

Civil and Environmental Engineering

Robert R. McCormick School of
Engineering and Applied Science
Northwestern University

SUMMER 2014

David Corr Receives Teaching Award

CORR WAS HONORED FOR HIS DEDICATION TO STUDENTS AND IMPACT ON CURRICULUM



“I have rarely encountered such dedication to his students’ mastery of the material.”

The award recognizes his outstanding performance in classroom teaching.

Corr has distinguished himself as a highly effective professor within McCormick. Administrators and fellow professors have recognized his dedication to students, as evidenced by his receipt of the McCormick “Certificate of Teaching Excellence” in 2011.

Teaching courses that contain both graduate and undergraduate students, Corr works creatively to ensure all students understand basic engineering concepts while continuously challenging those who are ready to apply the concepts.

One student remarked, “I have rarely encountered such dedication to his students’ mastery of the material.” In addition, his peers have commended Corr’s impact on the civil and environmental engineering curriculum. He has collaborated with others to ensure cohesiveness among courses and has also created projects that require realistic problem-solving skills.

As a practicing engineer, Corr learned firsthand the importance of teamwork and communication, so he believes it is essential to teach these skills as part of his courses. Corr first came to Northwestern in 2003 as a postdoctoral research associate. He served two years as research assistant professor before joining the consulting engineering firm Exponent, Inc. He returned to Northwestern in 2008 and has since earned a solid reputation for his research with the Infrastructure Technology Institute. Corr earned a PhD and MS from University of California, Berkeley and a BS from Notre Dame.

David Corr, a clinical associate professor of civil and environmental engineering in McCormick, was named the Charles Deering McCormick Clinical Professor during a ceremony in May.

Guiseppe Buscarnera Honored with CAREER Award

THE NATIONAL SCIENCE FOUNDATION GIVES THE AWARD TO OUTSTANDING EARLY CAREER SCIENTISTS

Guiseppe Buscarnera, an assistant professor of civil and environmental engineering in McCormick, received a prestigious Faculty Early Career Development (CAREER) Award from the National Science Foundation (NSF).

The CAREER program offers the NSF’s most prestigious awards for new faculty members. The program recognizes and supports early career development of teacher-scholars who are most likely to become the academic leaders of the 21st century.

CAREER awardees are selected on the basis of creative career-development plans that effectively integrate research and education within the context of the mission of their respective institutions. The minimum award size is \$400,000 for a five-year period. Buscarnera’s winning proposal was entitled “Mechanics of Geomaterials Exposed to Multi-Physical Perturbations: Innovating Science, Training and Education through Fundamental Principles.”



Buscarnera joined the faculty at Northwestern in 2011 from the Politecnico di Milano in Milan, Italy. His research focuses on the constitutive modeling of geomaterials with emphasis on the effects of

The CAREER Program offers the NSF’s most prestigious awards for new faculty members.

non-mechanical perturbations; mechanics of unsaturated soils; and theory of material stability and its application to geo-engineering problems.

Letter from the Chair

It is a great pleasure to share this issue of the CEE Newsletter with you.

It has been a very exciting and eventful year for the students, staff, and faculty of the CEE department. In October we held the first CEE Alumni Reunite Luncheon during the Homecoming weekend. About twenty five alumni from Classes of 1965 to 2013 joined us. In November Thomas J.R. Hughes, professor of aerospace engineering and engineering mechanics and Computational

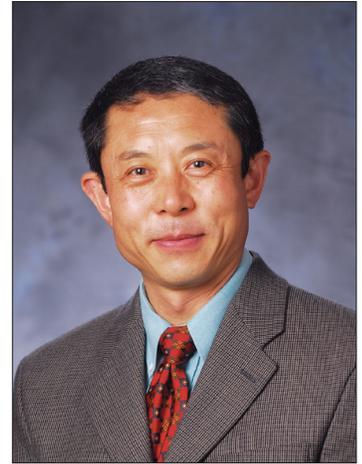
ence at the University of Illinois at Urbana-Champaign in April. For the first time, our environmental engineering students formed a team and competed in the environmental engineering event. In May Professor Linda Abriola, dean of the School of Engineering at Tufts University, delivered the 2014 Department of Civil and Environmental Engineering Distinguished Lecture, and James R. Rice, the Mallinckrodt Professor of Engineering Science and Geophysics at Harvard University, gave the

ates. Nearly 250 graduates and their families were on hand at the CEE Graduation and Award Ceremony to celebrate the success of our graduates. You can read more about some of these activities in this issue of the CEE Newsletter.

Last fall, the department welcomed George Wells, an assistant professor in the environmental engineering area. I am excited to tell you that Amanda Stathopoulos, an assistant professor in the transportation area will join us this coming fall. Inside this issue of the CEE Newsletter, you can find more information about their background, research and other interests.

Our students and faculty continue to shine. Their outstanding achievements have been recognized by many awards and honors. A few of them are highlighted in this issue of the CEE Newsletter. They give you a glimpse of the greatness of our students and faculty.

Of course, none of the above would be possible if not for the long-



standing support from our alumni and friends. I want to take this opportunity to express our gratitude toward your generosity with your time, effort, and financial contributions. As I embark on my second term as the department chair, I want to assure you that we will continue our effort in making the CEE department a better place for our faculty, staff, and students, and a place that you can be proud of.

“As I embark on my second term as department chair, I want to assure you that we will continue our efforts in making the CEE department a place you can be proud of.” Jianmin Qu

and Applied Mathematics Chair III of the University of Texas at Austin, presented the inaugural Ted Belytschko Lecture. Again, both our Concrete Canoe and Steel Bridge teams competed in the Great Lake Regional ASCE Student Confer-

second Annual Jan D. Achenbach Lecture. We concluded the academic year in June with the most exciting event—graduation. The Class of 2014 includes 29 undergraduates from the BSCE and BSEE programs, 53 MS, 28 MPM, and 11 PhD gradu-

The Department Welcomes New Faculty

AMANDA STATHOPOULOS AND GEORGE WELLS JOIN THE DEPARTMENT



Amanda Stathopoulos



George Wells

The Department of Civil and Environmental Engineering welcomes Amanda Stathopoulos and George Wells.

Currently a postdoctoral researcher in the Transportation and Mobility Laboratory at Ecole Polytechnique Federale de Lausanne in Switzerland, Stathopoulos will

join Northwestern on September 1 as an assistant professor. She received her masters from Sapienza University in Rome and PhD from Trieste University in Italy.

Stathopoulos' research areas of interest rests on three axes related to transportation choice modeling and forecasting; design

of choice experiments and use of unconventional data, developing models incorporating non-utility maximizing decision protocols or dimensions such as attitudes to group and collective behavior. Her research has entailed empirical data and model efforts, focusing on several types of stakeholders such as travelers, freight shippers and carriers, to concretely support decisions about future transportation policies, services and investments.

Earlier this year, Wells joined Northwestern as the Louis Berger Junior Professor of Civil and Environmental Engineering from Stanford University where he earned his master's and PhD. After receiving his PhD, Wells was a postdoctoral

scholar at the Swiss Federal Institute of Aquatic Science and Technology in Switzerland, where he studied microbial ecology.

Wells' primary research interests are microbial nitrogen cycling and short-circuit biological nutrient removal processes, microbial ecology of engineered and natural settings, sustainable biological wastewater treatment, microbial greenhouse gas production, and resource and energy recovery from waste.

As he embarks on this new phase of his academic career at McCormick, Wells is excited to explore collaborative possibilities on related research topics within the Department Civil and Environmental Engineering, across the University, and particularly with local industrial or public utility partners.

Predicting Changing River Landscapes

AARON PACKMAN COMBINES OBSERVATIONS AND MATHEMATIC MODELS TO EVALUATE THE RIVER'S FUTURE

Aaron Packman and his team are working to create tools that can predict how a river's water level, course, and toxicity will change in the future. The project, called Earthcasting, works across the boundaries of physical and chemical experiments and theory—combining observations in the natural environment with the development of new models. Funded by the National Science Foundation, it is an interdisciplinary, collaborative study among Northwestern, the University of Notre Dame, Michigan State University, and the University of Pennsylvania.

"Rivers are quite hard to predict compared to other systems," said Packman, a professor of civil and environmental engineering. "Current mathematics aren't sufficient to study this complex environmental system behavior, but we are linking mathematics, physics, and geochemistry to create a better model."

Packman's group at the McCormick School of Engineering bridges the gap between mathematics and experimental work to develop computational models that will improve our capability to predict river ecosystem dynamics. To do this, he and other researchers look at long-term trends, such as climate change, coupled with more variable trends, such as day-to-day weather. They must also take into account how humans alter a river's landscape by implementing locks and dams, removing water for drinking and irrigation, and changing nutrient levels through widespread use of fertilizers.

"Humans have the ability to rewrite the landscape through engineering and technology," Packman said. "Globally humans have doubled the amount of nitrogen [from fertilizers] that's coming out of major rivers. We've really changed the global process."

The researchers plan to build a record over a long period of time that allows trends to be assessed. The end result will be a software package that can be continually



A close-up look of the riverbed in Sugar Creek, Indiana. One of Packman's study sites, Sugar Creek has been straightened, deepened, and had tile drains installed to favor rapid removal of water from agricultural lands.



updated as more data becomes available. With the software, users can simulate different environmental or manmade factors to better understand the basic processes that occur in—and view the predicted future of—their particular river of interest.

Turning Events into Transportation Experiments

JOSEPH SCHOFER SAYS OPPORTUNITIES TO EXPERIMENT WITH TRANSPORTATION ARE ALL AROUND US

Flash floods, heavy snowfalls, storm surges—extreme weather has the instant ability to test our transportation systems. It can highlight infrastructure weaknesses and probe our response

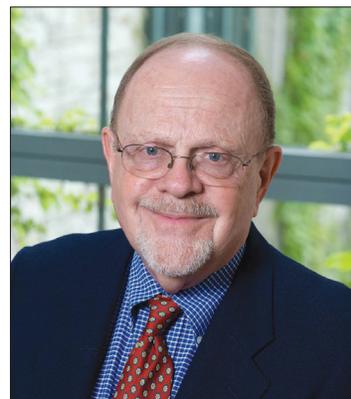
"Learning opportunities are all around us, but we let too many go by."

Joseph Schofer

mechanisms. According to Joseph Schofer, a professor of civil engineering in McCormick, some of the best transportation research comes from nature's unplanned events. "Learning opportunities are all around us," he said. "But we let too many opportunities go by."

In their recent article, "We Can Learn from That!," Schofer and McCormick PhD student Raymond Chan urge academics, professionals, and government leaders to work together to create an experimental culture in transportation. By studying planned and unplanned changes in transportation, governments can learn what works and what does not and apply the findings to future events. The article was published in the spring 2014 issue of *ACCESS*, the magazine of the University of California Transportation Center.

Looking to and learning from history can greatly improve future responses. For example, when Superstorm Sandy devastated the New England coastline in October 2012, it claimed 286 lives and caused



\$68 billion in damage. As bad as it was, some assessments indicate that it could have been much worse. By learning from mistakes made during Hurricane Katrina, the New York Metropolitan Transportation Authority chose to shut down mass

transit services in the face of the storm. It saved countless lives and dollars.

"New York made better choices by looking at how other transportation systems handled similar events," Chan said. "We can look to other systems and pull together a collective experience to learn from."

Schofer said other events, such as responses to gas tax increases, policy implementations, road closures, and construction disruptions, are fertile ground for transportation analysis. Failures and successes should both be viewed as opportunities for learning.

Huang Develops Two New Biomedical Devices

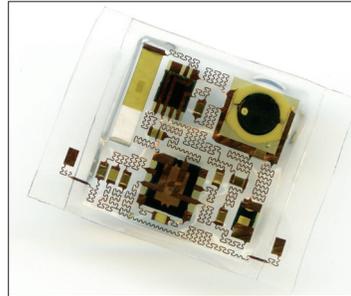
A STICKY HEALTH MONITOR AND A DEVICE THAT HARNESSES ENERGY FROM THE BEATING HEART

Yonggang Huang, the Joseph Cummings Professor of Civil and Environmental Engineering and Mechanical Engineering, has developed two new medical devices that could revolutionize clinical monitoring.

He was a part of a team that demonstrated thin, soft, stick-on patches that stretch and move with the skin and incorporate electronics for sophisticated wireless health monitoring. The patches stick to the skin and use a unique microfluidic construction with folded wires to allow the patch to bend and flex without being constrained by the rigid electronics components. They could be used for everyday health tracking and clinical monitoring, such as EKG and EEG testing.

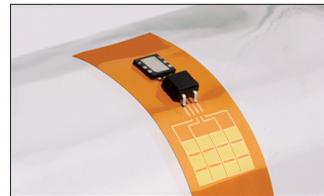
"We designed this device to monitor human health 24/7, but without interfering with a person's daily activity," Huang said. "This device is wirelessly powered and can send high quality data about the human body to a computer in real time."

Huang also developed a new, flexible medical device that can harvest the energy of the beating



heart. The device could power pacemakers, defibrillators, and heart-rate monitors naturally and reliably while reducing the need for batteries.

Huang and his longtime collaborator John A. Rogers of the University of Illinois developed and demonstrated a device that converts the mechanical energy from the natural motions of the heart, lung and diaphragm into electrical energy. This works because the one of the used materials has piezoelectricity, an electric charge that develops when



Huang has created two new biomedical devices. Left: A tiny rechargeable battery sits on the surface of a flexible implant that harvests the energy of a beating heart. Far left: A stretchable adhesive patch for health monitoring.

the material is pressed or bent. The mechanical beating of the heart or the breathing motion of the diaphragm does the pressing.

"We carefully designed the device so the piezoelectric material would be pushed to nearly the breaking point, where we could capture the maximum amount of energy," he said. "Once this kind of energy is harvested, it can charge a lot of different implantable devices."

"This device is wirelessly powered and can send high quality data about the human body to a computer in real time."

Yonggang Huang

ANNUAL SPRING LECTURES

Linda Abriola, dean of the School of Engineering at Tufts University, delivered the 2014 Department of Civil and Environmental Engineering Distinguished Lecture. "In Search of the Silver Bullet: Progress and Perspectives on Contaminated Subsurface" took place on May 8.

James R. Rice, the Mallinckrodt Professor of Engineering Science and Geophysics at Harvard University, delivered the second Annual Jan D. Achenbach Lecture on May 16. Titled "Mechanics on the Great Ice Sheets," his talk discussed the flow, fracture, and hydrology of Earth's major ice sheets.

FACULTY AWARDS

Jan Achenbach was named Honorary Professor by the Beijing Institute of Technology and received the A.K. Rao Memorial Award from the Indian Society of Non-Destructive Testing.

Zdĕnek Bažant delivered the Endowed Fowler Distinguished Lecture at Texas A&M University, gave a distinguished lecture in mechanical engineering at Carnegie-Mellon University, presented the distinguished lecture in mechanical engineering at Arizona State University, was elected ASME honorary member, and delivered four plenary lectures at international universities.

Gianluca Cusatis was appointed associate editor of the *ASCE Engineering Mechanics* journal and elected treasurer and member of the board of directors of IA-FraMCoS.

Richard Finno was appointed to the Board of Trustees of the Academy of Geo-Professionals.

Yonggang Huang published six papers in *Nature*, *Science*, and their sister journals, and his work was reported by NBC news. He was also elected president of the Society of Engineering Science and received the 2013 Daniel C. Drucker Medal from ASME.

Isaac M. Daniel received an honorary doctorate from Democritus University in Greece in June 2013.

John Rudnicki was elected fellow of ASCE Engineering Mechanics Institute.

Joseph Shofer received the Thomas B. Deen Distinguished Leadership Award from the Transportation Research Board.

Alumni Profile: Michael Goodkind (PhD '73)

GOODKIND COMES FROM A FAMILY OF SIX CIVIL ENGINEERS

A member of our department's External Advisory Committee, alumnus Michael Goodkind is a strong supporter of our department's students and mission. Annually, he sponsors our ASCE student members to attend the Western Society of Engineers Washington Award dinner and IL ASCE President and Scholarship dinner. Goodkind is the third generation civil engineer in his family and his wife Mary received her master's in civil engineering from Northwestern University. The rich civil engineering heritage of the Goodkind Family appeared in *All in the Family: Civil Engineering Legacy Stories*, published by ASCE Foundation. A condensed version of the article is provided here.

ASCE Foundation President Michael N. Goodkind has an extensive history of civil engineering in his family. His grandfather and uncle even have a pair of bridges spanning the Raritan River named after them. Located on U.S. Route 1 in New Jersey, the



Morris (Northbound) and Donald (Southbound) Goodkind Bridges connect Edison on the north with New Brunswick on the south.

Michael's grandfather, Morris Goodkind, began the civil engineering tradition in 1904 when he graduated with a bachelor's in civil engineering from Columbia University. He worked for the State of New Jersey, serving as the chief bridge engineer for 25 years. During World War II, he also worked as a consultant to the war department in Washington, D.C. Morris was involved in the founding of the National Society of Professional Engineers, and was a district director of ASCE, as well.

Michael's father, Herbert Goodkind, became the second engineer in his family after graduating with a bachelor's in civil engineering from Rutgers in

1938. He joined the US Army after graduation and entered World War II, causing him to spend time in Europe building bridges, which included working with his father on some of those projects. In 1953, he joined the consulting engineering firm of Goodkind & O'Dea, which was started by his brother, Donald Goodkind, and James J. O'Dea.

One of Donald's sons, Steven Goodkind, left New Jersey and received his bachelor's in civil engineering from the University of Vermont. Upon graduation, Steven decided to stay in the state, and is now the Director of Public Works for Burlington, Vermont.

After seeing all of his family's contributions to the field of civil engineering, Michael decided that he wanted to be a part of the tradition. He spent his last two years of high school working summers at Goodkind & O'Dea, further reinforcing in his mind that this was the career he wanted to pursue. Michael obtained his bachelor's in civil engineering from Rutgers in 1965, his master's in civil

When Michael married his wife Mary, she became the sixth civil engineer in the Goodkind family.

engineering from Iowa State in 1967, his PhD in structural engineering from Northwestern in 1973, and his MBA from the University of Chicago in 1976. Michael spent time working for his father's firm, and in between his PhD and MBA programs, completed structural and civil engineering work at other firms. After graduating from his



The Donald and Morris Goodkind bridges between Edison and New Brunswick, New Jersey.

MBA program, Michael began his career at Alfred Benesch & Company. He originally worked on civil projects, but later got involved with business development. In 1989, he proudly became the President of the company, and served in that role for 19 years. Michael stepped down as President in 2009, and retired in May of 2013.

Michael enjoys retirement, but is still involved in internal training on an "on-call" basis. His wife, Mary E. Goodkind, also has her master's in civil engineering, making her the sixth civil engineer in the family.

Text used courtesy of the ASCE Foundation

ALUMNI AWARDS

Edith M. Ardiente (PE QEP, MS) received the 2013 Charles W. Gruber Association Leadership Award from the Air and Waste Management Association.

Jen Cowman (BSEE) received the 2013 Outstanding Young Professional Award from the Air and Waste Management Association.

Ben Shorofsky (BSEE '12, MS '12) received a Fulbright Scholarship to help find solutions to the textile industries pollution of wastewater in the Rajasthan region of India, which he started while in the Global & Ecological Health Certificate Program in 2012.

Graduates Recognized at CEE Graduation Reception

NEARLY 250 GRADUATES AND GUESTS CELEBRATED THEIR ACCOMPLISHMENTS



2014 CEE award recipients from left to right: Abby Christman, Rose Milavitz, Lizzy Conger, Ruthie Norval, Julija Vinckeviciute, and Derek Cheah

The Department of Civil and Environmental Engineering kicked off the graduation celebration with a reception on June 19, the eve of Northwestern's university-wide commencement. Nearly 250 graduates, family members, and friends attended the Graduates Recognition and Award Ceremony, which followed a dinner at the Allen Center. It was a great opportunity for members of the department to meet with the graduates' families and friends and to help them celebrate a big milestone in the graduates' careers.

The Class of 2014 includes 29 undergraduates for the BSCE and BSEE programs, 28 MPM, 53 MS, and 11 PhD graduates from the areas of environmental engineering and science, geotechnical engineering, structural engineering and infrastructure materials, and transportation systems analysis and planning. The department recognized six graduating seniors for their scholastic achievement. Those graduates are:

Derek Cheah received the *Civil Engineering Senior Award*, which recognizes an outstanding civil engineering graduating senior.

Abby Christman and **Rose Milavitz** received the *Edwin C. Rossow Prize for Structural Engineering*, which is given to students who demonstrate great potential to contribute and succeed as a professional in the field.

Elizabeth Conger received the *Jimmie Quon Memorial Award for Environmental Engineering*, which is given to a senior with the highest potential to make significant contributions to the field.

Ruthie Norval received the *Wallis S. Hamilton Award for Civil Engineering*, which recognizes the senior who best exemplifies the stands of Professor Hamilton, a teacher, researcher, and professional engineer.

Julija Vinckeviciute received the *Environmental Engineering Senior Award*, which recognizes an outstanding environmental engineering graduating senior.

STUDENT SCHOLARSHIPS

Nicholas Brandis received the 2014 Structural Engineering Institute Undergraduate Scholarship from the Illinois ASCE.

Derek Cheah received the 2014 Transportation and Development Institute Graduate Scholarship from the Illinois ASCE.

Abigail Christman was awarded two scholarships by the Associated Steel Erectors and the Wire Reinforcement Institute Education Foundation.

Alessandro Culotti and **Kimberly Huynh** were awarded first and second place, respectively, in the Student and Young Professional poster competition at WATERCON 2014.

Jeremy Halpern received a Fulbright US Student Award to complete transportation research in Israel.

Kimberly Huynh received three awards at the 2014 Undergraduate Symposium: top poster presentation; top presenter in math, computer sciences, engineering, and physics; and top presenter from Northwestern. She also received the Graduate Fellowship from the Alumnae of Northwestern.

Sara Ibarra received the 2014 Geotechnical Group/GeoInstitute Undergraduate Scholarship from the Illinois ASCE and the 2014-15 AISC/Associated Steel Erectors of Chicago Scholarship.

Matthew Kan served as a juror of 2014 IDEAS2 where he selected winners of the steel structure competition.

Rose Milavitz received the 2013-14 AISC/Associated Steel Erectors of Chicago Scholarship.

Andrew Sonta received two 2014-15 AISC scholarships.

CLASS OF 2014 POST-GRADUATION PLANS

We asked undergraduates of the Class of 2014 where they are going next, here are a few of the responses:

Hailey Arterburn and **Ruthie Norval** will study at the University of Texas in Austin.

Julia Buford and **Gabrielle Salvaterra** will attend the Kellogg School of Management.

Derek Cheah will study at the University of California-Berkeley.

Abby Christman will study at the University of Washington in Seattle.

Elizabeth Conger plans to stay in McCormick to pursue a graduate degree in chemical engineering.

Meg Gates will join Kimberly-Horn and Associates in Houston, Texas as a civil engineer-in-training.

Frank Kaufhold will become a project engineer for Lend Lease in Chicago.

Justin Lueker will work for Ebert & Baumann Consulting in Washington, DC.

Dan McCarthy will move to Boston to become a technology analyst for Deloitte Consulting.

Rose Milavitz will study at the University of Minnesota in Minneapolis.

Ian Preston will become a staff engineer for McMahan Associates in Camp Hill, PA.

Tim Smith will work for Kier & Wright in Livermore, CA.

Deborah Teng is a technical sustainability consultant at Goby in Chicago.

Liz Trumbull will join Perry & Associates, LLC in Chicago as an engineer.

Julija Vinckeviciute will study at the University of California-Santa Barbara.

Michelle Wagner will become a plates structures engineer at CB&I in Chicago.

ASCE Student Chapter Continues to Grow

Since its reincarnation in 2010, the ASCE Student Chapter has seen growing participation and continuous improvement. Student interaction has been strong. For three years in a row, the Chapter participated in both concrete canoe and steel bridge competitions. This year, the civil engineering students were joined by the environmental engineering students at the Great

Lakes ASCE Student Regional Conference competing in the environmental engineering event. The students took third place in that event, third place in design, and fifth place overall in concrete canoe. The Chapter also received a Letter of Commendation from ASCE for its top one-third performance among all student chapters and clubs.

CE and Concrete Canoe on YouTube



In response to a request from McCormick, each student organization may produce a video showcasing its program. Brett Horin (CE '15), member of NU ASCE, produced a video about civil engineering at Northwestern. The 2013-14 concrete canoe team captains produced a video of their Purple Line canoe, which was presented to the Murphy Society for its support of the team. Both videos are available on YouTube. The links to the videos can be found on the CEE website http://www.civil.northwestern.edu/undergraduate/civil_engineering/index.html



Pictured at top: 2014 concrete team; pictured above: 2013 Purple Line

Sixth Graders Visit for Reach for the Stars Program

STUDENTS WERE INTRODUCED TO CEE TOPICS



CEE PhD student Jovanca Smith helps students with an activity.

Jovanca Smith (PhD '14), a former student of Gianluca Cusatis, associate professor of civil and environmental engineering, was a 2013-2014 Fellow of the National Science Foundation (NSF) GK-12 Reach for the Stars: Computational Models for Teaching and Learning in Physics, Astronomy and Computer Science program.

The program places STEM graduate fellows in K-12 science classrooms where they spend 10 to 15 hours per week for an academic year. The fellows work in a partnership with collaborating teachers to bring more inquiry-based teaching methods into the classroom and further expose K-12 teachers and students to the process of research. Through the program, fellows will adapt concepts of computational thinking and computational modeling tools from their research to classroom activities connected to the existing math and science curriculum. Michelle Paulsen, an adjunct professor in Northwestern's School of Education and Social Policy, directs the program.

At Chute Middle School in Evanston, Smith introduced sixth grade students to concrete mechanics, decomposition, abstraction, research, and graduate education among other topics. With the assistance of Marie Breitenstein at Chute, Amy Pratt of Northwestern's Office of STEM Education Partnerships, Karen Chou of McCormick's CEE department, and many fellow students, Smith organized a visit of more than 160 Chute students to our department in May.

Students were further engaged in scientific thinking and research through actual concrete testing, lab tours, and engineering competitions. The visit gave students, who would not otherwise have the opportunity, a means to visit a top research institution.

The students learned about concrete mechanics, decomposition, abstraction, research, and other civil and environmental engineering subjects.

CEE Alumni Reunite at 2013 Homecoming



In October, graduates of McCormick's civil and environmental engineering Class of 1965 enjoyed a special homecoming luncheon held in their honor. **Mark your calendar for the 2014 CEE homecoming luncheon on October 18** before the Northwestern Wildcats take on Nebraska at 6:30 p.m. Reservation information is forthcoming through e-mail, Twitter, Facebook, and the CEE website. Please e-mail ceecalumni@northwestern.edu to update your contact information. Hope to see you all back for the luncheon!

CALL FOR NEWS

We are always interested in how our alumni are doing. Let us know about you! Keep in touch by emailing us at ceecalumni@northwestern.edu with updates and your current contact information. And please follow us at Twitter at [@cee_nwu](https://twitter.com/cee_nwu) and like us on Facebook at [Facebook.com/ceeatnorthwestern](https://www.facebook.com/ceeatnorthwestern).

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