Ph.D. research: an environmentally friendly desalination process that reduces seismic inertial force and floor accelerations during an earthquake. Visit bit.ly/NSFASCE to read an abstract.

LU STUDENT CHAPTER PRAISED BY NATIONAL ORGANIZATION

The American Society of Civil Engineering Committee on Student Members awarded Lehigh’s ASCE Student Chapter a letter of honorable mention for its outstanding activities and contributions to developing the future of civil engineering. This honor is received by only the top third of all ASCE student organizations. According to ASCE’s director of educational activities, the chapter’s accomplishments reflect the enthusiasm and hard work of student officers and members, as well as the guidance of faculty advisor Jennifer Dress.

JHA PAPER LANDS SECOND PLACE IN EWRI STUDENT COMPETITION

Rajeev Jha’s study, “Classifying Streams on the Basis of Elevation Above Mean Sea Level, A Statistical Approach,” garnered second place in the 2014 national student technical paper competition sponsored by the Environmental and Water Resources Institute (EWRI) of ASCE. The award earned Jha $250 in prize money and an invitation to present his research at the 2014 World Environmental and Water Resources Congress. As a master’s student, Jha was advised by Paras Dipay, the P. C. Rossin Professor and chair of CEE, while both were at Virginia Tech. Jha is currently employed by the international consultancy Severud Associates, New York City.

THREE CEE STUDENTS NAMED 2014 MARTINDALE STUDENT ASSOCIATES

Thomas Jawin ’14, Agustin Villarreal ’15 and Alexander Niewiarowski ’14 (l-r) traveled to the Republic of Slovenia in May 2013 as part of the Martindale Student Association Program. The select group of 12 was tasked with reporting on a variety of Slovenian business, economic and social issues. Students attended briefings in Washington, D.C., before departing for Slovenia, where they met with government and business leaders. Their findings will be published in the 2014 edition of the undergraduate journal Perspectives on Business and Economics.

Now graduated, Jawin was an environmental engineering major and Niewiarowski was a dual-degree major in civil engineering and architecture. Villarreal is a civil engineering major.

TSAMPRASES SEURES GRANT FROM GERONDELIS FOUNDATION

Graduate student Georgios Tsamparas won a $5,000 grant from the Gerondelis Foundation Inc. for the 2012-13 academic year. The Massachusetts-based foundation awards grants to deserving Greek students attending graduate school at American universities. Tsamparas, a P. C. Rossin Doctoral Fellow, is working with Richard Sause, the Joseph T. Stuart Professor of Structural Engineering, on an experimental validation of a building system that reduces seismic inertial forces and floor accelerations during an earthquake. Visit bit.ly/NSFASCE to read an abstract.

PH.D. STUDENT EARNS SCHOLARSHIP FROM TAIWANESE GOVERNMENT

Shihong Shih (pictured left), a Ph.D. student in CEE’s water resources program, has received a two-year, $32,000 scholarship from the Ministry of Education of Taiwan to pursue his doctorate abroad. Shih’s research in the area of fluid mechanics and sediment transport helped earn him the prize, one of nine conferred in the engineering/natural disaster category.

Shih earned his master’s in hydraulic and ocean engineering from Taiwan’s National Cheng-Kung University. He is currently working with Paras Dipay, Professor of Water Resources Engineering, to complete his doctoral work.

AZERO RECOGNIZED BY LEHIGH FOR ASCE LEADERSHIP

At the annual student life leadership award ceremony in April, civil engineering major Alexander Azero ’14 won the Allegiance Award for his four years of exemplary work with the Lehigh student chapter of the American Society of Civil Engineers (LU-ASCE). “We quite intentionally nominated Alex for the Allegiance Award because it honors the spirit of continuous improvement within an organization,” says Paschos Dipay, chair of the department of CEE. “LU-ASCE has prospered under Alex’s leadership in multiple ways, and quite often because of his individual efforts.”

GEO-INSTITUTE APPOINTS LIN TO ADMINISTRATIVE ROLES

Ph.D. candidate Thomas Hai Lin attended the ASCE Geo-Congress 2014 in Atlanta to present his research. He returned the elected chair of the Geo-Logics committee and a member of the public relations committee. Both committees report to the Student Leadership Council of the Geo-Institute national organization.

Lin’s been equally busy as an author. Two articles about geotechnical professor Edward Kavazanjian Jr. and C. Carlos Santamaria, co-written with fellow Ph.D. candidate Suguang Xiao, were published in Geo-Satra magazine.
A 243-foot bridge over Panama’s Rio Indio now connects the remote villages of El Harino and Vallecito. It was built by civil engineering majors in the Lehigh student chapter of Bridges to Prosperity (B2P). Quite an accomplishment for a club that started only a year ago.

In late May, seven students flew to Panama City and boarded a bus headed southwest to the mountains in the center of the country.

One hour later, the students got into the back of a pickup truck and continued for another hour on a dirt road.

When the pickup could go no farther over the muddy, mountainous terrain, the group got out and hiked for another hour, hauling their belongings and equipment to their base of operations, the small village of El Valle along the Rio Indio river.

The students, seven civil engineering majors, were now ready to build a bridge.

The Rio Indio divides the remote communities of El Harino and Vallecito. During the dry season in Panama, from mid-December to early May, the river runs approximately three feet deep. Still, residents cross it on foot.

When heavy rains begin in May, the Rio Indio can rise five feet in 30 minutes. Now impassible, the surging river completely cuts off residents’ access to essential resources located on the other side of the river. Children in El Harino cannot attend school. Residents of Vallecito cannot reach the paved road, shop at the market, or receive medical care. The isolation makes daily life in this already impoverished community challenging at best, devastating at worst.

A footbridge, however, changes everything.

The students who traveled to El Valle were members of the Lehigh student chapter of Bridges to Prosperity (B2P), a not-for-profit organization that partners with university student chapters to build footbridges in isolated communities around the world.
A 243-FOOT-LONG CAPSTONE PROJECT
Harsh Doshi, a former B2P intern who received a master of engineering degree in structural engineering from Lehigh in 2013, introduced B2P to a group of undergraduate civil engineering students a little more than a year ago.

The students applied to B2P for chapter status and raised $10,000 for their project in Panama, receiving a Thornton Tomasetti Foundation grant and a Grant for Experiential Learning in Health from Lehigh.

In January, Ruigeng Yao ‘11G traveled to Panama to survey and select a site. Equipped with the necessary information about the Rio Indio, the group began to design a suspended footbridge with a 243-foot span. “This is pretty much a capstone of everything they learn,” says Clay Naito, associate professor of structural engineering and the B2P chapter’s adviser. “The part which we are almost never able to do in the classroom is that they can then take the design, go out to the site, and actually build it.”

Advisors who accompanied the students on the three-week bridge-building trip were Naito, Peter Bryan, Derrick Fitchman, Patrick Traisog and Dan Zenka. Local families in El Valle hosted the group. Assisted by local volunteers, the group dug trenches with shovels and carried equipment and materials such as cement, rebar and 1,000-pound cables on the arduous 40-minute hike from El Valle to the bridge site in Vallecito. Hard work and creative problem-solving became routine on the project.

Engineering students typically work on paper or build a replica of something already in existence, says Doshi, who assisted with the project, “but this is completely different. They get a chance to actually make a difference and at the same time use their engineering knowledge for something that’s really valuable.”

Today, the footbridge is completed and its impact on the community is irreversible. Children no longer miss months of school. Farmers can travel to the main marketplace to sell their crops. Obtaining medical care no longer involves tremendous risk. The Lehigh B2P footbridge has changed everything.

Next year, the chapter is planning to build another bridge in Panama. Tara Hofferth ’15, who is leading this year’s group, says the transformative project taught her how to think innovatively.

“This experience gave me the opportunity to work with a group of students that I did not know on an unprecedented project,” Hofferth wrote in a report about the project. “It involved being creative and innovative, thinking from a multidisciplinary perspective, networking, and stepping outside of my comfort zone.

“I think we’re going to be a lot more prepared to be even more successful next time.

“The Lehigh University Bridges to Prosperity Chapter is just getting started!”

Visit www.bridgestoprosperity.org to learn more about the international organization.

Visit facebook.com/BridgesToProsperityLehigh/timeline to view the Lehigh chapter’s Facebook page with photos.

Visit www.ignite.lehigh.edu/b2p to donate to the club.

THE PRESIDENT’S SCHOLARS
2013 / 2014
9

NUMBER OF UNDERGRADUATES WHO EARNED A TUTION-FREE, FIFTH YEAR OF STUDY AT LEHIGH
1

PRESIDENTIAL FELLOW, PURSUING A PH.D. IN STRUCTURAL ENGINEERING, STARTING FALL 2014

ROSSIN FELLOW APPOINTMENTS
2013 / 2014
12

DOCTORAL FELLOWS
6

JUNIOR FELLOWS
1

EXECUTIVE BOARD APPOINTMENT, SARAH EARLY AS SECRETARY

18

NUMBER OF GRADUATE STUDENTS WHO HAVE PARTICIPATED IN THE LEHIGH TEACHER DEVELOPMENT PROGRAM*

*DID YOU KNOW?

The U.S. Department of Education has cited Lehigh’s graduate tracking system as a model for measuring student success.

DIY ENGINEERING

HOPF FURRER ASSOCIATES

JOHN MORAVITY AND ASSOCIATES

KCI TECHNOLOGIES

KLEINFELDER

ON THEIR WAY:
The Class of 2014

21

NUMBER OF COMPANIES THAT EXTENDED OFFERS OF EMPLOYMENT TO CEE GRADS

KPF

MCLEAN ENGINEERING GROUP

MICHAEL BAKER CORPORATION

PHARRS STRUCTURAL ENGINEERS

PHILADELPHIA WATER DEPARTMENT

SEVERID Associates

SIMPSON GUMPERTZ HIERZ

TORCON

TURNER CONSTRUCTION COMPANY

WHITING-TURNER

COMPANIES THAT HAVE HIRED LEHIGH CO-OP STUDENTS

HBK ENGINEERING

HNTB

KCI TECHNOLOGIES

LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES

LARSON DESIGN GROUP

PENNSONI AND ASSOCIATES

REMINIGTON AND VERNICK ENGINEERS AND AFFILIATES

SOUTH WHITEHALL TOWNSHIP

Top to bottom: Carrying supplies across the river. Fabricating the anchor block reinforcement. Trench workman on the cage.

CO-OP PROGRAM GRADUATES 2013/2014

2013: 4 STUDENTS

2014: 7 STUDENTS

Sources: Lehigh Registrar, Career Services, June 2014
ALUMNA LANDS “DREAM JOB COME TRUE”

The arc of Michelle Tillotson’s career has quite literally reached the stratosphere. After the Lehigh alumna earned her B.S. in civil engineering in 2010 and her M.Eng. in structural engineering in 2011, the former research assistant joined the nuclear division of NASA as a structural engineer in September 2012. Opportunity soon came knocking again, and this time it offered Tillotson the job of her dreams: In July 2012, the E.I.T. accepted a position with NASA’s Marshall Space Flight Center in Huntsville, Alabama.

In her role as a stress analyst, Tillotson is part of a team working to reduce costs and risks for NASA’s next-generation rocket. Called the Space Launch System (SLS), the goal of the project is to engineer stronger lighter rocket tanks—one of the heaviest parts of the rocket—so the rockets can carry heavier payloads to space more cost-effectively. And every pound counts at these scales: The SLS core stage will stand at more than 200 feet tall with a diameter of 27.6 feet. It will store cryogenic liquid hydrogen and liquid oxygen that will feed the vehicle’s RS-25 engines.

Tillotson is excited to be applying her expertise in mechanics of materials and finite element modeling to aerospace engineering. She discovered the possibility in classes with John Galambos, professor of structural engineering. “His courses in Mechanics and Finite Elements made me realize my scope of knowledge wasn’t limited to bridges and buildings,” said Tillotson. She credits all her Lehigh professors for the preparation that helped her realize her potential as an engineer.

WHERE ARE THEY NOW?

THE CLASS OF 2013

95% of BSEE Grads are employed or in grad school

72% of BSEE Grads are employed or in grad school

$55K Average starting salary of CEE Grads

INDUSTRIES WHERE THEY’RE WORKING

- Building Materials and Construction
- Chemical, Drugs and Allied Products
- Computer Software and Data Processing
- Consulting Services
- Engineering/Surveying
- Environmental/Waste Management
- Other Manufacturing Employers
- Petroleum and Allied Products
- Transportation

Source: Lehigh Career Services, June 2014

UNIVERSITY OF MINNESOTA DEDICATES STRUCTURES LAB TO GALAMBOS

On May 7, 2013, the University of Minnesota renamed its cavernous structural engineering laboratory after one of its most prominent and gifted engineering faculty—and one of Lehigh University’s most distinguished alumni. The Theodore V. Galambos Structural Engineering Laboratory is a four-story lab designed for modeling and testing large-scale structural components. Now, it is also a testament to Galambos’ more than 40 years of groundbreaking contributions to civil engineering at the University of Minnesota and the profession at large.

Galambos earned his Ph.D. in civil engineering from Lehigh University in 1959 after receiving both his B.S. and M.S. at the University of North Dakota in Grand Forks in the same field. Upon graduation from Lehigh, Galambos taught and researched at the university until 1965, when he left to join the civil engineering faculty of Washington University in Saint Louis. In 1981, Galambos left Washington University to become a professor of engineering at the University of Minnesota, where he has served as emeritus professor of structural engineering since his retirement in 1997.

Galambos’ research areas include the reliability of structures, structural design standards and stability of steel structures. He has authored more than 100 publications on various aspects of structural engineering, and participated in almost every major specification committee for metal structures in the U.S.

In 1978, Galambos was elected to the National Academy of Engineering, one of the highest honors accorded to engineers. His single largest contribution to the field is his key role in developing the reliability-based load factor and resistance design code for steel structures that the profession uses today.

In 2002, Galambos was awarded the American Society of Civil Engineer’s (ASCE) prestigious Outstanding Projects and Loadings (OPAL) award for his contributions to civil engineering education. Other notable awards include the 1992 Ernest E. Howard Award, also from ASCE, for his contributions to the field of civil engineering.

TANK-TECH COMPANY SCORES A WIN

An aquarium-technology company co-founded a decade ago by environmental engineering alumnus Tim Marks ’04, ‘06G and his fellow Lehigh alum Pat Clasen ’04, ’07G has been named a “Small Business Exporter of the Year” by the U.S. Small Business Administration’s Philadelphia district and mid-Atlantic regional offices. The company’s growth in international markets accounts for 33 percent of its total sales.

EcoTech Marine, matched in an Integrated Product Development class at Lehigh in 2003, has expanded into a 36,000-square-foot facility in Hanover Township, Lehigh County. Credi EcoFilter’s strong sales of products such as the patented VorTech tank pump, which prevents aquarium water from heating up.

CLARKSON’S COLLINS HONORS FELLOW CEE ALUM SARKISIAN

Clarskon University’s 120th commencement ceremony also set the stage for a distinguished CEE reunion. Mark Sarkisian ’86G, director of seismic and structural engineering in the San Francisco office of Skidmore, Owings & Merrill LLP, received an honorary doctor of science degree from his fellow CEE alumnus, Anthony Collins ’75G, ‘82P, the president of Clarkson.

Clarkson awarded Sarkisian the degree for his “dedication to the science and art of engineering, for his visionary development of sustainable buildings and construction methods, and his inspiring work with future generations of engineers, designers and builders.”

To read Sarkisian’s bio, visit bit.ly/Sarkisian. To read Collins’ bio, visit bit.ly/CollinsClarkson.
FALOTICO FEATURED IN WOMAN ENGINEER

Kirsten Falotico '12, '13S, an environmental engineer with AECOM, was featured in the Winter 2013/2014 issue of Woman Engineer magazine for her work on contaminated groundwater at a mining site. “My average day consists of operating and maintaining a system that injects solution into wells deep in the ground,” Falotico said in the article. The solution provides food for naturally occurring bacteria in the ground. Bacteria consume the contaminant along with the food, decreasing its concentration in the groundwater.

Falotico, whose graduate research focused on microbiology, sees remediation technology as a growing and important field. “You feel good about the work you are doing by cleaning up the environment, and in turn, making it a safer place to live,” she said. “It is a great feeling, knowing that I am part of the team that is directly involved in cleaning up this groundwater.”

ZARRILLI APPOINTED TO FEMA NATIONAL ADVISORY COUNCIL

In August 2014, the Federal Emergency Management Agency (FEMA) appointed Daniel Zarrilli '97 to serve on its National Advisory Council (NAC). NAC was established by the Post-Katrina Emergency Management Reform Act of 2006 and advises FEMA on all aspects of emergency management.

In October 2013, Zarrilli headed to Botswana, where he did similar work on atmospheric carbon dioxide. The young researcher concluded his year in Kenya, where he worked on a project to collect soil gas and atmospheric data.

A MOMENTOUS COMMENCEMENT

Graduations mark major milestones in the life of a family. This was doubly so for the Wu family in 2014, as Dean S. David Wu affiliated his son Lehigh commencement while his son Brian received his B.S. in civil engineering. Both commenced to bigger, new challenges: provost of George Mason University and provost of George Mason University for her work on contaminated groundwater.

Visit bit.ly/CEEAlumni for a sampling of where our newest alumni are earning and learning.

LINDA KAPLAN, PITTSBURGH’S YOUNG CIVIL ENGINEER OF YEAR

The American Society of Civil Engineers–Lehigh Valley Section named Linda Kaplan '10G, P.E., the 2013 Young Engineer of the Year. Kaplan is a bridge engineer based in Curtain, Rooneys and Associates’ Pittsburgh office. ASCE confers the award to an engineer under the age of 35 who has demonstrated outstanding performance in the field of civil engineering and who is actively involved in both ASCE and the community.

Kuklinski is one of only 12 new members. His appointment ends in July 2017. Zarrilli currently serves as both the director of the New York City Mayor’s Office of Recovery and Resilience and the acting director of the Office of Long-Term Planning and Sustainability (OLTPS). The professional engineer is leading the implementation of “A Stronger, More Resilient New York,” the City’s effort to improve resiliency by strengthening coastal protections, upgrading buildings, improving infrastructure, and making neighborhoods safer and more vibrant. On Zarrilli’s watch, in September the City also committed to reduce greenhouse gas emissions 80 percent by 2050, making NYC the largest city in the U.S. to adopt that goal.

Until June 2013, Zarrilli served on the Mayor’s Special Initiative for Rebuilding and Resilience, where he led the City’s efforts to develop a comprehensive coastal protection plan for the five boroughs. In a previous role, he was the senior vice president for asset management at the New York City Economic Development Corporation (NYCEDC), where he was responsible for maritime assets and operations. Before joining NYCEDC, Zarrilli spent five years with Bechtel Infrastructure Corporation.

In addition to his B.S. in civil engineering from Lehigh, Zarrilli earned an M.S. in environmental engineering from MIT. He currently resides in Staten Island, N.Y., with his wife, Christine, and sons, Adam, 5, and Nathaniel, 2. Visit bit.ly/Zarrilli to read what the senators wrote on Zarrilli’s behalf.

NYIKADZINO LANDS PRINCETON U. RESEARCH INTERNSHIP

After graduation, Virginia Nyikadzino ’11 worked as a design engineer for structural consultants PCB International LLC. Compelled by her passion for geoenvironmental research, a desire to pursue graduate study, and hopes of working in research and development within Africa, the former Botstiber Scholar found her opportunity to do so in the Ivy League.

In April 2013, Nyikadzino began a research internship with Kelly Caylor, an associate professor of civil engineering and director of the NSF-supported Precorrosion Evolution (PREv) Lab. The internship took her to the Nyiragongo Research Center in Kigali, where she worked on a project to collect soil gas and atmospheric data, focusing on hydrogen isotopes in water vapor.

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The American Society of Civil Engineers–Lehigh Valley Section named Linda Kaplan '10G, P.E., the 2013 Young Engineer of the Year. Kaplan is a bridge engineer based in Curtain, Rooneys and Associates’ Pittsburgh office. ASCE confers the award to an engineer under the age of 35 who has demonstrated outstanding performance in the field of civil engineering and who is actively involved in both ASCE and the community.

Kaplan is the vice president of the ASCE Younger Members Forum and is a member of its outreach and program committees. The Pittsburgh resident also volunteers with the ASCE (Architecture, Construction, and Engineering) Mentor Program. Her professional projects include Pittsburgh’s Squirrel Hill Tunnel Rehabilitation and the North Side Bridge Replacement in Allegheny County.

KUKLINSKI HONORED BY LEHIGH VALLEY ASCE AND LEHIGH ALUMNI ASSOCIATION

The American Society of Civil Engineers–Lehigh Valley Section named Gregory Kuklinski ’98, P.E., its 2013 Engineer of the Year. The award recognizes civil engineers who have distinguished themselves through outstanding contributions to their professions and communities, including the education and support of younger and future engineers. Kuklinski, a structural engineer working at Wood Research & Co. in Allentown, is the practitioner adviser to Lehigh University’s ASCE Student Chapter.

An active alumni, Kuklinski serves the university on the Board of Trustees, Alumni Association Board of Directors, as the Class of 1998 representative, and as a founding member of the Young Alumni Council. For all his efforts, a grateful Lehigh honored Kuklinski with the Alumni Award for his class at its 15th reunion in 2013.
MILESTONES

SHARING VOWS AND HARD HATS
It seemed only fitting that CEE alumna Lauren Horwath ’10, ’11G wed journalism alumnus Andrew Daniels ’10 beside the scaffolding built for the Packer Chapel renovation. Lauren, an assistant project manager at Whiting-Turner, and Andrew, a senior associate editor at Newsweek magazine, were married a year in June 2014.

AN ARTS/ENGINEERING WEDDING
Bob Antes ’10, ’11G married Danielle Setola ’10 on Sept. 21, 2013. True to Lehigh’s interdisciplinary spirit, the groom brings his BSCE and M.Eng. degrees to the union; the bride, her B.A. in psychology.

AND BRAYDEN MAKES FOUR
Dawn and Greg Kuklinski ’06 welcomed son Brayden to the family on March 4, 2013. He enjoys playing with his big sister Ashley and attending Lehigh football games.

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We hope that you will also continue to support the Lehigh Fund, which goes toward financial aid, the university’s top priority.

Questions?
Contact Brad Superka at brs209@lehigh.edu or 610-758-6197.