

COLLEGE OF ENGINEERING



## FROM THE DEAN

# Collaborative excellence defines our success

I am proud to announce the recipients of the 2022 Oregon Stater Awards, presented by the College of Engineering at Oregon State University. These individuals are recognized for their contributions to the engineering profession, to their college, and to humanity.

Every one of this year's honorees, each distinguished in their own way, was once a student in our College of Engineering. Our students have always been, as they are today, our most important product. The educational foundations they build here, as engineering students at an R1 research university, enable them to reach inspirational heights in their own professional lives.

This year, for the first time ever, we have more than 10,000 students. Among them, more than 2,000 are women and over 3,000 are people of color. We support, encourage, and actively recruit students from groups that traditionally have been shut out from opportunities in engineering. As we work to create a more diverse and inclusive engineering workforce, we are helping to break down old barriers and create new ways for people from different backgrounds and cultures to work together.

We're transcending divisions in academia as well. Engineering, especially in artificial intelligence and computer science, is helping to empower success in other world-ranked programs at Oregon State, including agriculture, forestry, and oceanography. Increasingly, the success of our college is defined by the quality of our collaborations with colleagues across disciplines, with peers at other universities and national laboratories, and with our industry partners.

Oregon State is poised to make a qualitative leap forward in this regard with the building of the Jen-Hsun and Lori Huang



Collaborative Innovation Complex. This \$200 million, 150,000-square-foot research and education center will enable dynamic collaboration among researchers from the College of Engineering and other STEM disciplines to create solutions for some of the world's greatest challenges — in areas such as climate science, sustainability, and water resources. It will house one of the nation's most powerful supercomputers, a state-of-the-art clean room, and specialized equipment to support team-based research in artificial intelligence, materials science, and robotics.

The complex is named in honor of two of our most distinguished alumni, who made the initial gift of \$50 million toward its construction. Jen-Hsun "Jensen" Huang and Lori Mills met at Oregon State as lab partners in a first-year engineering course, and they

were married a few years later. Jensen went on to become a co-founder of NVIDIA, which changed the face of computing forever with its invention of the graphics processing unit, or GPU. Today, NVIDIA is a global leader in artificial intelligence hardware and software, with Jensen as president and CEO. Jensen was inducted into our Engineering Hall of Fame in 2013. We are grateful beyond measure for his and Lori's generous support.

Please join me in congratulating this year's Oregon Staters as we celebrate their achievements and look forward in anticipation of more great things to come.

Go Beavs!

Scott A. Ashford, Ph.D., P.E. (California)  
Kearney Dean of Engineering

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**ACKNOWLEDGMENTS**

The 2022 Oregon Stater Awards are made possible with the assistance of many people. We deeply appreciate everyone who contributed their hard work and great ideas.

Produced and published in partnership with Oregonian Media Group

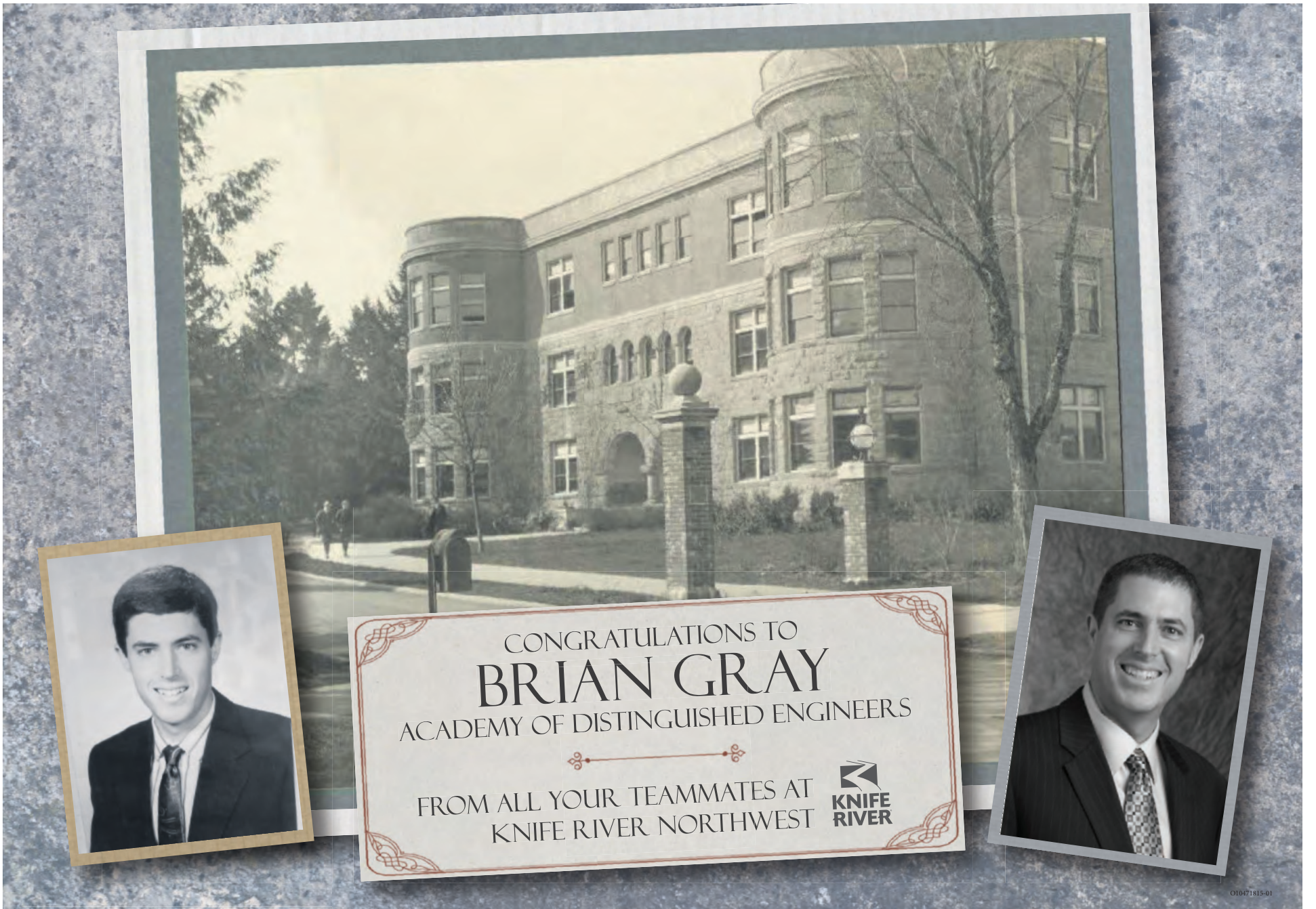


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# About The Awards

In 1998, THE COLLEGE OF ENGINEERING introduced the annual Oregon Stater Awards to honor outstanding alumni for their contributions to the engineering profession and to Oregon State University. Three categories recognize outstanding achievement at different stages of an Oregon Stater's career:

### ENGINEERING HALL OF FAME

Presented to a distinguished leader in recognition of their sustained, meritorious professional accomplishments and leadership contributions in the field of engineering. This award celebrates both the professional and the personal achievements of the honoree. Hall of Fame inductees must be alumni of Oregon State University.

### ACADEMY OF DISTINGUISHED ENGINEERS

Presented to mid-career engineers who have made sustained, distinguished contributions to their profession, their field, Oregon State University, or society at large. Awardees must be Oregon State Engineering alumni, currently active in the engineering profession, with a minimum of 20 years of experience beyond their bachelor's degree.

### COUNCIL OF OUTSTANDING EARLY CAREER ENGINEERS

Presented to engineers who have distinguished themselves through their professional accomplishments, service to Oregon State University, the engineering profession, or society at large. These individuals have made early career contributions that identify them as rising leaders in their profession or field. Awardees must be Oregon State Engineering alumni with less than 20 years of professional experience beyond their bachelor's degree.



**CONGRATS MARK!**


NuScale is proud to see Mark Shaver inducted into the OSU Council of Outstanding Early Career Engineers. This honor is a testimony of his hard work and commitment to a smarter and cleaner energy future.



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**Congratulations, Monica Morales on achieving the Council of Outstanding Early Career Engineers award. Keep pushing the limits of what's possible.**

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## AWARD

# Engineering Hall of Fame

The worst nuclear disaster in history happened in April 1986 at the Chernobyl nuclear power plant in Ukraine, then part of the Soviet Union. Two months later, newly commissioned U.S. Army 2nd Lt. Julie Bentz — who had just graduated from Oregon State University, where she studied radiological health

science — headed to Europe to help with the disaster. With the depth of experience she gained during that time, and in many subsequent years developing federal nuclear defense strategy, she was among the first to get a call in 2011 when Japan experienced the Fukushima nuclear disaster.

Bentz said, “Those of us with experience at Chernobyl were able to oversee a new generation of nuclear experts in disaster response. This is where Oregon State University has a critical role to play.”

Retired Maj. Gen. Julie Bentz, Ph.D., served for more than three

decades in active and reserve military and National Guard commissioned service. She served at the White House with multiple appointments between 2004 and 2019 to the National Security Council and Homeland Security Council, including as senior advisor for emerging technologies and director of strategic capabilities. At different times, she also held several roles in the Department of Defense at the Pentagon.

“I’m still in awe that I had the opportunity to work in the same policy realm through three presidential administrations,” Bentz said.

The 9/11 terrorist attacks renewed serious attention on nuclear power. After the power plant disasters and the end of the Cold War, nuclear studies atrophied. When Bentz was at Oregon State, 62 universities had a nuclear research reactor affiliated with their engineering programs; fewer than half

that number are in operation today.

“If there is a future crisis, our communities are going to rely heavily on the nuclear engineering program at OSU,” she said.

Bentz feels strongly about promoting STEM learning success in the U.S. as a national security issue. During her time in the White House, she was in frequent communication with Oregon State faculty about recruiting and retaining students to the sciences.

Bentz came to Oregon State from the small community of Jordan, Oregon on an ROTC scholarship. Though she initially thought she wanted to study nuclear engineering, she ultimately chose radiological health sciences. “I loved it,” she said. “We focused on the impact radiation has on living tissue, which proved timely.”

Bentz enjoyed her studies, but laughingly remembers nearly starting a citywide panic in Corvallis. She was checking emergency kits at a hospital and casually mentioned to a receptionist that a container of Radiacwash decontaminant had burst. By the time she got back to campus, the president of the hospital was on the phone with Art Johnson, then director of Oregon State’s Radiation Center, asking if the hospital needed to be evacuated.

“I learned how important communication is, especially in this field; never assume our lexicon is the same as others,” she said.

Bentz built on her Oregon State education with a master’s degree in health physics and a doctorate in nuclear engineering from the University of Missouri. She also received a master’s degree in national security strategy from the National War College at the National Defense University in Washington, D.C., and an honorary doctorate from Oregon State.

Now retired, Bentz has returned to Oregon with her husband to live on her family’s 700-acre forestry farm and fish hatchery, the oldest privately owned hatchery in the state. She believes the current crop of nuclear engineers will be in high demand, not only to design and provide safe operation of plants to meet increasing energy needs, but also for technical expertise in nuclear weapons non-

proliferation, countering nuclear terrorism, and managing increasingly complex relationships with the world’s other major nuclear superpowers, Russia and China. “Nuclear is a broad field; it’s more than a reactor, it’s more than energy,” Bentz said. “OSU can ensure that we have people who are ready to provide advice, expertise, and information support to lead our national policies.”



## MG (ret.) Julie A. Bentz

B.S., Radiological Health, 1986

Major General, Retired

Blue Den Ranch, co-owner

*“It’s been my philosophy that when a door opens, go through it, then look around at the things that need to be done, and do them. Then go through the next door that opens and repeat the process.”*

*“We have to be serious about making sure we have people trained in (the nuclear) field. Oregon State University is one of the few places that can take on that important role.”*

## AWARD

# Academy of Distinguished Engineers



## Hubert Gasteiger

M.S., Chemical Engineering, 1989

Chair of Technical Electrochemistry, Chemistry Department

Technical University of Munich

**H**ubert Gasteiger attended a polytechnic school in Germany that did not offer a Ph.D. in his field. Funded by a Fulbright scholarship, he spent two years at Oregon State University, where he earned his master's degree in chemical engineering in 1989. He says that the quality of teaching in the chemical engineering department was the highest he experienced throughout his education, and that he received encouragement from several professors to continue his education.

Gasteiger went on to conduct his doctoral research in fundamental electrocatalysis at the University of California, Berkeley, where he received his Ph.D. in chemical engineering in 1993. He was a postdoctoral fellow at the Lawrence Berkeley National Laboratory (1994–1995) and at Ulm University (1996–1998), where he worked on gas-phase catalysis and electrocatalysis.

After his academic training, Gasteiger spent 10 years in the fuel cell vehicle program at General Motors, where he was able to contribute to the development of fuel cell electric vehicle technology. He held a variety of roles in several organizations, including a lead position in the development of catalysts and membrane electrode assemblies for proton exchange membrane fuel cells within the fuel cell program of GM/Opel in the U.S. (1999-2007).

He spent a year on a visiting professorship at MIT with the group of Yang Shao-Horn, and eventually became full professor in the chemistry department of the Technical University of Munich (2010). There, he founded the chair of technical electrochemistry, focusing on the development of materials, electrodes, and diagnostics for fuel cells, electrolyzers, and batteries.

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*I experienced Oregon State as a very nurturing environment on so many levels: professors who were exceptionally dedicated to teaching and mentoring students, a town community that warmly welcomed foreign students, and a place that offered marvelous outdoors experiences."*

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Gasteiger has served as editor of Wiley's Handbook of Fuel Cells, holds 23 patents, and has published over 200 refereed articles. He is a Fellow of the International Society of Electrochemistry and of the Electrochemical Society, and has received numerous awards for his work in research in fuel cells, batteries and energy.



## Brian Gray

B.S., Civil Engineering, 1993

President

Knife River Corporation's Northwest Region

**B**rian Gray graduated from Oregon State with a bachelor's degree in civil engineering in 1993. During his time there, he was involved in several campus activities, including hosting campus tours for prospective new students, working in the Department of New Student Services and leading summer orientation and advisory programs. He was an active member of Thanet Honorary Society and held several leadership positions while living at Sigma Phi Epsilon.

Gray continues to recruit prospective future engineers on campus, works with professors to promote work zone safety, and volunteers time and resources to develop more environmentally friendly concrete materials. Beaver Nation remains an important pillar of his life — even if it's simply by attending a sporting event with his family.

Today Gray is president of Knife River Corporation's Northwest Region, which includes operations in Oregon and Washington. At certain times of the year, he oversees more than 1,500 employees and manages the region's diverse mix of aggregate, ready mix, asphalt, prestress, and construction operations. Gray has climbed through the ranks at the company, starting as a quality control technician, and has held multiple management positions.

Gray is a strong advocate for the construction materials industry in Oregon and is actively involved in a number

of boards and executive committees to help the industry prosper. He has held several leadership positions at the Oregon-Columbia Chapter of AGC, including president in 2017, sits on several Oregon Department of Transportation advisory committees, and is president of Oregon State's Construction Education Foundation. He represents Knife River on the executive committee and board of directors for the National Ready Mixed Concrete Association.

Gray enjoys hunting, golfing and spending time with his family. He lives in Scappoose with his wife of 25 years, Danne', and he has three grown children.

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*"My time at Oregon State and my experiences in the College of Engineering built the foundation for my personal and professional career. I received more than just an academic education. It was a life-changing experience that provided the self-confidence and built personal relationships to help me excel in my career."*

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## AWARD

# Academy of Distinguished Engineers



## Jorge Grilo

M.S., Electronics and Semiconductor Devices, 1994

Ph.D., Electronics and Semiconductor Devices, 1997

Senior Director, Global ASIC Design

Knowles Corp.

Jorge Grilo received a book from his father entitled “My First Book of Electricity,” at age 7. He devoured it and soon was experimenting with electricity. He built an electric chair for flies, and experimented further with electrocution using his cousins as subjects. Fortunately, fuses were quick to react, and no harm was done to his cousins. The flies were not so fortunate, after a 220-volt zap.

Grilo went on to learn electronics on his own, and by age 11 was building FM transceivers, audio amplifiers, music synthesizers, infrared sensors, and a plethora of gadgets for use around the house. The path ahead and his future vocation were unequivocal.

He completed his undergraduate studies in Portugal in 1992, then came to Oregon State with a scholarship from the Portuguese government and a research assistantship from Professor Gabor Temes to work towards his master’s and Ph.D. degrees. Temes had a wealth of life experiences and sense of humor that Grilo found inspiring.

Grilo adds that Oregon State provided a form of sanctuary. The calm environment and beautiful campus promoted a healthy lifestyle and exposure to intellectual stimulus that was essential to his integration. Coming from a

foreign country, he found the university to be supportive, soothing and welcoming.

*“Nurture your relationships and build a network based on trust and compassion early in your career. I have worked with, and hired, many Oregon State alumni who were outstanding individuals, both personally and professionally. Some of my best work was inspired by many of them.”*

Grilo’s career path eventually led him to the Chicago area, where in 2020 he joined Knowles to lead a talented global ASIC organization in the design of low-noise, high dynamic range ICs for MEMS-based microphones and sensors.

Grilo notes that the technologies he works with develop applications that make our lives simple and seamless - including mobile communications, self-driving automobiles, facial recognition, and gaming. These rely on the continual development of hardware infrastructure.



## Daniel Jordheim

B.S., Nuclear Engineering, 1987

M.S., Nuclear Engineering, 1991

Manager, Fuel Design Neutronics

Framatome

Daniel Jordheim transferred to Oregon State from an engineering school in the upper Midwest in 1984 to pursue a degree in nuclear engineering. He chose Oregon State because of its strong full-scope program, and its location — near towering, glacier-robed, volcanic peaks, lush green forests, the scenic Pacific Coast, and in a smaller city.

Jordheim entered nuclear engineering with an open mind, prepared to become anti-nuclear if that was where a better technical understanding of things led. He considers himself intellectually curious — especially about anything controversial — and was naturally eager to learn more about the field.

Jordheim has worked in a variety of roles over the years, including in engineering, in supervision, in sales and marketing, as part of an operations crew in a nuclear power plant control room, and as a manager in a multinational organization. He grew up on a farm and never imagined he would have a career with so much international travel and engagement, but he has travelled to Germany, France, and the Republic of China, and he has worked with an assortment of nationalities.

Jordheim articulates that humans are predominantly driven by emotions and emotional appeal, not by factual information, data, or science. He cites bizarre claims about

vaccines during the COVID-19 pandemic as a recent example, but he says that he sees this same behavior frequently when anything nuclear or radioactive is the topic. As a nuclear power professional, he is proud to be part of the largest source of carbon-emissions-free energy.

*“The diversity of perspectives at Oregon State helped spur my intellectual growth and curiosity and helped me learn to challenge my own viewpoints and perspectives based on accurate, pertinent, and complete information.”*

One of his most memorable accomplishments is the collaboration with German colleagues to develop the most advanced and most efficient boiling water reactor nuclear fuel product on the market.

Jordheim has also enjoyed being on the industrial advisory board for the School of Nuclear Sciences and Engineering for nearly 12 years and welcomes opportunities that bring him back to the Oregon State campus. His wife is also an alum, and their daughter recently completed her sophomore year there.

## AWARD

# Academy of Distinguished Engineers



## Melinda Sych

B.S., Chemical Engineering, 1997

Senior Vice President of Commercial Business and Chief Commercial Officer

Battelle

**M**elinda Sych attended Oregon State in the 1990s and noticed that, as a woman, she did not look like the majority of students in the chemical engineering program. She worked full-time for a reactive metals company as an engineering intern throughout her college years. It was a balance, juggling work hours with school while finding a network of people to collaborate with who understood that balance.

Sych believes the culture and quality of the staff and students at Oregon State were instrumental in her success. It taught her to set priorities and practice disciplined time management. Sych adds that the network of amazing people she developed as a result of those practices is invaluable and inspiring for her, both professionally and personally.

Sych has held a variety of roles throughout her career, spending more than a decade at Dow Chemical Co., ending her tenure there as a global business director with profit and loss responsibility for the company's advanced materials business. She was the global vice president of sales, marketing, business development, and commercial operations at Suterra, a division of The Wonderful Company, and was global vice president of commercial operations at Tektronix (Fortive), where she managed

commercial operations serving all electronic test and measurement segments.

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*“My advice to anyone pursuing their engineering degree today: Absolutely take advantage of the opportunities that degree will provide to you to do things that matter to you, to contribute in ways that are meaningful to you, and to inspire others to great things.”*

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In October 2021, she was appointed senior vice president of commercial business and chief commercial officer at Battelle, an independent research and development organization. Sych and her team are responsible for growth in commercial sales through expansion of current business and the development of new market opportunities.

Sych has earned leadership certifications from Wharton Executive Education and Georgetown Executive Education, and holds certifications in consultative and strategic selling, as well as in channel management. She serves on the board of the Brian Grant Foundation.



## Steve Vincent

B.S., Mechanical Engineering, 1982

Semi-retired

Consultant

**S**teve Vincent attended Oregon State in the earlier 1980s, focusing his studies on mechanical engineering. During his time there, he made many good friends and connections, and he maintains several of those relationships today.

He feels that the Oregon State experience gave him a foundation not only in engineering, but also in practical problem-solving. He has used that throughout his career to ensure success in the programs he has worked on, and to help others on the team learn to solve technical problems on their own. He adds that the College of Engineering piqued his curiosity, and gave him a solid understanding of how things work.

After Oregon State, Vincent worked in several roles with increasing responsibility, building on his interest in solar power. He started as an engineer, working on product development of high-performance residential and commercial windows, and he eventually managed a team of engineers who handled those tasks. After eight years working in solar, he pivoted to the sports industry.

Vincent has over 30 years of experience leading consumer product innovation teams. He has held senior executive roles at Nike, Fila, and, most recently, Adidas, where he spent over 17 years and most recently held the position of senior vice president of innovation. He managed

vice presidents and senior directors, leading global teams of designers, engineers, and scientists in the U.S., Germany, Italy, and Asia.

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*“I believe the successful future of engineering in the sporting and apparel industry will be through deeply diverse teams working with other disciplines, such as designers, scientists, and marketers, in a collaborative way.”*

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The teams working under Vincent developed industry-leading sport products, including footwear, apparel, and electronics. He and his teams helped create new products and platform technologies that were an integral part of the company's recent turn-around and current success.

Vincent retired from Adidas in 2018, but continues to enjoy consulting work, focusing on strategy, innovation and mentoring. He is currently consulting for a small startup apparel and electronics brand. He spends his time between Portland and Bend, and Baja Sur Mexico. He enjoys hiking, biking, off-roading, kayaking, cooking, and traveling.



AWARD

# Council of Early Career Engineers



**Alan Blood**

**B.S., Computer Engineering, 2004**

**B.S., Electrical & Electronics Engineering, 2005**

**General Manager**

**Garmin AT Inc.**

**A**lan Blood grew up in the heart of Beaver Nation, in the town of Albany, Oregon. While studying at Oregon State, he worked with the Associated Students of Oregon State University organization as a web designer.

Blood believes that the leadership of the College of Engineering puts students first, and that there is a concerted focus on integrating engineering disciplines across schools so students graduate with real-world integrative engineering knowledge and experience.

After graduating, Blood joined Garmin AT Inc. in Salem as an aviation embedded software engineer. With Garmin, he was given the opportunity to earn his private pilot license and instrument rating in 2007 and now holds a commercial pilot license. After serving in many roles in software and systems engineering, Blood moved into his current role as general manager in January 2021.

The company designs and manufactures avionics equipment for both retrofit and forward-fit/OEM aviation markets, and houses a customer contact center supporting products in outdoor and marine consumer product lines. With over 500 employees in Salem, Garmin AT is one of the larger private employers in the mid-Willamette valley.

Blood is a member of the Dean's Leadership Council, the School of Electrical Engineering and Computer Science's industry advisory board, and the board of directors for the Strategic Economic Development Corporation, which is focused on enhancing economic development in the mid-Willamette Valley.

Blood is most proud of his work on a product that Garmin calls the Flight Stream 510. It's one of the company's smallest products, but contains some of the most advanced engineering Garmin has produced. The idea was born out of the desire to add wireless connectivity to Garmin's existing aviation display products, and Blood says he was honored to be one of the named inventors. He feels that there is a bright future in engineering as it relates to advanced air mobility – almost every aspect of the system will require innovative engineering solutions.

*“Never be afraid to take on the most difficult challenges – head on. The most rewarding experiences come from successful completion of something that was seemingly impossible, that had never been done before.”*



**M. Alex Brown**

**M.S., Radiation Health Physics, 2010**

**Ph.D., Radiochemistry, 2013**

**Radiochemist**

**Argonne National Laboratory**

**A**lex Brown received a bachelor of science degree in chemical engineering from Ohio State University, then went on to achieve both a master of science and a Ph.D. in radiochemistry from Oregon State University.

Brown currently works as a radiochemist at Argonne National Laboratory and an adjunct professor of physics at the Illinois Institute of Technology. His research encompasses the science and technologies of nuclear chemistry, including nuclear power, nuclear waste, nuclear medicine, and nuclear forensics.

Brown believes that civilian nuclear technologies — both controversial and essential — advance our qualities of life and life expectancies. The challenges concerning nuclear waste derived from commercial nuclear power production are major hurdles for the industry. He adds that without a long-term, sustainable solution to our spent nuclear fuel, nuclear power is fixed under a “glass ceiling” in the domestic power grid and will maintain its contribution of less than 20% for the near future.

His studies helped develop new chemical processes that can address the waste challenges that the nuclear industry faces today, and enabled him to bridge gaps into high-caliber national laboratories, where he was able to solidify his role as a nuclear chemist. After his graduate studies, Brown used the skills he acquired at Oregon State to pivot into the fight against heart disease and cancer — both commonly diagnosed and treated using some of the same radioactive elements found in nuclear waste. Since 2013, he has been working with domestic industrial partners to boost the supply of instrumental medical isotopes.

Brown feels that the future of nuclear medicine is open-ended and untapped. Nuclear medicine needs more research and development, more scientists and engineers, more resources, and more industrial partners. The project Brown is proudest of involves nuclear medicine and medical isotopes, specifically the molybdenum-99 program. Brown's team has been supporting domestic industrial partners with R&D to integrate more medical isotopes into industry and the economy. He finds it rewarding to see their work applied in the real world.

*“Oregon State University provides the right expertise and resources to make any student capable of bettering the world and tackling today's – and tomorrow's – global challenges.”*



**Jason Hower**

**B.S., Chemical Engineering, 2006**

**System Integration and Technology Development**

**HP**

**J**ason Hower's interest in science and engineering began early in life, taking toys apart and always asking why. He started working with Skip Rochefort in the chemical engineering department at Oregon State after his first year at Corvallis High School. Throughout high school and his undergraduate education, he continued working in Rochefort's polymer chemistry lab, learning about viscoelastic fluids and polymer processing. This early exposure to research, as well as his participation in STEM outreach activities, put Hower on a path toward graduate education.

Hower says he got the best undergraduate education one could hope for. The College of Engineering gave him the technical and analytical skills to be successful in his career. The experience helped develop his passion for teaching and put him on the path to coaching.

Hower continued his education in chemical engineering, earning a master's and doctorate from the University of Washington. In 2009, he began his career at South Dakota School of Mines and Technology, where he taught chemical engineering and started research groups.

In 2011, Hower took a job with HP in Corvallis, working in system integration and technology development. There, he has helped bring new industrial printing presses to market, developed new polymeric materials for HP 3D Multijet Fusions printers, and pioneered the company's 3D Metal Jet printing solution. He currently leads ink and inkjet system technology development for commercial and packaging applications.

Outside work, Hower is the proud parent of two, happily married to fellow Oregon State alum Kelly. He serves on the advisory board for the School of Chemical, Biological, and Environmental Engineering at Oregon State.

Hower is confident that the College of Engineering is at the forefront of research and education, with alumni in positions across multiple disciplines and technologies, finding solutions to the challenges facing our communities today.

*“The College of Engineering taught me to ... think like a molecule. Breaking big problems down to small parts has helped me to be successful solving challenging, complex problems. Thanks to my Oregon State education, I can solve hard problems and that is what being an engineer is all about.”*



**Parth Nilesh Khimsaria**

**B.S., Manufacturing Engineering, 2016**

**B.S., Industrial Engineering, 2016**

**Supply Chain Business Manager**

**Lam Research**

**P**arth Nilesh Khimsaria was born and raised in Vadodra, India. He came to the U.S. for his undergraduate education at Oregon State. While there, Khimsaria felt a strong sense of community and dedication to student success. He built lifelong friendships with people from all over the world and gained invaluable knowledge, skills, and experiences that continue to be the cornerstones for success in both his personal and professional life.

Khimsaria was honored to represent India as an international cultural ambassador through a scholarship program offered by International Programs at Oregon State. As part of this program, he had the opportunity to work with amazing leaders and establish a peer mentoring program for international students. Another wonderful experience was being a supplemental instruction leader with the Academic Success Center, where he helped other undergraduate students in math and physics, by way of leading study tables. These opportunities helped him develop his interpersonal skills, while giving back to the student communities.

Khimsaria feels privileged to be part of the wonderful ME-COP program, where he secured an internship at Blount Manufacturing and Lam Research, where he led study tables for undergrads in math and physics. The internship at Lam led to his first full-time job offer after graduation. Khimsaria has now been with Lam Research for seven years. He feels fortunate to have worked in various roles and projects in manufacturing and supply chain operations, which have helped him become a better problem-solver.

Khimsaria is currently a supply chain business manager for Lam. He is responsible for the management of a cable supplier in Mexico, and ensuring on-time delivery of parts to the company's international factories in the U.S., Austria, Korea, Taiwan, and Malaysia.

To further his professional development and career, Khimsaria is pursuing a master of science degree in industrial engineering at Oregon State. He plans to graduate from the program this fall.

*“I uphold the Oregon State value of driving and delivering excellence in my work as an industrial engineer and supply chain business manager in the semiconductor industry. I would like to think that I am helping the industry, especially my company, become more efficient and agile, one problem at a time.”*

AWARD

# Council of Early Career Engineers



**Monica Morales**

B.S., Civil Engineering, 2012

M.S., Civil Engineering, 2015

Water Resources Engineer

Jacobs

Monica Morales describes herself as a “determined and starry-eyed” first-generation college student from Reno, Nevada. Upon her arrival in Oregon, she sought out ways to invest in herself and her education through the resources and great minds she was surrounded by. She says that Oregon State not only fed her newfound passion for civil engineering, but also for the outdoors and water resources in general.

She adds that the College of Engineering is one that will prepare students to work straight out of school. She finds that it is a well-respected program, and engineers in the profession understand that Oregon State students have been prepared to implement what they have learned and will continue learning on the job.

After graduating, Morales worked at Hazen and Sawyer as an assistant engineer, first in Ohio, then in Los Angeles. She worked on several projects related to water and wastewater, groundwater treatment, pump systems, and analysis and design of borehole horizontal direction drilling. She then worked for over five years at CH2M on an engineering team to help solve future drought concerns in San Diego.

She currently works at Jacobs as a water resources engineer, working on many challenging water resources projects and helping fight future droughts in Southern California. She’s been able to grow within a 55,000-plus-person global engineering consulting company and help lead multimillion-dollar projects for multibillion-dollar programs. Morales volunteers for several nonprofit organizations, such as the American Society of Civil Engineers and the Nevada Water Environment Association.

Morales is a passionate professional engineer, who strives to incorporate sustainable solutions and treatment designs while prioritizing the safety, needs, and concerns of the public. She feels that all of her experiences have helped her develop organizational and leadership skills, and she is excited to continue applying what she has learned in the Pacific Northwest and to be part of growth in sustainable infrastructure.

**“The College of Engineering’s professors and the mentors I made through the Civil Engineering Cooperative Program were sincerely life-changing. They provided me a window into a professional world I never had a peek into before, in that I came from a low-income family. I am so thankful for the memories and foundation built at Oregon State.”**



**Andrew Patterson**

B.S., Construction Engineering Management, 2002

Global Manager of Marketing and Business Development, Business Manager of Heavy Civil

Bechtel Infrastructure

Andrew Patterson considers himself an individual who is passionate about infrastructure and energy projects that have a high social dividend. He loves being involved in the implementation of energy transition projects, electrical and autonomous vehicles, vertical transportation, and faster and cleaner public transport technologies.

Patterson attended Oregon State to pursue a degree in construction engineering management. He says that the professors, leadership, and technical and practical knowledge gave him the skills and knowledge to support his career. Although the College of Engineering is often seen as a place to learn technical applications, he emphasizes that building individuals’ core competencies and knowledge goes well beyond this. Skills such as team-building, understanding external variables and influences, and how to apply these in the real world are just as important as the mathematics.

Patterson started working with Bechtel in Florida, and has travelled to nearly 100 countries, living in seven, while being involved in over 50 megaprojects including motorways, metros, international airports, ports, new cities, hydro and pumped storage, renewables, and telecommunications.

He is proud to be part of an industry that makes an impact on people’s lives by connecting and powering communities, and improving economic and social opportunities. He is honored to be working with a global leader with a 125-year history in engineering and construction, one that continues to be at the forefront of new infrastructure solutions, construction techniques, and technologies.

Patterson believes that the possibilities of engineering are infinite, and that we are experiencing an accelerated transformation in electrical, mechanical, civil, and other engineering skill sets. He adds that we are also seeing a long overdue and significant positive shift in the perception of what an engineer is. The industry is becoming more diverse and inclusive, and we are seeing more women lead some of the most complex engineering and construction projects in the world.

**“While my career has taken me places that I never imagined during my time at Oregon State, my studies gave me a solid foundation to be successful in this environment, such as when I was part of the team that won the regional ASC and AGC student competition and went on to compete in the national.”**



**Nadia Payet**

Ph.D., Computer Science, 2011

Partner Engineering Manager

Microsoft

Nadia Payet is a native of a tiny French island in the Indian Ocean. She earned a master’s degree in electrical and computer engineering from CPE Lyon, in France. She arrived at Oregon State University on an exchange program in computer science. Originally slated to be in Corvallis for just six months, Payet fell in love with the Pacific Northwest and decided to continue her studies at Oregon State, where she obtained her Ph.D. in 2011.

Oregon State shaped Payet’s passion for computer science. She adds that the College of Engineering has a great online curriculum, and it creates opportunities for a diverse group of people that way.

Payet started her career at Amazon.com, working for Kindle Direct Publishing. A year later, she joined the Google Maps Navigation team and over the next 10 years worked her way up to a senior engineering manager position. In 2022, she joined Microsoft as an engineering partner in the Maps and Local department.

Payet feels that people have a fundamental need for mapping solutions every day, when we need to find places and go there. She is pleased that her work has helped consumers and companies around the world do just that. Payet is proudest of her involvement in a Google Maps project that has helped save 1 megaton of carbon emissions.

Payet organizes visits to high schools and universities to give advice about how to apply for internships in the tech industry. She talks to Women in Engineering groups about the issues they are facing as a minority in engineering, to help motivate them to persist, and encourages more women to pursue leadership positions in the field.

She recognizes that improving the pipeline of minority groups interested in science is an important step in changing the demographics in technology. She takes every opportunity to give back and currently supports the Making Connections Program at the University of Washington Women’s Center, as well as the School of Electrical Engineering and Computer Science at Oregon State.

**“Please remember to be kind to yourself first. I see so many engineers in the industry who are burned out because they are just so hard on themselves. The future may be uncertain, but look at where you are.”**



**Jordan Reed**

B.S., Industrial Engineering, 2012

Senior Manager of Operational Excellence

Benchmade Knife Co.

Jordan Reed grew up in Corvallis and spent a significant amount of time on campus, resulting in his becoming a lifelong Beaver fan. With an early aptitude for math and science and a drive to improve the world around him, the path was clear to a career in engineering. Enjoying the focus on creating better outcomes through processes and people, he earned his degree in industrial engineering.

At Oregon State, he joined in many student groups, related to science and engineering. While serving in various roles for those groups, he participated in the Multiple Engineering Cooperative Program, with two internships that exposed him to professional opportunities after graduation while enabling great real-world applications to bring back to the classroom.

His professional career started as a result of his second internship, at Ulven Forging Inc., where he became a full-time engineer, progressing to production planning manager and, ultimately, director of operational excellence. After six years at Ulven, he joined Benchmade Knife Co. as quality systems and assurance manager, then climbed to his current role as senior manager of operational excellence. He leads several groups, focusing on processes and people working to promote compliance, adherence, and improvement, driven by data and technology.

While at Ulven, he began attending Forging Industry Association meetings to represent his company and support the greater industry in North America, resulting in serving three years as chair of the Plant Engineering Committee. As a MECOP graduate, he quickly began contributing as a member representative and mentor to interns. Continued involvement through multiple roles within the organization ultimately led Reed to serve as president of the board of directors within the past year.

Reed looks forward to continuing to connect, to promote better outcomes for all involved.

**“Get involved, engaged, and connected! It will pay dividends long into the future for both your personal and professional life. My connection to the College of Engineering has provided many collaborative opportunities.”**

## AWARD

# Council of Early Career Engineers



**Mark Shaver**

H.B.S., Nuclear Engineering, 2005

Nuclear Licensing Manager, Regulatory Affairs Department

NuScale Power

**M**ark Shaver was honored with the Nuclear Engineering Student of the Year Award for 2004-2005 while working toward his honors bachelor of science degree at Oregon State. He also earned a master's degree in nuclear engineering and radiological sciences from the University of Michigan.

While studying, he participated as a Space Scholar Intern at the Air Force Research Laboratory, as an undergraduate researcher at NASA through Oregon State's Microgravity Flight Team and NASA's Reduced Gravity Student Flight Opportunities Program, and as a national security engineering intern and postbaccalaureate research engineer at Pacific Northwest National Laboratory.

After college, Shaver continued at PNNL, eventually as a nuclear engineering analyst and project manager. There, he worked on a variety of projects in the areas of project management, radiation shielding, radiation detection, reactor analysis, and other nuclear projects related to national security.

In 2014, Shaver accepted a position as radiological engineering technical lead at NuScale Power, which develops passively safe small modular nuclear reactors. Over the next eight years, he worked hard and became the nuclear licensing manager in the company's Regulatory Affairs Department. His teams consist of four groups, whose responsibilities include interfacing with the Nuclear Regulatory Commission as well as preparing, submitting, and answering questions about applications submitted to the NRC. The NuScale Regulatory Affairs Department has led the charge in licensing efforts for its first-of-its-kind advanced nuclear technology. Shaver has also been a member of several committees and advisory groups in the industry.

Shaver is pleased to see the impact of his work in the industry, through development of cheap, clean, safe energy that is accessible without major grid infrastructure upgrades and can improve the quality of living throughout the world.

***"Oregon State is a great place to get a large university education with a community feeling. The professors are truly invested in the education and success of the students."***



**Samantha Wallace**

B.S., Bioengineering, 2017

Engineering Supervisor, Sustaining Engineering, and Product Engineer 2

Acumed

**S**amantha Wallace studied bioengineering at Oregon State. During her time there, she participated in two internships, one at Oregon Health & Science University and the other at Qorvo in Bend. She obtained her B.S. in 2017, then went on to pursue a master's degree at the University of Portland.

In 2018, she joined Acumed, an orthopedic implant company, as an entry level product engineer. During her four years at Acumed, she has been promoted to an engineering supervisor in sustaining product engineering. Through her roles at Acumed, Wallace has supported many initiatives and projects pertaining to manufacturing and quality improvements, product registrations, surgeon labs, surgical instrument development, and biocompatibility qualifications.

At Oregon State, Wallace was involved in a wide range of student organizations. She feels that the university and the College of Engineering do a great job of encouraging students to try new things, with a community built by incredible students, faculty, staff, and alumni, all willing to help.

Wallace has been an alumna presenter and panelist at several events on various topics, most recently on how to lead and navigate change as an engineer for the College of Engineering Leadership Academy in 2021. She was the keynote speaker at the college's Engineering+ event in 2020.

Wallace is also an avid promoter and supporter of women and minorities in STEM. She volunteers for several organizations in the science and engineering fields, enjoys participating in outreach, mentoring, and public speaking opportunities, and has remained involved at both of her alma maters.

***"I am most proud of my ability to seize opportunities to advance in my career. Change is something that never quits, and through my time at Oregon State and beyond, I've been able to harness change as a tool to better myself and propel my career forward."***

COLLEGE OF ENGINEERING

# ANOTHER THINK COMING

**ARTIFICIAL INTELLIGENCE** has ushered in a "second industrial revolution," and it's already changing the way our world works. Here in the School of Electrical Engineering and Computer Science, not only do we offer graduate degrees in AI, but every one of our computer science programs includes instruction in the topic. We're not just ready for the future. **WE'RE READY FOR THE NOW.**



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**AI is the most transformative technology of our time, and it will enable us to address some of the world's greatest challenges.”**

**JEN-HSUN HUANG, '84, '09 (Hon. D.)**  
Founder & CEO, NVIDIA

**LORI L. HUANG, '85**  
President, Jen-Hsun & Lori Huang Foundation



Thank you, **Jen-Hsun and Lori Huang**, for your \$50 million gift to the OSU Foundation in support of the planned \$200 million Collaborative Innovation Complex. We are delighted the university will recognize your gift, which was announced at the public launch of Believe It: The Campaign for OSU, by naming the facility in your honor.

The Jen-Hsun and Lori Huang Collaborative Innovation Complex, powered by one of the nation's fastest supercomputers, will enable faculty and students to tackle global challenges in areas where OSU is an international leader, such as climate science, oceanography, sustainability and water resources.



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