THE BRIDGE

START-UP SUCCESS

To address the global water crisis, faculty and alumnus found MicroHAOPS.

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FALL 2017

CIVIL & ENVIRONMENTAL ENGINEERING
UNIVERSITY *of* WASHINGTON

That I would one day write to you as chair of the Civil and Environmental Engineering Department was inconceivable to me when I was a student here and also when I returned as an assistant professor in 2000. I am both humbled and thrilled by the opportunity to contribute to the department's mission to educate the next generation of engineers.

My time as an undergraduate student at UW was transformative. I grew as a scholar, a researcher, a professional engineer and a person. I enjoyed the time I spent with my CEE cohort working on homework assignments and projects, and participating in department activities. As chair, I look forward to providing opportunities for learning, growth and camaraderie to today's students.

I am particularly excited about the launch of the new Bachelor of Science in Environmental Engineering (BSEnvE) degree program, which provides undergraduates the opportunity to focus their studies on environmental science and engineering principles. Our faculty worked for several years to develop the program's curriculum, which will prepare students to enter the environmental engineering profession or pursue a graduate degree. In the coming year, we will be working to grow the BSEnvE program and graduate approximately 40 students each year.

This fall, I participated in several student welcome sessions and the experience reminded me that student learning is not limited to the classroom. Various student clubs, including the Concrete Canoe and Steel Bridge teams, allow students to apply their engineering education to solve real-world problems and develop project management and communication skills. Our department also offers several study abroad programs, enabling students to see first-hand the impact of civil and environmental engineering in communities around the world. This winter, a new study abroad program launches in India with the goal of empowering students to develop solutions for food insecurity and access to clean water and energy. During my tenure, I hope to enhance and expand these important extracurricular learning opportunities.

Laura Lowes, Chair & William M. and Marilyn M. Conner Professor

As a new chair, I am gaining a deeper understanding of faculty research, which is impressive in breadth. A number of faculty members received grants this fall for innovative research projects, including developing breakaway tsunami resistant buildings to better protect communities; creating sustainable cities that consider the overall health of residents; and advancing wastewater treatment technology that conserves energy. Our faculty share the same goal of creating more resilient communities and healthy environments, which is increasingly critical in today's society.

As the academic year and my term as chair begin, I look forward to advancing the department's mission of education, scholarship and service and sharing the activities and accomplishments of our students, faculty and staff.

Laura Lowes
Chair & William M. and Marilyn M. Conner Professor

MEET the **CHAIR**

A FEW FACTS ABOUT NEW DEPARTMENT CHAIR LAURA LOWES:

- **She is the first female chair in the department's 119-year history**
- **Lowes earned M.S. and Ph.D. degrees at the University of California, Berkeley**
- **Her research employs computational modeling to investigate the behavior and design of reinforced concrete structures for earthquake loading**
- **Lowes enjoys skiing, camping and hiking with her family**
- **She is a season ticket holder for Husky football games**

CEE junior Tyler Oshiro.

New bachelor's program in **ENVIRONMENTAL ENGINEERING**

When CEE junior Tyler Oshiro turns on a faucet, he sees more than just clean water. He sees the end result of a lengthy process.

"Out comes clean, potable water, but most people don't realize how much design, monitoring and treatment engineering it takes to provide such a life-sustaining resource," Oshiro said.

This passion for water quality and supply is what led Oshiro to enroll in the department's new Bachelor of Science in Environmental Engineering (BSEnvE) degree program. Oshiro is one of 14 students in the program's inaugural class this fall. After many years of planning, the program was added due to student interest in the field and increasing demand for environmental engineers.

While the existing Bachelor of Science in Civil Engineering program will continue to offer a broad, big-picture perspective of environmental engineering, the new BSEnvE program will provide a solid foundation in both engineering and the sciences as it pertains to engineering for the environment.

"I want specialized knowledge in purely environmental subjects," Oshiro said. "Environmental engineering is continuously growing and deeper technical knowledge at the undergraduate level will hopefully give me an advantage in graduate school and in my first years in industry."

An interest in environmental engineering surfaced while Oshiro was attending high school in Hawaii, where he was raised. During an environmental science class, Oshiro worked on a science fair project that entailed evaluating the water quality of a local stream. The project, together with what he learned about pollution caused by human activities, led him to develop a deeper interest in the field. For Oshiro, the timing of the program launch couldn't be better.

"It's very exciting to see it all come to fruition just in time for me to be a part of the inaugural class," Oshiro said. "It's really a testament to how hard the whole CEE department works to meet the needs of its students."

JOB GROWTH IN ENVIRONMENTAL ENGINEERING

Environmental engineering is projected to grow at a faster rate than other occupations in coming years. Job openings are expected to increase by 22 percent from 2010-2020, which is more than the 14 percent growth projection for all occupations and 11 percent growth for engineers, according to the Bureau of Labor Statistics.

After 36 years,

PROFESSOR SCOTT RUTHERFORD RETIRES

A transportation expert, professor Scott Rutherford has reached the last stop of his career: retirement. And if you ask him, it's been an amazing trip.

"I have loved it here," Rutherford said. "This is the greatest job in the world, by far."

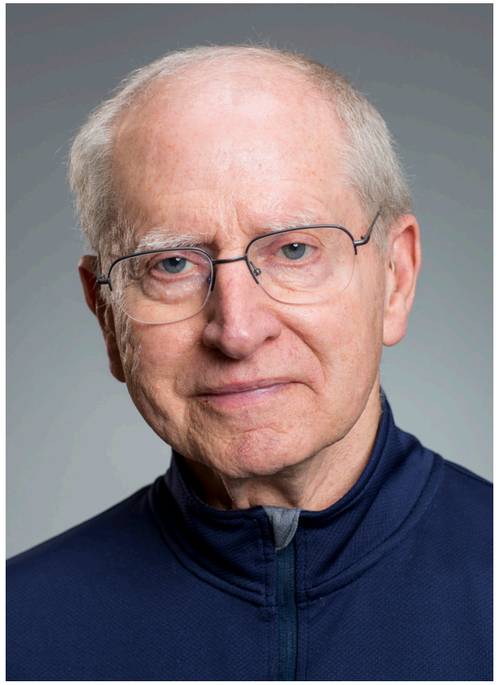
After 36 years with the Department of Civil & Environmental Engineering, Rutherford retired in September. Highlights during his career include serving as department chair, implementing the campus-wide U-PASS program and founding a new online master's degree program.

Rutherford earned his bachelor and master's degrees in civil engineering from Washington State University. After working for a few years at Standard Oil, the precursor to Chevron, Rutherford earned a Ph.D. in transportation systems from Northwestern University. He then worked in transit project consulting and travel forecasting in Washington D.C. before joining UW CEE.

In his early days in the department, Rutherford served in a variety of roles, including director of research for the Washington State Department of Transportation and director of the Washington State Transportation Center, which promotes collaborative research by serving as a link between the state, university and private sector.

Rutherford's many leadership roles over the years prepared him for a new type of management position: department chair. From 2002-2006, Rutherford served as chair of UW CEE, during which time he fondly recalls hiring many high caliber faculty members.

Recent leadership roles include serving as director of the Valle Scholarship and Scandinavian Exchange Program, which promotes the exchange of graduate students between UW and schools in Nordic countries. While a search is underway for a new director, professor John Stanton is serving as interim director. Rutherford also directed the online Master of Sustainable Transportation program, which he helped establish six years ago.



Transit planning research is Rutherford's area of expertise. A successful program he helped implement in 1991 was the campus-wide U-PASS program, which provides students, faculty and staff with access to transit options and parking through an integrated system. Prior to the adoption of the U-PASS program, many parking lots on campus were completely full; after the program was implemented, some of the same lots were half-empty, Rutherford said.

"People realized they had a choice," Rutherford said. "That was the most satisfying program I ever worked on."

Meet new faculty member

David Shean

Incoming faculty member David Shean aspires to answer big questions about climate change, sea level rise and water resources by studying something appropriately large: polar ice sheets and thousands of mountain glaciers across the globe.

Shean, who joins UW CEE faculty as an assistant professor in January 2018, has been studying glaciers on Earth since 2004. He has most recently been researching glaciers in Antarctica, Greenland and the Pacific Northwest. Glaciers are important indicators of climate change, and they serve as long-term freshwater reservoirs, providing essential meltwater for hydropower, agriculture and municipal use during late summer and dry periods.

"After studying ice and climate on Mars for nearly a decade, I wanted to shift my research focus to a topic more immediately relevant to the 7.5 billion people on Earth," Shean said.

Before pursuing his Ph.D. in earth and space sciences at UW, Shean worked at Malin Space Science Systems, a NASA sub-contractor that builds and operates space cameras for missions to Mars and other planets. Shean was on the science operations team for the Mars Reconnaissance Orbiter mission.

During his doctoral studies, Shean led efforts to develop an automated method to extract high-resolution terrain data from commercial stereo satellite imagery. He used this data to document the evolution of ice-shelf basal melt and ice-stream dynamics in West Antarctica, which affects ice sheet stability and global sea level rise.

Shean comes most recently from a research associate position at the UW Applied Physics Lab's Polar Science Center. He is passionate about pursuing research projects that bridge engineering and applied science disciplines. Shean plans to continue his snow and ice research programs in the Pacific Northwest, High Mountain Asia, and the polar regions to better understand emerging water resource challenges that impact billions of people.

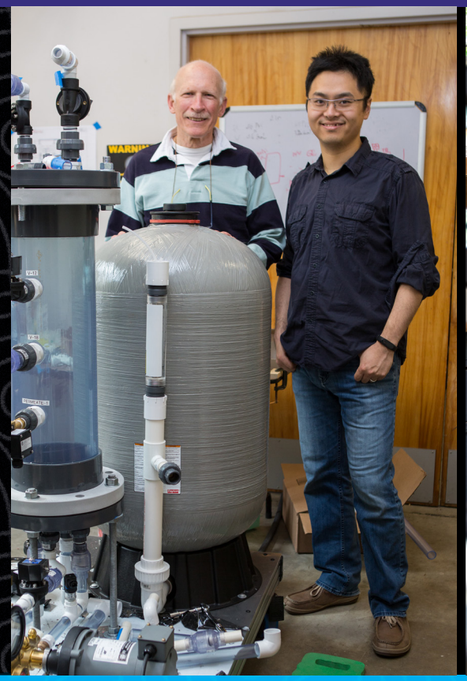
"UW has a critical mass of talented research scientists doing cutting-edge remote sensing of ice sheets and glaciers," Shean said. "I'm eager to start applying my skills to consider important civil engineering problems."

Growing up in Maryland, Shean has been a Seattle resident for six years. He fits right in, with hobbies that include hiking, backpacking, skiing, canoeing, biking and vegetable gardening. And his love of the outdoors is not limited to the ground— one of his goals for the coming year is to take up recreational flying once again.

David Shean sets up a GPS base station for spring glacier mass balance surveys at South Cascade Glacier, located in the North Cascades of Washington, in May 2017.

START-UP SUCCESS

MicroHAOPS Technology Cleans Water More Efficiently



Above left: Standing behind the partially constructed pilot system are MicroHAOPS founders emeritus professor Mark Benjamin and alumnus Nathan Cai, from left.
Above right: MicroHAOPS employee Al Vetrovs (foreground) connects the various components of the pilot system.
Reviewing the design diagram are Tianyu Wang (MSCE '16), Siamak Modarresi (Ph.D. '16) and Nathan Cai (Ph.D. '11), from left.

THE GOAL OF A NEW CEE-BASED START-UP IS CLEAR, QUITE LITERALLY: CLEAN WATER.

Founded by CEE emeritus professor Mark Benjamin and alumnus Nathan Cai (Ph.D. '11), MicroHAOPS began operations in January 2016. The company is developing technology to significantly increase the rate at which water purification processes produce clean drinking water, which has the potential to address the current and future water crisis around the world.

The emerging water crisis is the result of several factors, including climate change, urbanization and pollution of available water sources. Half of the world's population will be living in water-stressed areas by 2025, according to the World Health Organization.

"As the water crisis becomes more and more real to people's daily lives, there is a huge demand for better use of water," said Cai, who recently relocated to Seattle to work for the start-up.

The state-of-the-art process for treating drinking water is to push water through membranes that allow water flow but filter out contaminants such as bacteria, viruses, pathogens and salt. However, the membranes suffer from frequent clogging by Natural Organic Matter (NOM), a substance that originates when decaying plants are washed into the water source. Filtering out the NOM is essential, as it reacts with the chlorine added to drinking water and produces chloroform and other carcinogenic byproducts.

"Membranes are one of the best technologies for cleaning water, but they invariably encounter limitations," Benjamin said.

When membranes become clogged, some water treatment facilities continue driving the water through the filter using more energy. Other facilities operate at a slower rate, which simply delays the problem. Membranes treating freshwater are typically cleaned at least hourly, leading to deterioration of both the membranes, which are costly to replace, and ancillary equipment.

"Most U.S. plants are operating well below their designed capacity," Cai said. "Our technology is a pretreatment technology for the membrane and is very effective."

The technology developed by MicroHAOPS collects the contaminants, called "foulants," just before they accumulate on the membrane surface. The researchers developed an innovative process that heats aluminum oxide particles, causing them to retain their original shape even when pressurized. A thin micron-scale layer of particles is deposited on a porous support surface. When water passes through the particles, they absorb the foulants, preventing them from forming a gel-like film that clogs the membrane.

In preliminary tests, the new technology allowed water treatment membranes to operate at full capacity for up to one month with only a few cleanings. An additional benefit is that the particles are inexpensive to produce.

"The heating step is what makes our technology new," Benjamin said. "We envision implementing it in places that already have membranes installed."

The researchers are currently working on a large-scale test of the technology. The start-up has received funding from two National Science Foundation grants: a Small Business Technology Transfer Research grant and an Accelerating Innovation Research Technology Translation grant. In addition to applying for grant renewals, the team is in the process of talking to investors and water treatment organizations. Targeting both drinking water and wastewater treatment plants, the founders anticipate working globally with early adopters.

"We've gotten a lot of momentum and are moving faster than expected," Cai said.

The start-up builds on research Benjamin has been conducting since the early 1990s. While working on an approach to prevent NOM from plugging up membranes, graduate student Yujung Chang (Ph.D. '96) developed a process for removing NOM from water. The UW patented the process while Benjamin and his students continued to advance it. The current technology is based on research that Cai conducted during his graduate studies.

While both Benjamin and Cai never initially dreamed of starting a company, both have had a persistent desire to see their research applied in the real-world.

"This will really address some pain points in the field," Cai said. "I am confident we will bring something new to the industry."

Emeritus professor Mark Benjamin holds a bottle that contains patented particles, which are deposited in mesh tubes to remove contaminants from water without clogging membranes.

Students

Maxwell Armenta
KING COUNTY GRADUATE STUDENT RESEARCH FELLOWSHIP

Master's student Maxwell Armenta has received a King County Graduate Student Research Fellowship. The award funds Armenta's research to introduce granular activated sludge at the West Point Treatment Plant in Seattle, with the goal of enhancing wastewater purification.

Claire Beveridge
NSF GRADUATE RESEARCH FELLOWSHIP

Ph.D. student Claire Beveridge is the recipient of a National Science Foundation Graduate Research Fellowship. Beveridge is studying the lifecycle and sustainability of dams, specifically the Elwha River watershed in the Olympic Mountains, which is home to the largest dam removal project in U.S. history.

Lysandra Amanta Medal Bitticaca
INDONESIA ENDOWMENT FUND FOR EDUCATION

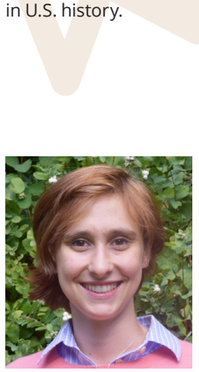
Ph.D. student Lysandra Amanta Medal Bitticaca is the recipient of an Indonesia Endowment Fund for Education award. Bitticaca is working to develop a decision making framework for facility managers and stakeholders to utilize when energy retrofitting buildings.

Matthew Bonnema
NASA EARTH AND SPACE SCIENCE FELLOWSHIP

Ph.D. student Matthew Bonnema has received a NASA Earth and Space Science Fellowship, which funds his research on using satellite remote sensing to better understand the effects of reservoir construction and operation on the water cycle.

Otgonchimeg Davaadorj
STEWART WATSON MEMORIAL SCHOLARSHIP

Master's student Otgonchimeg (Audrey) Davaadorj has received the Stewart Watson Memorial Scholarship from the American Concrete Institute. The award funds Davaadorj's research to find a unified approach to address sliding shear failure strength across various steel and concrete interfaces.



Yasmine Farhat
NSF GRADUATE RESEARCH FELLOWSHIP

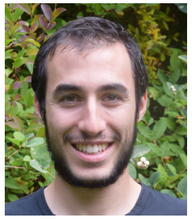
Ph.D. student Yasmine Farhat is the recipient of a National Science Foundation Graduate Research Fellowship. Farhat's research focuses on how climate change may impact the nutritional quality of rice, the primary staple food for more than half of the world's population.

Elyse O'Callaghan Lewis
NSF GRADUATE RESEARCH FELLOWSHIP

Master's student Elyse O'Callaghan Lewis has received a National Science Foundation Graduate Research Fellowship. The funding will support her dissertation work on how publicly owned transit systems may affect the quality of life of slum residents in Latin American cities.

Dan Nishiguchi
KING COUNTY GRADUATE STUDENT RESEARCH FELLOWSHIP

Master's student Dan Nishiguchi has received a King County Graduate Student Research Fellowship. The research will fund Nishiguchi's research on wastewater treatment.



William Pollock
LARAM SCHOOL 2017

Ph.D. student William Pollock was one of 40 graduate students worldwide to participate in the 2017 International School on Landslide Risk Assessment and Mitigation in Italy. The program teaches graduate students to develop educational programs to assess, forecast and mitigate landslide risks.

Edwin Quezada
TRANSPORTATION CLUB OF SEATTLE SCHOLARSHIP

Master's student Edwin Quezada is the recipient of a Transportation Club of Seattle Scholarship, which supports the next generation of transportation professionals. The funding will support Quezada's studies in the online Master's in Supply Chain, Transportation and Logistics program.

Nick Waldo
DOE SCGSR AWARD

Ph.D. student Nick Waldo has received a Department of Energy Office of Science Graduate Student Research Program award. Waldo's climate change research explores how wetlands provide unique chemical conditions for microbes to produce methane, a powerful greenhouse gas.

Julian Yamaura
UW COE STUDENT TEACHING AWARD

Ph.D. student Julian Yamaura was honored with a UW College of Engineering Student Teaching Award for inspiring the next generation of engineers. Last year, Yamaura served as an instructor for a junior curriculum course, planned and supervised lab sessions and was a teaching assistant.

Tess Young
NSF GROW FELLOWSHIP

Ph.D. student Tess Young is the recipient of a Graduate Research Opportunities Worldwide Fellowship, which funds a year of study in Switzerland. Young will be conducting research to explore chlorine and sunlight as an advanced drinking water treatment method.

Faculty

Steve Kramer honored with second Norman Medal

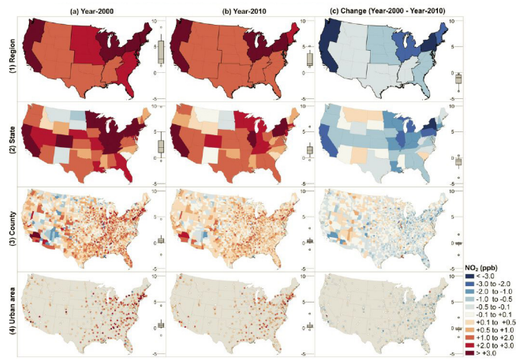
Professor Steve Kramer officially has a collection of Norman Medals. Kramer was honored with a second Norman Medal after receiving his first award eight years ago. Bestowed by the American Society of Civil Engineers (ASCE), the Norman Medal recognizes the best paper of the year from ASCE's more than 35 technical journals. In the history of the award, which dates back to 1874, only a handful of people have been honored more than once. Kramer and his Ph.D. student C.H. Wang received the award for their paper that details an innovative way to estimate the residual strength of soil following liquefaction, which causes soil to behave like a liquid during sudden environmental changes, such as earthquakes.

Enabling an engineering first: **LIGHT RAIL ON A FLOATING BRIDGE**

Light rail will cross a floating bridge for the first time in the world when construction is completed on Sound Transit's East Link Extension Project in 2023. The engineering feat is possible thanks to the work of UW CEE researchers, led by professor John Stanton, who have collaborated with Sound Transit officials and Parsons Brinckerhoff consultants for the past five years. The researchers have been primarily involved in testing various prototypes that have never before been implemented.

People of color still exposed to **MORE AIR POLLUTION**

Air pollution exposure for minority groups is still a big problem, according to a new nationwide study conducted by a team of researchers led by professor Julian Marshall. The study found that during a 10-year period, little progress was made in reducing disparities between whites and people of color when it comes to being exposed to harmful air pollution emitted by vehicles. However, the study did uncover that average exposure to nitrogen dioxide decreased across all races and income levels.



CREATING SEISMICALLY RESILIENT, sustainable buildings

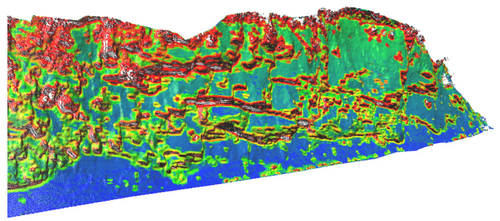
Researchers are one step closer to proving that high rises crafted from a new type of sustainable timber, paired with a rocking wall system, are seismically resilient. This may one day inform the next generation of buildings constructed in earthquake zones. Researchers from across the country, including associate professor Jeffrey Berman and graduate student Sarah Wichman, found no significant damage after a two-story structure underwent 14 earthquake simulations at the world's largest earthquake simulator at the University of California, San Diego.

DRONE DELIVERY sometimes greener than trucks

Delivering items by drone may be better for the environment than trucks in some instances, according to new research led by professor Anne Goodchild. But this is only true when packages are lightweight, distances are short and there are few recipients on a delivery route. Currently, little research exists that examines the environmental impacts of drone delivery. Although the Federal Aviation Administration has recently created legal space for experimenting with drone deliveries, commercial operations are still regulated in the United States.

New technology assesses **ROCKFALL HAZARDS ON ROADWAYS**

The ability to more accurately and quickly identify rockfall hazards on roadways is now possible, thanks to technology developed by a team of researchers including professor Joe Wartman and alumna Lisa Dunham, MSCE '15. The technology ultimately has the potential to save the lives of people driving through mountainous terrain. The new technology, called the Rockfall Activity Index, utilizes LIDAR technology to map large areas in a short amount of time and uses computer analysis to identify and rank hazards.



THANKS to SCHOLARSHIPS,

CEE SENIOR IS READY TO MAKE AN IMPACT

CEE student Tammy Teal. Photo credit: Mark Stone / University of Washington.

CEE senior Tammy Teal is ready to have an impact on the world – similar to the one that scholarships have had on her education.

With two quarters left of school, Teal is excited to soon put her engineering skills into practice. She is passionate about working on environmental issues such as access to clean water. Teal also hopes to improve infrastructure in developing countries, particularly the rural village in Cambodia, called Kampong Cham, where her family is from. The village lacks electricity and clean, running water.

"I daydream about traveling to developing communities to help design and construct infrastructure for transportation, living and accessing clean water," Teal said. "I want to use my CEE degree to help provide infrastructure to communities, like my father's, that need it most."

Despite such clear career ambitions, Teal was unsure how she would fund college. Growing up in a large family with nine siblings, Teal's parents were not in a position to help her financially. Her father, a refugee from Cambodia who fled the Khmer Rouge, suffers from post-traumatic stress disorder. And her mother, who was diagnosed with multiple sclerosis 20 years ago, is unable to work.

Determined not to let her family's finances stop her from pursuing a college degree, Teal applied for and received multiple scholarships and grants, including the Washington State Opportunity Scholarship and Undergraduate Education Access Fund in Civil and Environmental Engineering, which is funded by generous donors. Teal will soon be the second member of her family to graduate from college.

"Scholarships have tremendously impacted my education," Teal said. "Finances have always burdened my family and financial assistance toward college has been absent."

In addition to financial support, Teal also benefitted from the two-year Washington STate Academic RedShirt (STARS) program at UW. The program offers a specialized curriculum for economically disadvantaged students, allowing them to catch up to their peers before applying to specific engineering departments.

As Teal begins to think about life after college, she is grateful for all the help she's received along the way. For her, it is motivation to use her degree to help solve critical problems in the world and ultimately have a positive impact.

"I want to use my CEE degree to help provide infrastructure to communities, like my father's, that need it most."

MAKE an IMPACT

To support students from underrepresented and diverse backgrounds like Tammy Teal, please consider donating to the Undergraduate Education Access Fund in Civil and Environmental Engineering. To learn more, please contact assistant director of advancement Janeka Rector at 206-543-8879 or janekar@uw.edu.

Longtime donors Neil and Ann Hawkins

‘get a boost’ OUT OF GIVING

Sometimes you start to wonder who gets more out of giving: the donor or the recipient.

“We get a boost out of talking to faculty and students who say we’ve made a difference,” Ann Hawkins said.

For longtime UW CEE supporters Neil and Ann Hawkins, education is a value the couple strongly champions. Over the years, the couple has established a total of five funds. Their signature funds are the Neil and Ann Hawkins Prize and the Neil and Ann Hawkins Scholarship.

Their goal is simple. To attract the best students possible to the field of civil and environmental engineering, they know that encouragement and support are critical. The couple is especially devoted to supporting outstanding undergraduate students, which was the motivation behind founding the Neil and Ann Hawkins Prize.

While serving as the head of civil and environmental engineering at the University of Illinois, Neil Hawkins was inspired by an award that recognized exceptional undergraduate students. Wanting to implement a similar award at UW CEE, where Neil Hawkins was previously a faculty member for 23 years and served as department chair, the couple established the Neil and Ann Hawkins Prize in 1993.

“When I was department chair, I felt that we didn’t focus enough on our undergrads,” Neil Hawkins said. “We didn’t have anything to give outstanding students.”

The annual prize recognizes two outstanding graduating seniors who are selected based on scholarship, leadership and communication abilities. The Hawkins feel strongly that engineers must hone their communication skills prior to entering the workforce. The winners, who are kept secret, are announced at the department’s graduation ceremony.

“Once you start to give, you continue to give.”

The couple also established a second signature fund, the Neil and Ann Hawkins Scholarship. To do so, they took advantage of a matching gift program for UW faculty, staff and retirees, which matched gifts at a 50 percent rate.

“Once you start to give, you continue to give,” Neil Hawkins said.

The couple know first-hand what it feels like to have financial support during college. Ann Hawkins, who was raised on a farm, received a scholarship that covered her college tuition, fees and books. And Neil Hawkins, who completed two bachelor’s degrees at the University of Sydney, benefitted from free higher education in Australia at the time.

The Hawkinses, who returned to the Seattle area for retirement, emphasize that they choose to give not because they have an abundance of disposable income, but because it is a value they believe in.

“We don’t have a business or a ton of money,” Ann Hawkins said. “But we try to motivate people in a field we believe in.”

THE PERFECT MATCH

A new matching gift program is currently available to UW faculty, staff and retirees as part of the Campaign for Students. Matching funds are available through June 2020, or until the $5 million in matching dollars is exhausted.

To learn more, please contact assistant director of advancement Janeka Rector at 206-543-8879 or janekar@uw.edu.

GRADUATION GATHERING

To welcome graduation keynote speaker Simon Cheong (BSCE ’81), who traveled from Singapore with his family, members of the UW CEE Visiting Committee and faculty gathered for dinner in June 2017. Pictured are professor emeritus Stephen Burges, visiting committee member Susan Betcher (BSCE ’90), 2017 graduation speaker Simon Cheong, 2016 graduation speaker Andrew Taylor (MSCE ’85), visiting committee member Amy Haugerud (BSCE ’77) and visiting committee member Jon Magnusson (BSCE ’75), from left.

THE BRIDGE FALL / 2017

Laura Lowes, *Professor & Chair*
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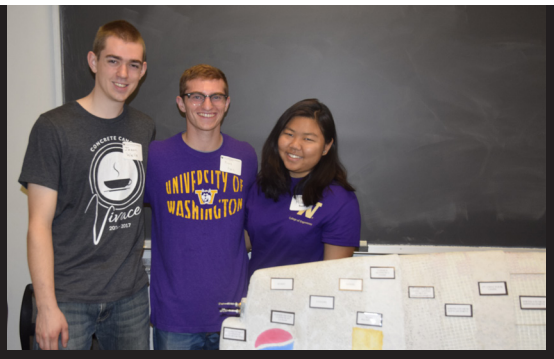

Annual Alumni Tailgate

CEE alumni excel in Husky pride! More than 75 UW CEE alumni and friends gathered for a tailgate party before the Huskies Homecoming game against UCLA on Saturday, October 28. Attendees enjoyed food and drinks, connected with former classmates, learned about student projects and met the department's new chair, professor Laura Lowes.