

# Catalyst

2023

## Revolutionizing ChemE education

Modernizing the curriculum • Faculty  
collaboration • Universal design in  
learning • Optimizing teamwork •  
Leading in DEI

CHEMICAL ENGINEERING  

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UNIVERSITY *of* WASHINGTON

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As engineers, we are united in our fervent pursuit of innovation, with a conscious intention to improve the lives of everyone.

This is reflected in the research and accolades of our faculty, students and alumni who continuously show how chemical engineering permeates and revolutionizes multiple industries, and how our small but mighty team can impact global industry standards.

The team of young changemakers at UW ChemE has a wealth of opportunities and connections right at their fingertips. Of more than 180 undergraduate students and counting, 70% participate in research and are often co-authors with faculty and graduate student mentors.

Engineering works in tandem with creativity, accessibility and diversity. Being innovators means thinking beyond the sphere of labs and textbooks and imagining what could be, but also connecting with the world as it is here and now to develop solutions that are informed, purposeful and can have the broadest influence.

In this issue of Catalyst, we pull back the curtain to reveal some of the ongoing work behind the scenes that has earned the University of Washington Department of Chemical Engineering (ChemE) a reputation of being among the front-runners in fostering a culture of inclusion and respect for all who join our community. Emphasizing diversity, equity and inclusion (DEI) is not a political statement. It informs how we can attract the most ambitious and hardworking students and faculty, and ensures an environment where everyone is able to do their best work.

The calculated quest for purposeful progress in our department is relentless, from the careful nurturing of partnerships to the committed actions to advance diversity, equity, inclusion, accessibility and much more. You will see in this newsletter how we have equipped our alumni with tools to start their own companies, and how those alumni continue to re-engage with our students and give back in the form of industry sponsorship and mentoring.

My philosophy in leadership is that people work best when they have a say in what they do. When applied to a discipline as cross-functional as chemical engineering, this collaborative approach ultimately garners incredible success.



Thank you for taking the time to read on about how we continue to work toward positive change.

**James Carothers**  
Interim Department Chair and  
Charles W.H. Matthaei Endowed Professor

# Meet our **new faculty**

## Zachary Sherman

Assistant Professor



ChemE is delighted to welcome Zach Sherman as the newest faculty addition in Autumn 2023. Zach comes to the department from a postdoctoral fellowship at the University of Texas in Austin, where he worked alongside professor Tom Truskett on the self-assembly and optical properties of functional nanoparticle materials. Prior to his fellowship, he earned his Ph.D. at MIT under professor Jim Swan on the assembly and transport of colloidal dispersions in electric and magnetic fields.

Zach brings to the department his expertise in computational modeling of colloidal soft materials. His research combines elements of chemical engineering, materials science, and applied mathematics, with the goal of creating “designer” soft materials with tailored properties that can be applied across virtually any area of impact, from health and medicine to clean energy to infrastructure and beyond. As part of his appointment, Zach will be building out a lab that focuses on using a unique set of computational modeling and simulation tools to investigate electromagnetic field-driven colloidal materials across the electromagnetic spectrum.

“The use of electromagnetic fields functions as this external controller that can move particles around and change the way they interact with each other. We will use computational models to predict how the particles react.”

When deciding to pursue the opportunity to join the University of Washington, Zach was drawn to UW ChemE’s history of excellence in colloidal science, and also to the culture of collaboration that exists within the department and the College of Engineering. He is particularly excited about the availability of computational resources that he can leverage in his lab, including the eScience Institute and Hyak.

“As a computationalist, it’s very important for me to find experimental collaborators and I am certain I will find that here at UW.”

Zach was also drawn to the investment that UW ChemE has made into diversity, equity and inclusion efforts on all levels of the department, and the commitment to continue working toward a positive and inclusive learning environment for all students that choose to pursue chemical engineering or any STEM discipline. For most of his time as a postdoc, Zach was an outreach chair with the Center for Dynamics and Control of Materials, which is recognized as part of the National Science Foundation Materials Research Science and Engineering Centers (MRSEC).

“The goal was to do whatever we could to educate K-12 students and to show that science is for everyone, and anyone can become a scientist. It was great to connect with communities that did not have a lot of their own science resources. We ran STEM clubs at elementary schools in the greater Austin area, and hosted booths at larger UT events like World of Engineering Day. It was fun to be a part of.”

On the teaching side, Zach has plans to develop a new elective course for the ChemE curriculum. His course will provide an introduction to molecular simulations and understanding the processes that go along with them. The course will give students a chance to step outside of the customary physical processes of a wet lab setting, and will instead challenge them to approach processes from a computational angle.





Photo by Ron Wurzer

## John Berg receives Distinguished Teaching Legacy Award

John C. Berg was honored this year as the recipient of the 2023 Distinguished Teaching Legacy Award.

His intellectual generosity and enthusiasm for teaching continue to inspire students after over fifty years as a professor of chemical engineering.

## Editor-in-chief



**Elizabeth Nance** was selected as the new **Editor-in-Chief of Bioengineering & Translational Medicine (BioTM)**. Nance plans to increase journal submissions and peer review involvement by engaging engineers, scientists, clinicians, and industry and government-

based professionals around the world. The journal's overall mission is to **raise awareness around high-priority or rapidly evolving areas of technological innovation in medicine**, and to identify and publish manuscripts that represent underserved populations or applications.

## Fond Farewell

**Jim Pfaendtner** was named the **Louis Martin-Vega Dean of the College of Engineering at North Carolina State University**. As a beloved professor, mentor, department chair and now dean, he continues to set the bar high for engineering in higher education. The UW ChemE community wishes him the best on this next venture.

## 35 Under 35

**Julie Rorrer** was named among the **American Institute of Chemical Engineers' 35 Under 35** in the **Energy and Environment** category. Rorrer's research group develops catalytic processes to upcycle plastics and bio-derived molecules into high-value chemicals and renewable fuels.



## HEALTH & BIOTECH

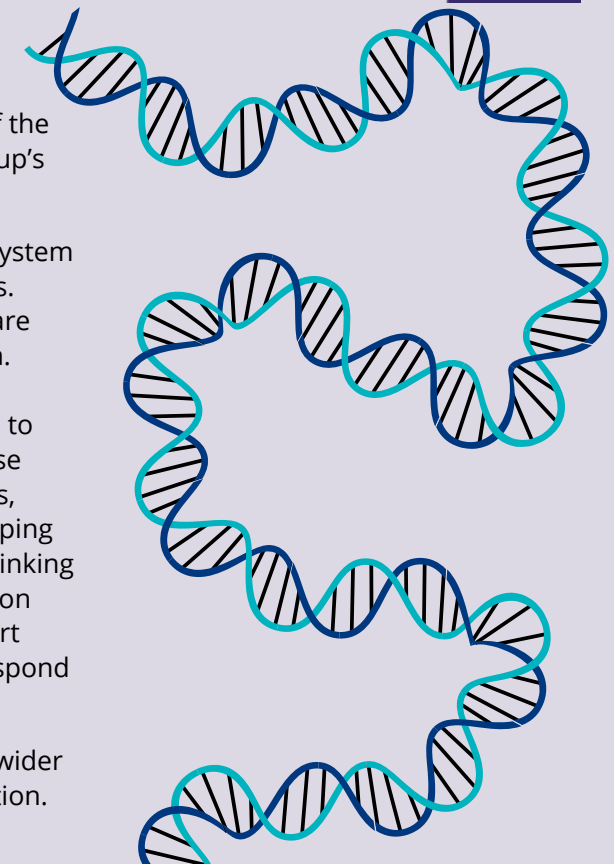
### Making bacteria work smarter

Diego Alba, a Ph.D. student in chemical engineering and a member of the Carothers Lab, co-authored a paper published in PNAS about the group's work to build input-responsive CRISPR a/i gene-regulatory networks.

By looking at bacteria, researchers are able to isolate a single-celled system to learn how it works, and then modify it to perform desired reactions. Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) are a natural set of proteins that act as a defense mechanism for bacteria. Over the last decade, engineers have repurposed and built different kinds of CRISPR tools that can modify bacteria in many different ways to achieve a desired function. A key component of this research is the use of a cell-free environment for prototyping synthetic biological systems, which allows for improvements in the speed and efficiency of prototyping circuits. With these developments combined, researchers can start thinking about building more complex circuits that can handle more information and produce more complex functions, allowing bacteria to make smart decisions based on multiple inputs and determine the best way to respond in a given environment.

Leveraging the resilience of biological systems can ultimately lead to wider solutions for reducing the amount of energy used in industry production.

## RESEARCH HIGHLIGHTS



## CLEAN ENERGY & SUSTAINABILITY

### Hydrogen-free, low-energy upcycling

While the idea of chemically repurposing plastic waste into high-value materials sounds like a win, the process involved is costly and not so environmentally friendly. Currently, plastic upcycling demands the use of either energy-intensive high temperatures, or volatile and expensive hydrogen gas. In a recent publication, graduate student Julia King explores existing methods of waste plastic upcycling and the challenges that they each present.

With this information, King and other researchers in the Rorrer lab are working to develop a hydrogen-free, low-temperature method of catalytic conversion that will make plastic upcycling more feasible and accessible.

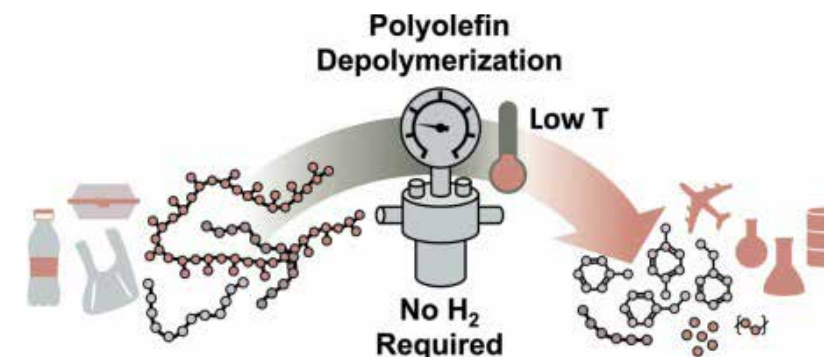


Image courtesy of the Rorrer lab

### Methane-eating bacteria

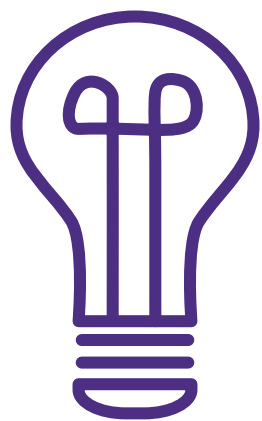
A multidisciplinary team of researchers in the Lidstrom lab have identified a type of bacteria that could play a significant role in climate mitigation, thanks to its ability to consume low concentrations of the greenhouse gas methane, the second leading contributor to global warming. With funding from the National Science Foundation, the team is working to pilot their bioreactors currently under development in three years, with a long-term goal to commercialize by 2030.

Photo of colonies of the bacteria growing on methane on an agar plate, courtesy of the Lidstrom Lab



# Expanding and innovating in ChemE education

The University of Washington Chemical Engineering (ChemE) department continues to shape the narrative around what it means to be a chemical engineer, and much of the innovation starts outside the classroom. **Read about the ways UW ChemE is showing up for students and faculty to embrace the journey of diversity, equity, inclusion and accessibility.**



## Modernizing the ChemE curriculum

Elizabeth Nance, professor of chemical engineering and current chair of the ChemE undergraduate program, addressed the conserved nature of the chemical engineering curriculum taught at institutions across the nation.

“Take a chemical engineering student from almost any college in the country, and I could tell you exactly what classes they are taking, and probably what textbooks they are using,” says Nance.

In the packed curriculum that chemical engineering students progress through, every principle is essential. The benefit of having such a rigid discipline is that the employers that hire newly graduated chemical engineers will know exactly what training students have had. The challenge, however,

comes with modernizing ChemE education to meet the expanding applications of chemical engineering in industry.

“Modernizing the curriculum becomes extremely difficult,” says Nance, “In order for something new to be added, something else must be cut to make space, which poses a huge risk in such a historically conserved discipline. So you have to find things that will teach the same exact principles in a new and more relevant way.”

In the first chemical engineering class that UW ChemE students take as sophomores, they learn the foundations of chemical engineering at the most basic level represented by relevant scenarios. In 2021 amidst the COVID-19 pandemic, Nance took the opportunity to introduce the new cohort of students to chemical engineering by using vaccine production as the focus of demonstrating fundamental principles.

“It demonstrated a highly complicated problem that reflected a real-world scenario at the time, and those basic principles are still very much a part of the production process that yields a safe product that will be injected into billions of people to help mitigate a new pandemic.”

## A collaborative, diverse faculty

The chemical engineering department is fortunate to have faculty that connect to every impact area students might be interested in pursuing after completing their education. ChemE’s core faculty also represents a group of educators particularly diverse in age, ethnicity, experience and expertise. These differences among them only strengthen the collective goal of making continuous improvements in chemical

engineering education by offering valuable perspectives from all kinds of personal and professional experiences.

When it comes down to modernizing a historically rigid curriculum, making change is possible, but it demands buy-in from all faculty and a commitment to adjusting classroom learning with the changing times and standards.

Some long-time faculty have been using the same classroom examples for decades to effectively teach certain principles of chemical engineering. Why change something that’s been working for so long? Because the world is changing, and so is ChemE’s identity. A degree in chemical engineering is among the most versatile and adaptable engineering degrees, which forces a reframe of the picture that the general public may have about what the discipline represents in industry.

Historically, a chemical plant and all the public hazards that come along with it might be the first image that comes to mind at the mention of chemical engineering. But that is not necessarily the most accurate reflection anymore. Julie Rorrer, a newer addition to the faculty as of January 2023, has been recognized for her lab’s research and work in the area of plastic upcycling, and represents just one way that chemical engineers can contribute positively in the area of clean energy and sustainability.

“We have expertise coming from both ends of the spectrum,” says Nance, “We have professors who have taught here for many decades, and seen how current events impact education over time,” says Nance, “We also have new professors who have a fresh perspective on what modernization could look like in the curriculum and how to strengthen the overall perception of chemical engineering.”

The active collaboration of new and seasoned faculty brings fresh ideas and past challenges together to meaningfully shape the way that change can be effectively incorporated into classroom problems. Every year, all ChemE faculty teaching core undergraduate courses gather to discuss course content and do peer review, to determine how they can best adapt content for the sake of relevance to the ever-changing chemical engineering landscape.

## Better teamwork in classrooms

Part of the ChemE undergraduate lab experience is intended to prepare students for the collaboration and teamwork they can expect after graduating and entering their careers in industry. The Comprehensive Assessment of Team Member Effectiveness (CATME) SMARTER Teamwork is a collection web-based tools created by Purdue University that enable professors to implement

teams optimized for productivity and effectiveness based on student criteria.

Alex Prybutok, assistant teaching professor of chemical engineering, introduced CATME in her classes to better support ChemE seniors preparing to transition into industry careers. This tool helps mitigate issues that can arise from other methods of group formation like leaving students to self-select or assigning teams at random.

By surveying a broad scope of student data, the program can designate effective teams based on information like gender and ethnicity, preferred work styles, class schedules, and extracurricular activities. Factoring in things like minority status helps ensure that any marginalized students don’t feel alone in their group. In addition, CATME’s automatic peer evaluation feature can help notify instructors early of any tension between students in their designated teams, which provides the opportunity for early intervention.

The goal with is to provide a positive introduction to teamwork for students that aligns with the department’s commitment to diversity, equity, inclusion and accessibility.



Opposite page: UW ChemE faculty attend the 2023 faculty retreat to discuss department goals for the upcoming school year.

Colored gradient on the cover and at the top of this page courtesy of Sean Sinclair, Unsplash

# An evolving

Since 2016, UW ChemE has been committed to fostering a diverse and inclusive culture where everyone is equipped to learn and to do their best work, and the department continues to make great strides. **Here is a snapshot of their journey so far.**

# IDEA

INCLUSIVITY · DIVERSITY · EQUITY · ACCESSIBILITY

## 2022

- An “Ethics and DEI for Chemical Engineers” seminar was added to the curriculum, focusing on fostering social awareness and ethical responsibility within the field of engineering for ChemE students. Guest speakers from the UW and other institutions present on topics highlighting issues like workplace discrimination, implicit bias and intersectionality.
- The initial Universal Design for Learning training was delivered, which emphasizes specific learning principles that support all student learning types regardless of disability status. The DEI committee and undergrad committee led a massive effort to promote support for students with disability accommodations, and helped encourage more widespread use of classroom recordings.
- Committee members and advising staff expanded the DEI pages on ChemE’s website to include more resources and offer transparency around the diversity, equity and inclusion efforts of the department.



## 2016

- An new ad hoc committee was formed to address diversity within the department. Former department chair François Baneyx appointed James Carothers to lead the committee, with the goal of exploring ways to recruit, retain and support a more diverse cohort of students in ChemE.

## 2019-2020

- Bathrooms in Benson Hall were reassigned to move closer to equal availability of gendered men’s and women’s facilities, in addition to the building’s existing all-gender bathrooms.
- Onboarding materials for all new faculty were developed and implemented, to emphasize the commitment and expectations of the department around DEI efforts.

## 2017-2018

- UW ChemE begins to hold regular annual celebrations for Veteran’s Day, Pride Month and International Women’s Day, to recognize and celebrate students of underrepresented demographics and nontraditional backgrounds.
- In 2018, UW Chemical Engineering removed the GRE from the graduate program application requirements. After considerable research and internal discussion among faculty, it was concluded that removing this requirement would ultimately benefit the department by reducing barriers to accessing top talent.

## 2021

- The IDEA Endowed Support Fund in Chemical Engineering was established, to further the efforts of our now established Diversity, Equity, and Inclusion Committee. The word “IDEA” in the fund name initially stood for inclusion, diversity, equity and antiracism.
- The Benson Hall lobby was remodeled to adopt a more welcoming atmosphere for students, along with accessibility improvements like installing digital touch screens to help students and visitors navigate the building.

## 2023

- Formal peer mentoring programs for ChemE students were established. These programs connect new undergraduate and graduate students entering the department to other students who are nearing the end of their degree. This peer connection helps mitigate anxiety and isolation and fosters a sense of belonging for students of all backgrounds as they pursued their degree in chemical engineering.

## 2024 PRIORITIES

The DEI Committee is focused on continuing to build a resource library for Universal Design in Learning training materials to further engage and support ChemE students in their success.

Follow our journey at [cheme.washington.edu/diversity-equity-inclusion](https://cheme.washington.edu/diversity-equity-inclusion)



In early 2016, the first chapter of Women in Chemical Engineering (WChE) was founded by Professor Elizabeth Nance and students at the University of Washington. The purpose of this student organization is to educate, empower, and advocate for women in chemical engineering and their allies by providing a safe space for dialogue, mentorship, collaboration and camaraderie for all.



Opposite page: ChemE students from the Nance Lab line up in order of rainbow colors to celebrate Pride in 2018



## Graduate student & postdoc highlights



Duyen Tran (Ph.D. '23) was selected as a finalist for the **2023 Frank J. Padden Jr. Excellence in Polymer Physics Research Award**, of the American Physical Society (APS) in March 2023.

Duyen graduated in August 2023 and is now a postdoctoral scholar in the department.

Teresa Rapp, a former **Washington Research Foundation postdoctoral scholar**, completed her fellowship this year and accepted a position as an assistant professor of chemistry and biochemistry at the University of Oregon.

During her time as a ChemE postdoc, Rapp participated in the **Society for Biomaterials Postdoc Recognition Award competition** at their 2022 National Conference and won second place. She was also **recognized as a Rising Star in Engineering in Health**.

Her research from the DeForest Lab on photodegradable hydrogels was published in **Nature Communications** in 2023.



## Undergraduate achievements

2023 UW Library Award for Undergraduates

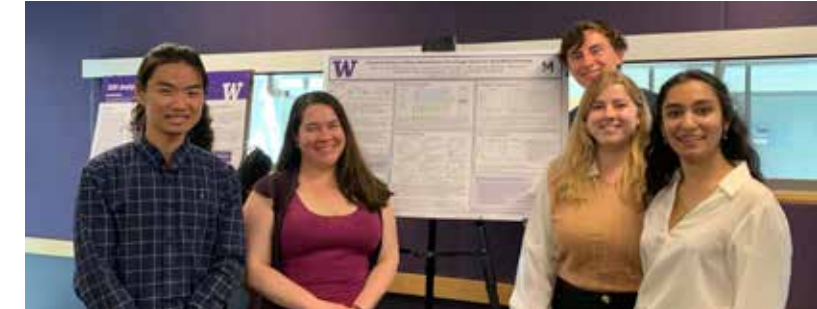
### Owen Lin



2023 ChemE graduate Owen Lin was a **Grand Prize recipient in the Upper Division Thesis category of the Library Research Award for Undergraduates**.

The title of his project submitted for this award was "Quantifying

Microglia Morphological Response to Injury and Treatment Across Species with Unsupervised Machine Learning."



From left: Owen Lin, Gisele Charpentier, Lindsey Miller, Mansi Gokani and Mason Nelson

### Capstone projects nurture ChemE industry partnerships

A team of ChemE seniors completed their Industry Capstone project sponsored by Membrion. Founded by UW ChemE alum Greg Newbloom, Membrion focuses on wastewater treatment through efficient ion exchange membranes. The students in this project, supervised by a Membrion research engineer, compared and characterized silica-based anion resins developed by Membrion and their competition. This project helped Membrion measure and compare the efficiency of their resin with that of their competitor—offering valuable insight for future product development.

### STUDY ABROAD

## ChemE undergrads take Denmark

Kijung Lee, a rising chemical engineering senior, was among the students that participated in a 4-week summer study abroad program in Denmark this year. The program takes place at the Technical University of Denmark (DTU) which houses one of the top unit operations laboratories in the world.

"I wanted to study abroad in Denmark because I never got to work in a lab before due to the COVID pandemic," says Lee, "so I really wanted to get this valuable lab experience before the start of my senior year."

The course combines challenging theory and practical, hands-on experience alongside an international social environment. Students from all over the world collaborate and build the cultural

Photo by Nick Karvounis, Unsplash



Photo by the Technical University of Denmark

competence that will benefit them as they approach the end of their degree and prepare to start their industry career.

Lee noted the differences in the broader educational system at DTU compared to what most students are accustomed to in the United States. He appreciated the personable and interactive nature of working with professors on the lab experiments, and being able to ask questions and engage in active discussion.

Outside of the lab, students in the program had barbecue socials and took group trips to see Danish castles and other local landmarks. For Kijung Lee, the difference in culture around work-life balance was evident.

"It's a drastic departure from our routine and gave me a bigger perspective on the world," said Lee.



2023 R. Wells Moulton

## Distinguished Alumnus in Industry

### Tony Huang (B.S. '82)

Director of Finance (ret.),  
Clorox

Tony Huang graduated from the University of Washington with a B.S. in chemical engineering in 1982.

"I always liked chemistry, and I picked chemical engineering because I believed there would be more opportunities to apply chemistry in my career as a chemical engineer. I knew that I wanted to work in industry after college. Back then, we didn't have things like biotechnology. The big industries here were oil, pulp and paper, and chemical companies."



*Tony Huang and his wife, Melissa on vacation in Ireland*

While working as an engineer for several years with Procter and Gamble, Tony ran operations and managed the production of laundry detergents. He successfully consolidated the West Coast production of detergents to the Sacramento facility through a capacity expansion project. Gaining these valuable business experiences piqued his interest in other aspects of business practices, and he was inspired to deepen his education in that area. He went back to school and earned an MBA with a concentration in finance from Columbia Business School in 1990. From there Tony continued his career with a 27-year run at Clorox, starting as a Senior Financial Analyst and ultimately serving as Director of Finance before retiring.

Tony's full 33-year career largely preceded the implementation of what is now standard technology in the corporate workplace. Without a personal office computer as is customary today, he often had to do calculations manually when determining quantities of production materials. Office presentations were given on glass slides instead of a digital PowerPoint file. Among Tony's accomplishments included facilitating Clorox's adoption of enterprise software for their, a process that took four years to implement.

In his address to the ChemE graduating class of 2023, Tony remarked that while the way that we do business will continue to change, the qualities of a successful leader will not.

Today, Tony is retired and spends his time volunteering at the local hospital and traveling the world with his wife.

2023 UW Chemical Engineering

## Early Career Impact Award

### Eric Karp (Ph.D. '12)

Chief Technology Officer,  
Crysalis Biosciences

Eric Karp is an emerging leader in the clean energy transition.

Eric earned his B.S. in chemical engineering from the University of Colorado Boulder before pursuing his Ph.D. at the University of Washington. After completing his doctoral degree, Eric worked extensively with the National Renewable Energy Laboratory in Golden, Colorado. As a chemical engineer, he assisted in the development of a more sustainable method of producing materials like carbon fiber using bio-based chemicals.

Now, he has taken his extensive knowledge in biochemicals and his passion for cutting carbon emissions on an industry level a step further. Along with co-founder Sanket Gandhi, Eric Karp has started a new company called Crysalis Biosciences. By repurposing a former ethanol plant just east of Saint Louis, this new company will be among the first of its kind to produce environmentally-friendly aviation fuel.

"We expect to produce approximately 30 million gallons a year of sustainable aviation fuel," says Eric. The plant will also be the first low-carbon production facility for biobased acetonitrile, a chemical with high demand in the pharmaceutical and battery industries.

Not only will sustainable aviation fuel help to curb carbon emissions from the aviation industry, but the production process will be near net-zero as well. Combined heat and power for the chemical plant itself will come from converting waste on site.

"I think there is a huge opportunity within the field of chemical engineering in general to have a positive impact on climate change. There is a huge push, not just societally, but specifically within chemical engineering, that this change needs to happen. And given that corporations and large chemical companies produce about 70% of the global warming carbon emissions, just modifying the way that chemicals like fuel are produced can have a huge impact."

With over a decade of experience in biofuels and the end-to-end bioprocess development, Eric has more than 36 peer-reviewed publications and multiple patents in biomanufacturing that are currently being used. In 2017 he was the recipient of the R&D 100 Award, a prestigious award for honoring the pioneers of revolutionary innovations in science and technology.



UW ChemE established the Early Career Impact Award in 2021 to recognize a graduate within 15 years of receiving their degree who has made significant contributions to engineering in industry, academia, government, or public or volunteer service.

## DONOR SPOTLIGHT

### Inspired by others' giving, ChemE alum starts new endowment

UW ChemE alum Rob Hinton (BS '89) shows his passion for education by starting an endowment for future Ph.D. students in chemical engineering.

Rob Hinton graduated from the University of Washington in 1989 with a B.S. in chemical engineering.

For 18 years he worked with what is now Georgia Pacific, in the pulp and paper industry, before switching gears to try something new. He partnered with his older brother, a civil engineer who owned a real estate development business, and the two have been working together for over 16 years.

But even in shifting away from chemical engineering and into a new industry, Rob remarked that the critical thinking and technical problem-solving learned as an engineer can be applied to anything. His time at UW and years of engineering work experience have both helped him continue to build on his success.

"Engineering teaches you how to think, and if you have those critical thinking skills, you can take them anywhere. It helps us look at overall processes better. Even though my career path hasn't looked like a typical chemical engineer, my education has been beneficial in every part of my life."

Rob fervently believes in the value of education. He has contributed over the years, and as his career has grown, he has enjoyed being able to give more and more often. Noticing that Dr. Berg had established a new fund, Rob was inspired to do the same. "I have been very fortunate in my career, and I have always believed in giving back when I can."

He reached out to the department chair and the advancement team to express his interest in giving opportunities, and learned ChemE was most in need of endowed funds to support the Ph.D. program. As a result he started the Robert Hinton Endowment, which will help to cover the tuition costs and support future students pursuing their Ph.D. in chemical engineering for years to come.

If you are interested in making an impact through philanthropy at the UW, please contact Kaitlin Colleary, Director of Advancement, at [kaitcoll@uw.edu](mailto:kaitcoll@uw.edu)



## WOMEN IN CHEMICAL ENGINEERING

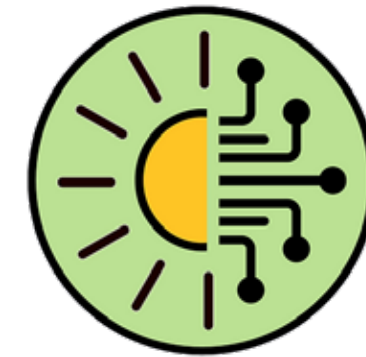
### Introduce a girl to green technology

In February 2023, the Women in Chemical Engineering (WChE) student organization held its seventh annual Introduce a Girl event at the University of Washington.

The theme for this year was **Introduce a Girl to Green Technology**.

The event offered an afternoon of STEM demonstrations for young girls and gender-expansive folks ages 5-15, with a priority to connect with those from historically underrepresented backgrounds and low-income families.

Members of the Pozzo Research Group educated young scientists about hydrogels and the uses they have in relation to green technology.



*Patch design by Nada Naser*



*This page, left: Girl scouts participate in the Introduce a Girl to Green Technology event  
This page, right: Members of the Pozzo Research Group showcase their demos on hydrogels*

## Chemical Engineering Leadership Seminar Series

This series explores a breadth of career paths and connects students with alumni who are leaders in a range of industries and sectors. Reflecting upon their careers, speakers offer students valuable insights, lessons learned, and advice for succeeding in today's professional work environment.

### 2023 SPEAKERS

**Linda Cadwell Stancin (B.S. '89)**  
VP Air Vehicle Engineering and Technology, Lockheed Martin

**Andy Penner (B.S. '82)**  
Mission Success Manager (ret), Lockheed Martin

**Janet Matsen (Ph.D. '16)**  
Data Scientist, Benchling

**Tami McTaggart (B.S. '14)**  
Research Scientist, Amazon

**Erin Hollinger (B.S. '07)**  
Director of Engineering, Intel

**Kirk Nass (Ph.D. '89)**  
Technical Team Leader; Dispersants, Inhibitors, and Fuel Additives (ret), Chevron

**Andy Walker (B.S. '96)**  
Co-founder, President & Chief Operating Officer, GentiBio

**Angela Maehren (B.S. '03)**  
Enterprise Engineering Integration Leader, Boeing

## Stay connected with ChemE

We have opportunities for alumni at all stages of their careers to support and interact with the department. Whether it's giving a guest lecture, sponsoring a capstone project, or participating in a networking event, alumni enrich department life and add value to the student experience.

Please contact department interim chair James Carothers at [chechair@uw.edu](mailto:chechair@uw.edu) if you're interested in getting involved and would like to learn more.



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