

IMPACT



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@KStateEngg



Beth Ward, IE '93, and Anita Ranhotra, IE '94, MEM '01, attended the 2021 Career Fair Reception to accept the Company of the Year award on behalf of Hallmark Cards.

Contents

- 4 Sue Barsamian and a Global Perspective
- 6 Turning Trash Into Treasure
- 7 2021 Engineering Open House Awards
- 8 Carl and Melinda Helwig Naming
- 10 R3NRT — Taking on the Challenge of Sustainable Food, Energy and Water Systems
- 13 Scholarships Make an Impact
- 14 Engineering Students Have Rhythm
- 17 2021 Seaton Society
- 18 Upgraded Spaces
- 20 Engineering Awards for Excellence in Diversity and Inclusion
- 21 By the Numbers
- 22 College and Alumni News

From the Dean

As we began the fall semester here in the Carl R. Ice College of Engineering, it was good to finally see the halls and classrooms throughout the engineering complex full of energy again. This semester has brought the return of activities and events, making clear that more than ever, we are open for business as usual.

You may have noticed some changes to this magazine. We are now publishing Impact once per year, and we've redesigned the magazine to have a new look and feel. What remains the same is our commitment to using these pages as a tool to connect with you, our alumni, so that you remain linked to this campus and its future. We hope the stories that follow give you the chance to do exactly that.

This year, we had much to celebrate at the college's fifth annual Diversity, Equity and Inclusion Summit, and we were honored with the presence of our keynote speaker, Sue Barsamian. Sue has helped us create a pair of new awards that honor those who are actively promoting diversity and inclusion within the college, and we appreciate her contributions to our broader commitment to take on a more active role toward equity and inclusion.

We recently also had the pleasure of hosting our fall meeting with the Carl R. Ice College of Engineering Advisory Council with Beth Ward, senior vice president, supply chain at Hallmark, serving as chair. Many thanks to those who were able to attend and continue to help guide the college in its decision-making.

We had another piece of exciting news become official this year as the University Engineering Initiative Act was renewed for another 10 years through a bipartisan process in the Kansas legislature. You can read in the pages to follow how UEIA has impacted our college over the last decade, but we want to make sure we thank all those who had a hand in securing the renewal. Support poured in from all corners of the state from our alumni, chambers of commerce, our legislative relations team and so many others.



Our biggest goal continues to be educating engineering students, and the availability of scholarships continues to make a difference in the decision-making process for many. Our alumni have always been a valuable resource for creating scholarships, and we thank you for those gifts. As we go forward, competing for the top students in the state and region will require more scholarships as we work to give our recruitment team the tools it needs to make sure K-State remains the largest engineering school in Kansas for the foreseeable future.

Matthew J. O'Keefe, Ph.D.
Dean and LeRoy C. and Aileen H. Paslay Chair

A global perspective

Loving people from all backgrounds drives Sue Barsamian's success

A year spent studying at the Swiss Federal Institute of Technology in Zurich, Switzerland, set **Sue Barsamian's** life and career on a path emphasizing global inclusiveness.

"I think that going to Zurich for a year of post-graduate work after completing my undergrad at K-State really set me on a lifetime journey of loving diversity," Barsamian said. "I went from Kansas, having never traveled outside of the country, to suddenly living in Switzerland and going to a university where people came, from not only all over Europe but all over the world, to study engineering and technical disciplines. I discovered my superpower, which is loving people from all different backgrounds and perspectives. This set me off on a career in Silicon Valley when I got back from Switzerland."

Sue Barsamian grew up in Wichita, Kansas, and earned her bachelor's degree in electrical engineering from K-State in 1981. She attributes her time at K-State and the mentors she met there with setting her on her path to success.

"Don Lenhart was a strong mentor of mine while I was at K-State. He was instrumental in not only my electrical engineering degree, but also in setting me up for success," Barsamian said. "He helped me formulate my idea and application for the scholarship to go to Switzerland. And we are still in contact today."

Barsamian's 40-year career in the tech industry has encompassed Hewlett Packard, where she held a range of executive roles, Mercury Interactive and Verity. Now semi-retired, she serves on multiple boards, including Five9, Box, NortonLifeLock and the KSU Foundation. She served as the chair of the National Action Council for Minorities in Engineering and was inducted into the Carl R. Ice College of Engineering Hall of Fame. Barsamian has expertise in enterprise software, cybersecurity and cloud operations. Her passion is working with global, diverse teams.

"I like the breadth and diversity that goes along with engaging a wide variety of people. At work that means global roles,"

"At the end of the day, people drive change. Recognizing individuals who really set an example for diversity and inclusion is one way to continue the march to make progress."

— Sue Barsamian, '81

she said. "That also means being committed to diversity in employees. When companies are more diverse and have more diverse leadership and boards, they have better results. Variety breeds better final decisions, and it hopefully causes people to take into account perspectives they hadn't thought of."

To support diversity, equity and inclusion efforts in the college, Barsamian has created two awards — the Sue Barsamian Engineering Faculty and Staff Award for Excellence in Diversity and Inclusion and the Sue Barsamian Engineering Student Award for Excellence in Diversity and Inclusion.



"I believe that both recognition and targets drive change," Barsamian said. "At the end of the day, it's people who make it happen. Recognizing individuals who personally set an example for diversity and inclusion is one special way to continue the march to make progress."

Barsamian's love of K-State fuels her desire to give back, both financially and of her time.

"I've always been committed to giving back to K-State because it was so important to me," Barsamian said. "I'm really proud

2021 DIVERSITY, EQUITY AND INCLUSION SUMMIT

CARL R. ICE COLLEGE OF ENGINEERING

The Carl R. Ice College of Engineering hosted the fifth annual Diversity, Equity and Inclusion Summit on Nov. 9.

Keynote speaker Sue Barsamian, 1981 electrical engineering graduate of Kansas State University and board director at three public companies (Five9, Box, NortonLifeLock) and several private technology companies, brought the message, "Diverse viewpoints make us better," followed by a Q&A session with attendees.

The two-hour event also included breakout sessions, a diversity, equity and inclusion panel discussion and the presentation of two new awards named in Barsamian's honor. [Learn more about the recipients on page 20.](#)

of K-State's origin as a land-grant institution and its focus on educating the young adults of Kansas and beyond, including many first-generation college students.

"There is an important place in higher education for organizations like K-State because everyone deserves an equal opportunity regardless of their background. In the College of Engineering, I am very impressed with Dean Matt O'Keefe's leadership as a dean and his commitment to diversity and inclusion as K-State and the college make progress."

Based on her years of life and career experience, Barsamian's advice to students today is, "In life and in work, surround yourself with variety so that your opinions as a person and your decisions as an employee are grounded in enough input for you to have a well-rounded perspective."

By Marisa Larson, KSU Foundation

Turning Trash Into Treasure



Recycled Materials Design Club, or REMADE, cofounder Eli Janzen knows the work his club is doing to turn plastic waste into useful household items will not divert a meaningful amount of plastic from landfills.

His goals are much bigger, his timeline much longer.

“Our members are demonstrating what it takes to transform plastic trash into a new product in the most hands-on way possible,” Janzen said. “Once they graduate and move into industry or academia, they will have a much deeper understanding of the recycling and plastic manufacturing process than most graduates, and that is when they will be able to solve the problem of plastic waste on a meaningful scale.

“That’s our true goal.”

The REMADE club was formed in 2019 by Janzen and Dylan Evans, both doctoral candidates in the Tim Taylor Department of Chemical Engineering, as an outlet for students to gain experience with materials science and product design while providing hands-on experience with environmentalism. While the club was aimed at chemical engineers within the Carl R. Ice College of Engineering, students from all majors are welcome.

The club’s goal is to break down plastic waste, process it into 3D printer filament, then design and create household products that people can use, literally turning trash into treasure. The initial production process included shredding plastic milk jugs and turning them into flower pots, though the group is looking at creating other items.

“All we need is a 3D CAD model, which several of our members are capable of making, and we can 3D print just about anything,” Janzen said.

The club’s biggest challenge as it worked to get off the ground was finding the necessary equipment, which is typically designed for large-scale operations and is cost prohibitive for a student organization.

“Within the last several years, DIY-scale plastic processing equipment was developed and became commercially available, so we we’re actually pretty lucky with the timing of our club,” Janzen said.

“The outpouring of support we’ve seen from the K-State community has been extremely encouraging . . . ”

– Eli Janzen

The group has plans to expand beyond just the high-density polyethylene it’s recycling now, but a new material, such as aluminum or paper, would require new equipment.

Janzen said the response from the college, as well as the broader K-State community, has been overwhelmingly positive.

“Everyone that we’ve talked to has been excited or interested in what we are working toward,” he said. “The outpouring of support we’ve seen from the K-State community has been extremely encouraging, and I am so excited to see what we can accomplish.”

2021 Engineering Open House Awards

Engineering Open House department winners

1st Place - Chemical Engineering

2nd Place - Architectural Engineering and Construction Science

3rd Place - Mechanical and Nuclear Engineering

Video competition winners

‘Cat’s Pride Individual

1st Place – Patrick Flett

2nd Place – Caden Churchman

3rd Place – Sean Clennan

‘Cat’s Pride Organization

1st Place – REMADE

2nd Place – Robotics Competition Team

3rd Place – Engineers Without Borders

What Makes You Unique

1st Place – Bryan Hill, Hildana Abamegal, Shiseido Robinson, Amaya Molinar, Michaela Ross, Emmanuel Adeniji and Camden Mayfield

2nd Place – Emma Lucas

3rd Place – Dawson Bailey and Bjorn Jonsson

Engineering Students Having Fun

1st Place – Ethan Copple

2nd Place – Anne Bowser

3rd Place – Samuel McGowan and Zak Oster

Engineering Faculty/Staff Having Fun

Dave Thompson, associate professor



View the video competition winners’ videos at engg.us/open-house-videos.

Saint Patricia and Saint Patrick

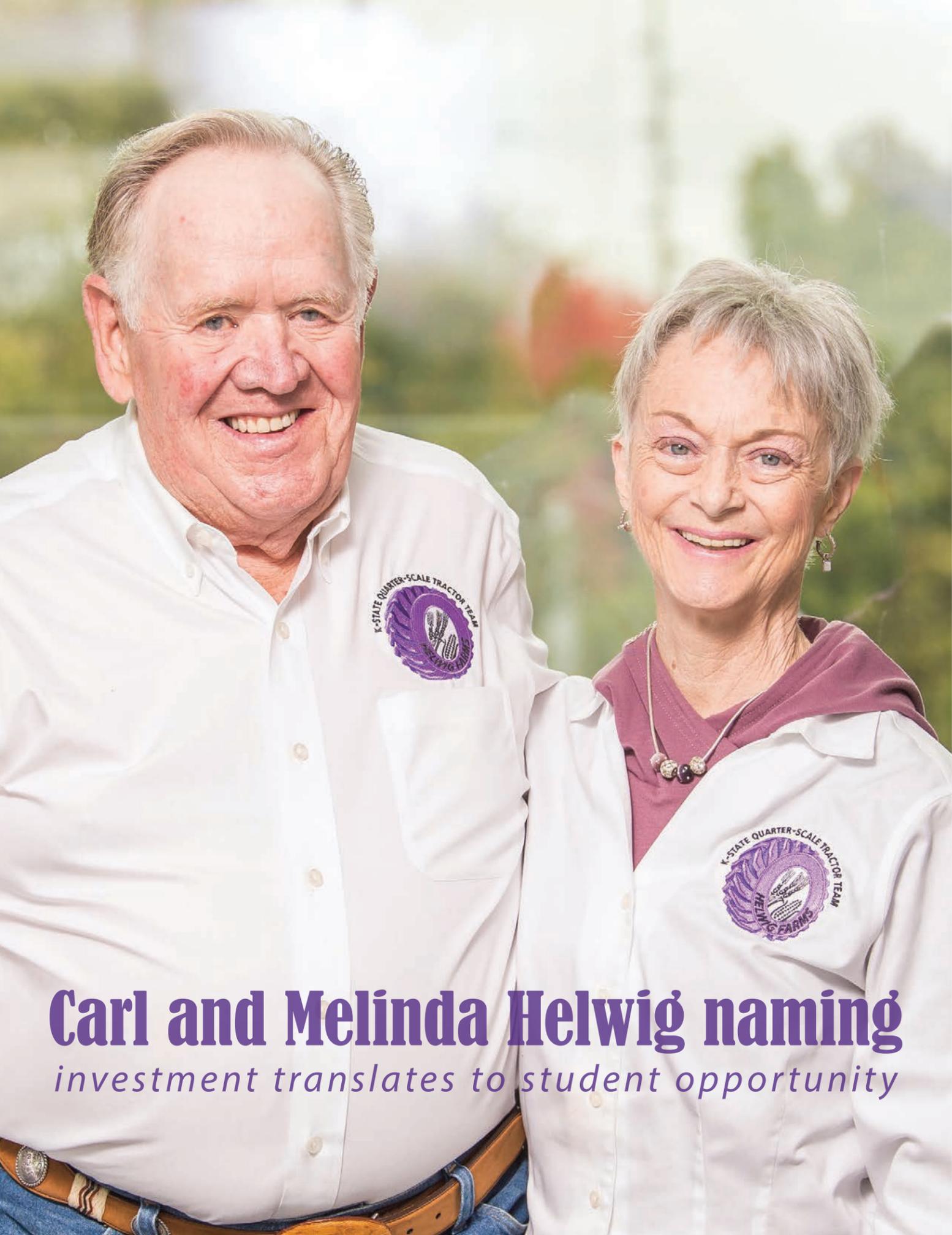
The honor of Saint Patricia and Saint Patrick is awarded annually to two outstanding graduating seniors in the Carl R. Ice College of Engineering who have been nominated by their respective departments in recognition of their leadership and contributions within their department, impact on the college and K-State community, and strong record of academic excellence.



St. Patricia
Mariana Cruz



St. Patrick
Ronaldo Lopez



Carl and Melinda Helwig naming *investment translates to student opportunity*



Carl and Melinda Helwig, Columbus, Kansas, have invested in the naming of the Carl and Melinda Helwig Department of Biological and Agricultural Engineering in the Carl R. Ice College of Engineering at Kansas State University. On April 23, the college celebrated this naming in the Helwigs' honor.

This investment will empower the department to recruit and retain top faculty, support deserving students and provide flexible funding for department leaders to take advantage of emerging opportunities.

"I am extremely honored that Carl and Melinda Helwig have chosen to invest in the department of biological and agricultural engineering," said Joseph Harner, department head and professor. "The Helwigs are committed to assuring undergraduate students have extracurricular experiential learning opportunities beyond the classroom. Their generous gift enables students to participate in a team environment working on product design, testing, manufacturing and marketing prior to entering the professional workforce."

Carl and Melinda Helwig, owners of Helwig Farms, raised wheat, corn, soybeans and grain sorghum on their southeast Kansas farm. The Helwigs also competed in tractor-pulling competitions and placed nationally in the early 1980s. Neither attended Kansas State University, but in recent years became important supporters and mentors of K-State



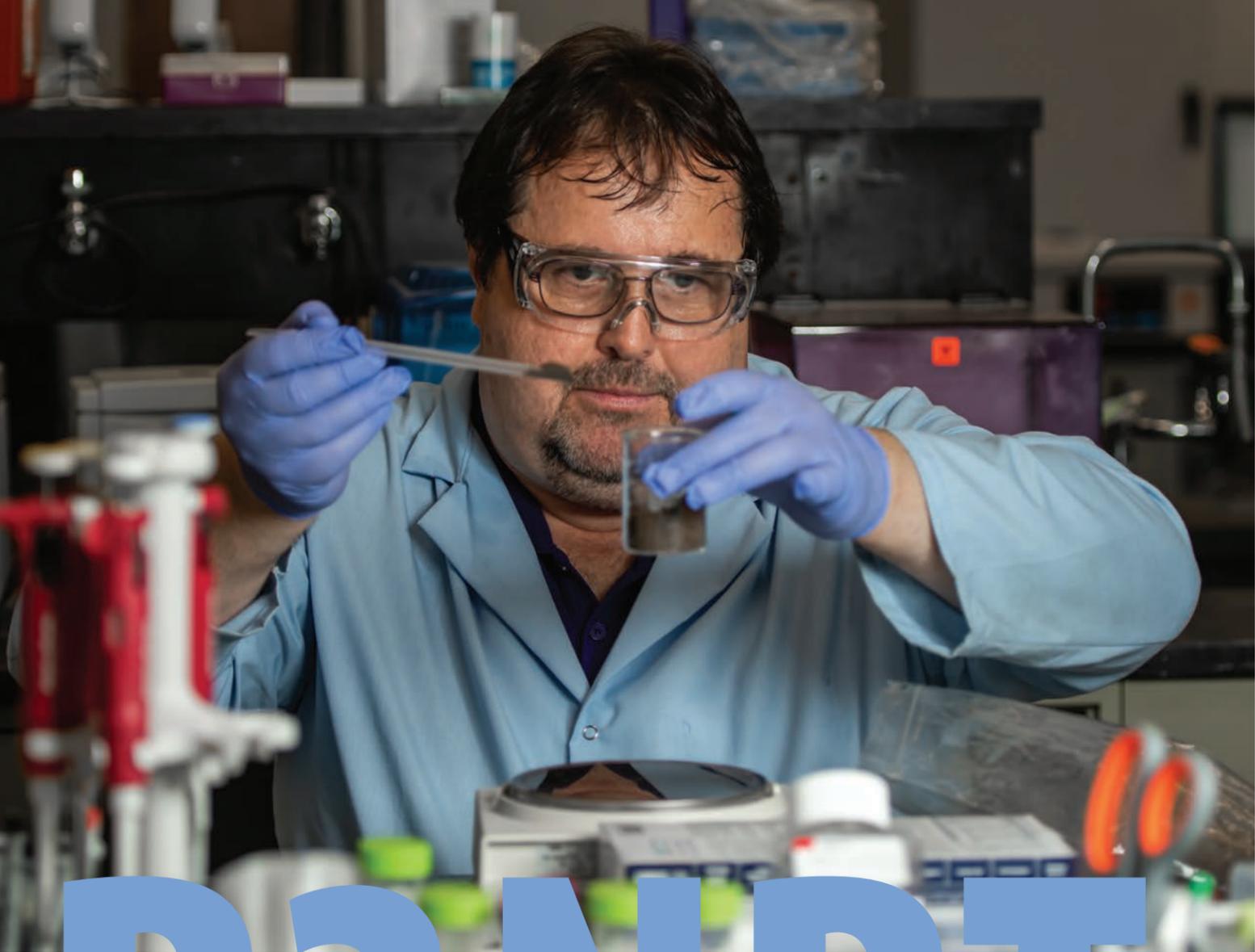
students by investing in the university's quarter-scale tractor team, which demonstrates the power of engineering and inspired innovation. They felt a kinship with the students of this team and were motivated to support them.

"We are honored to support K-State as it educates the next generation of engineering professionals," said Carl Helwig. "We have had a good life, been fortunate in grain production and enjoyed the thrill of competition. We want students to have every opportunity to be on top."

A gift of this magnitude is truly transformational for the college and the university.

"Carl and Melinda Helwig personify the generosity of the K-State family," said K-State President Richard Myers. "Their investment in the success of the College of Engineering faculty, students and programs not only elevates the college but brings prestige to the university and helps propel K-State toward being nationally recognized as a student-centered, public research university."

As Kansas State University's strategic partner for philanthropy, the KSU Foundation inspires and guides philanthropy toward university priorities to boldly advance the K-State family. Visit ksufoundation.org for more information.



R3NRT

— taking on the challenge of sustainable food, energy and water systems

by Mary Rankin



Above: One of the experimental setups to study the impact of inoculating *Bacillus subtilis* on increasing water retention and breakdown of water repellency. Left: Moises Gutierrez, CHE, preparing the soil sample for the inoculation of *Bacillus subtilis* during the experiment.

Moises Gutierrez, doctoral candidate in chemical engineering, has long been motivated in his educational pursuits by the use of microorganisms in improving human life.

Now a member of the second cohort of the Rural Resource Resiliency National Science Foundation Research Traineeship, or R3NRT, at K-State, he is drawing on that influence with his current research project, “The impact of the bacterial inoculants on increased water retention and breakdown of water repellency of agricultural soils in Kansas.”

Working in the Hansen Biointerface Lab in the Tim Taylor Department of Chemical Engineering, Gutierrez’s goal, with his advisor, Ryan Hansen, associate professor of chemical engineering, is to lay the foundation for ways to reduce water usage in irrigation systems, thereby saving water in shrinking aquifers.

“When I decided to pursue a Ph.D. degree, I thought the R3NRT would be an excellent fit for my career since I’ve largely focused on reducing food waste.”

“Topics such as use of yeast to transform food waste into fuel, use of bacteria to clean and reverse pollution issues, and now use of bacteria to increase water retention and breakdown water repellency are all excellent fields to explore,” Gutierrez said.

After completing his bachelor’s degree in chemical engineering from the University of California at Riverside in 1996, he worked in the food industry in different positions for more than 20 years. In 2016, he decided to pursue a master’s degree in chemical engineering through K-State’s Global Campus, graduating in August 2019.

After a short period of time out of school, he was accepted into the chemical engineering graduate program in the Carl R. Ice College of Engineering, entering directly to R3NRT as part of its second cohort.

“When I decided to pursue a Ph.D. degree,” Gutierrez said, “I thought the R3NRT would be an excellent fit for my career since I’ve largely focused on reducing food waste.”

“During my master’s degree studies, I researched converting food waste into bioethanol and mitigating the impact on the environment. Now, R3NRT has allowed me to continue researching ways to protect the environment through the food-energy-waste nexus.”

His long-term plans may involve a shift from the food industry.

“After the completion of my academics goals,” Gutierrez said, “I would like to continue in the field of academics in order to teach new generations about the benefits and importance of making this a better world.”



Gutierrez plating for the growth and harvesting of *Bacillus subtilis* for inoculating it on soils.

NSF-funded fellowship program now in its third year

The Rural Resource Resiliency graduate training fellowship, funded by the National Science Foundation Research Traineeship, or NSF NRT, program, is now in its fourth year at Kansas State University. Begun in 2019 with 16 students in the first cohort, there are currently 23 students in the third cohort with applications being accepted for a fourth that will begin in August 2022.

The program prepares future leaders who will focus on innovations at the nexus of food, energy and water systems. Fellows are students studying biological and agricultural engineering, chemical engineering, civil engineering, mechanical engineering, agricultural economics, sociology and other related fields.

Talented master’s and doctoral degree students are offered the opportunity to engage in advanced interdisciplinary research to solve challenges related to creating sustainable food, energy and water systems, and resilient rural communities. Participants engage with policymakers in these areas while being mentored by dedicated faculty regarding graduate school and future career paths.

Visit nrt.research.ksu.edu to learn more about the program.



Scholarships make an impact

Scholarships have always been an important part of recruiting top students to the Carl R. Ice College of Engineering, but with student need at an all-time high and the college prioritizing enrollment growth, they’re more crucial than ever.

Every dollar given for scholarships to K-State engineering makes a difference in the lives of students, but a current challenge facing the college is a lack of flexibility in how current scholarship dollars are able to be allocated. While many existing awards are designed to help certain underrepresented groups or future students in specific locations or regions, most are unable to respond to changing demographics and priorities over time.

“We are extremely fortunate to have the support of many generous alumni affiliated with the college,” said Craig Wanklyn, assistant dean for recruitment. “Flexible scholarships allow us to respond to student needs as they change. As our recruitment strategies continue to evolve, being able to utilize scholarships in the way that best meets those needs is important.”

An example of the type of program flexible funds can be used for is the college’s “finish line” awards for upperclassmen who are close to graduating but need a small boost to help them through the last semester or two remaining.

“Flexible funds can allow us to be creative and invest in student’s overall success at the beginning and end of their K-State engineering career,” Wanklyn said.

While the college remains committed to undergraduate and graduate student success, recruiting the area’s best and

brightest remains an ever-changing challenge. High school students preparing for college are more cost-conscious than ever, looking to avoid debt and see large returns on any investments, including their own education.

With competition from other schools for the highest-achieving students ratcheting up, so too must scholarship offers. Similarly, students with the greatest need also require more scholarships to be able to afford higher education, even paired with state and federal resources.

“Being able to compete within the state of Kansas and regionally for these students is paramount to our success,” said Gary Clark, senior associate dean for the college. “We want to be able to offer the same sort of scholarship support these students might find elsewhere so they can choose their university destination without money being a key decision-making factor.

“We want K-State engineering to remain the No. 1 choice for engineering students in Kansas and an affordable choice to those across the country.”

Are you interested in helping the Carl R. Ice College of Engineering through the gift of a scholarship? Contact the engineering development team at engineering@ksufoundation.org or 785-775-2000.

Engineering students have rhythm

The Kansas State University Marching Band, known as the Pride of Wildcat Land, has always seen its fair share of students from the Carl R. Ice College of Engineering among its ranks. This year, a pair of engineering seniors are helping lead the band.

Gillian Falcon, drum major and senior in chemical engineering and biological systems engineering, and **Ben Murdock**, senior in mechanical engineering and assistant drum major, strive to balance a heavy academic schedule with the time commitment required for their band leadership positions. We asked them a variety of questions about life as a student leader in the K-State marching band. Below are their answers in their own words.

What are some of the biggest challenges taking on a leadership role within the marching band?

"Some of the biggest challenges of being head drum major are associated with giving proper time to both the band and my coursework. I have to be prepared to conduct the shows, be ready for performances, and often set aside classwork stresses to give my full attention to the band. Senior year in engineering also has its struggles as the assignments get longer and more challenging. But watching the band from the podium make improvements or hit a set that has been challenging is one of the greatest rewards I have ever gotten to experience." - Falcon

"One of the biggest challenges I am working on is making a personal connection with each member of the band. With more than 400 members, this is a very daunting task

"I love my time in the college, but marching band is where I learn to be a better person."

-Ben Murdock

to undertake, but something I value. With members of all ages, building trust and personal accountability with everybody is challenging, but necessary." - Murdock

What are some of the perks of taking on a leadership role within the marching band?

"One of the greatest perks of being the head drum major is getting to lead such an amazing group of people who are full of energy, excitement and passion for both the band and this university. I am a better person for getting to know all of these people, and I am honored they look to me for guidance." - Falcon

"I love giving back to something that means so much to me. The Pride was my first experience as a student, and it holds

a very special place in my heart. There are also scholarships for the leadership team, which makes band feasible for many students in their later years at K-State." - Murdock

What does the weekly time commitment look like for these roles?

"On a typical game week, I spend about 29 hours doing band activities before Saturday. This includes a meeting Sunday afternoon, full two-hour rehearsals Tuesday, Thursday and Friday, sectionals on Wednesday night and the Pub Crawl band Friday night. On game days, we typically spend 12 hours getting ready, rehearsing at The Bill, performing pep bands and then playing at the actual game." - Murdock

Are you involved in other engineering or K-State clubs or extracurriculars?

"I am involved in the K-State chapter of the American Institute of Chemical Engineers (AIChE) and serve as the chair of the open house committee. Additionally, I am the treasurer for the band service sorority, Tau Beta Sigma. This role is in charge of all of the merchandise for the marching band, planning a formal luncheon and helping apply for SGA funding for visiting performers." - Falcon

How will your experiences in the marching band help you in your career?

"I love my time in the college, but marching band is where I learn to be a better person. I learn how to communicate with



To watch Gillian and Ben in action, go to engg.us/marching-band.



people from different backgrounds in high-stress environments, push myself through mental blocks in the heat and cold, and hold myself to be personally accountable." - **Murdock**

How do you balance your coursework with the demands of the band and other extracurricular activities?

"Time management is key. I rely heavily on my planner and stick to a strict schedule. Even with all of this time management and sticking to a strict schedule, there are times I have to change my schedule because the band runs long or an assignment takes extra time. This often means losing sleep to finish all of my coursework, but that is a price I'm willing to pay to participate in the activities I love so much." - **Falcon**

What is the best part about being a member of the marching band? Best part of helping lead it?

"The best part about being a member of the marching band is being able to go on the field every Saturday and perform for the best fans in the country in an amazing atmosphere. Aside from performances, the friendships that I have made through this program will last for years to come and have made my college experience so much richer." - **Falcon**

"I love being the center of the energy in the stadium and hyping up the student section, especially being back in section 26. Running through the tunnel at the beginning of pregame is a memory I will never forget — there is something special about running into a performance for 50,000 fans. Now that I help lead The Pride, I love watching our shows come together on the field. I have one of the best seats in the house during halftime! Most importantly, I deeply cherish seeing how I can make a positive impact on each of our member's experience at K-State." - **Murdock**

What are your plans after graduation?

"I would love to work in the environmental sector as a consultant. However, I am still actively searching for positions and considering graduate school." - **Falcon**

"Currently I am pursuing graduate school options focused on aerospace with plans to work in the space industry post-graduate school." - **Murdock**



SEATON SOCIETY

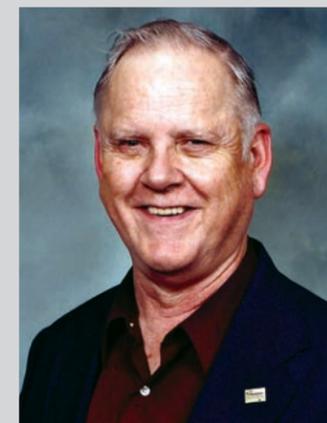
Carl R. Ice College of Engineering

HALL OF FAME CLASS OF 2021

Induction to the hall is the highest honor bestowed on its alumni by the college. Honorees are recognized for their professional success and accomplishment, involvement with and support of the Carl R. Ice College of Engineering, dedication to K-State, and professional and public service.



Mike Wieggers
EE '82, vice president, consumer engineering, Garmin International Inc.



Charles Wilson
ME, M.S. '72, senior scientist, Leidos Inc.

PROFESSIONAL PROGRESS AWARD

Nominated by their respective department heads and confirmed by the dean, 10 alumni were honored for significant early to mid-career success.



John Anderson
BAE '01, engineering director, AGCO Corporation



Katie Clark
CHE '07, global polyethylene marketing manager, Chevron Phillips Chemical Company



Kevin Day
CE '00, assistant vice president, Canadian National Railway



Monte Engelkemier
ME '00, group engineering lead, Cargill



Liz Heier
ISE '00, director of global data privacy, Garmin International



Justin Horsch
CNS '00, senior superintendent, GE Johnson Construction Company



Mackenzie Martin
EE '03, partner, Baker McKenzie LLP



Michelle Schlie
IE '00, northcentral supply chain region vice president, Frito-Lay



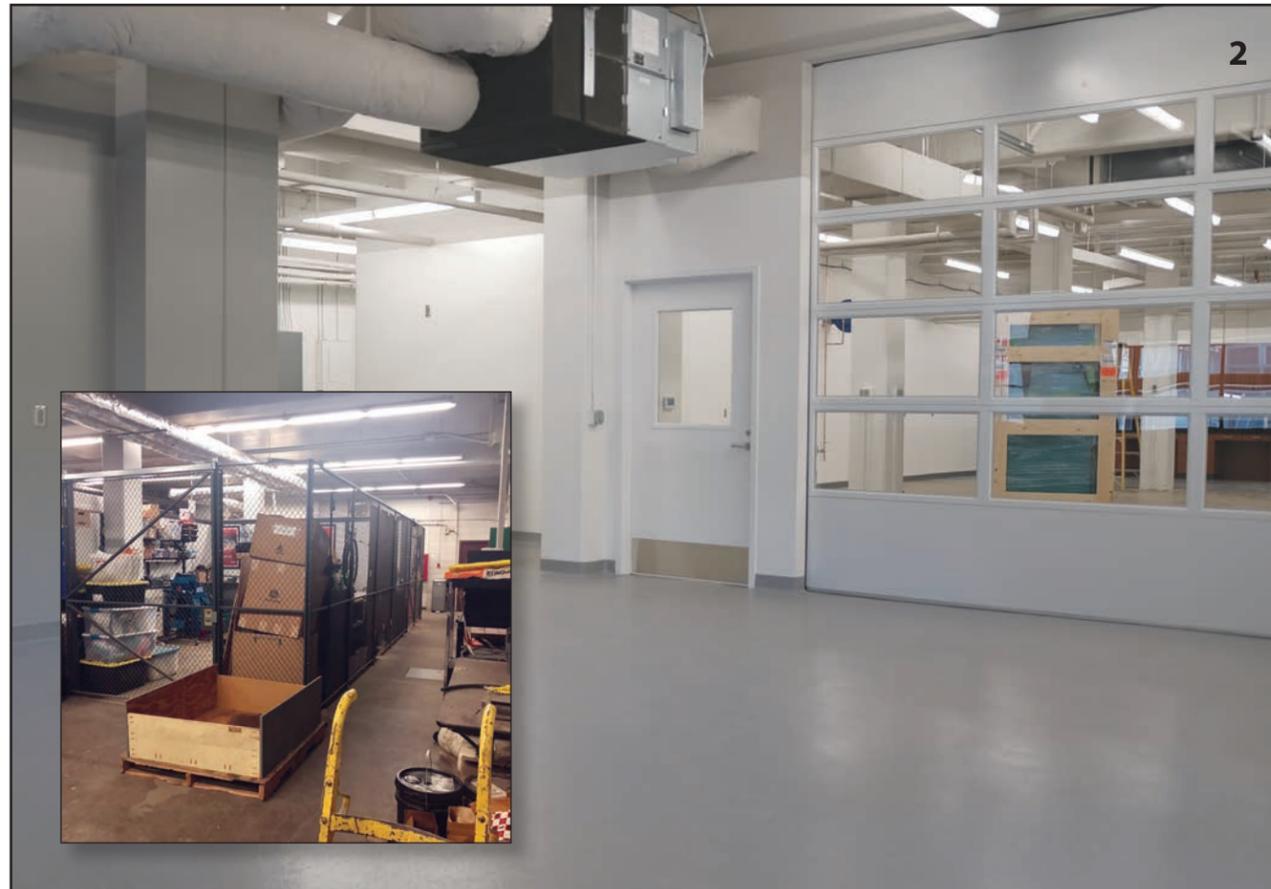
Travis Stryker
ARE '04, president, CAS Constructors



Mark Troutfetter
CMPE '06, co-founder, Pristine



Watch the Hall of Fame videos at engg.us/hall-of-fame-2021.

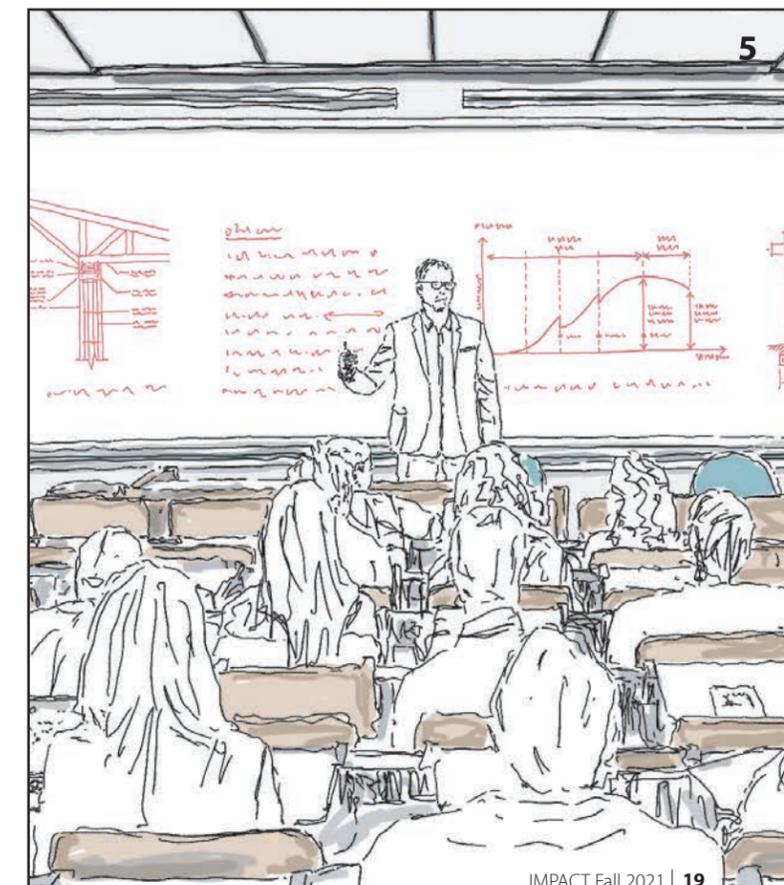


new & improved

multiple spaces in the college have been upgraded or renovated

Students who spent much of 2020 away from campus came back to a new and improved engineering complex, with several large remodeling projects completed as well as the unveiling of several new state-of-the-art spaces throughout out the facility.

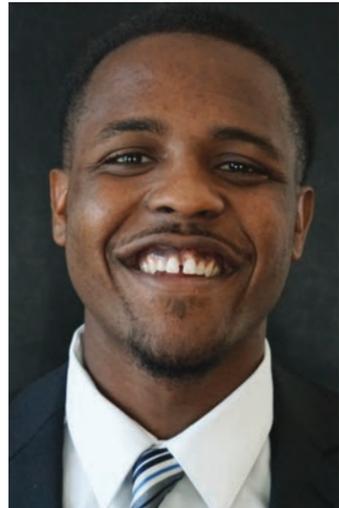
1. Fiedler Hall Auditorium was updated over the summer with new paint, carpet and chairs installed in addition to new acoustic panels and electrical outlets/USB ports in the desktops.
2. The basement of Seaton Hall, part of the Carl and Melinda Helwig Department of Biological and Agricultural Engineering, was completely redone, including an updated layout as depicted in the before and after photos. The remodeled space includes areas for the Helwig Farms Quarter-Scale Tractor Team and Spray Technology Lab, among other updates.
3. The Alan Levin Department of Mechanical and Nuclear Engineering debuted its all new makerspace, including new flooring, lighting, paint, tables and equipment. New amenities in the space include 3D printers, a drill press, a soldering station and other tools.
4. The Tong Family Biomedical Education and Innovation Laboratory was created from converted space previously used as a conference room. Part of the Mike Wieggers Department of Electrical and Computer Engineering, the teaching laboratory includes all new equipment.
5. This rendering shows renovated classroom space planned for west Seaton Hall. If the project moves forward, the 72-seat classroom with state-of-the-art technology would be the largest space in the GE Johnson Department of Architectural Engineering and Construction Science.



Recognizing Excellence in Diversity and Inclusion

The Carl R. Ice College of Engineering had even more to celebrate than usual at this year's fifth annual Diversity, Equity and Inclusion Summit on Nov. 9, presenting a pair of new awards created by alumna Sue Barsamian designed to honor a student and faculty or staff member who have demonstrated excellence in enhancing diversity and inclusion in the college.

Student award recipient



The recipient of the inaugural Sue Barsamian Engineering Student Award for Excellence in Diversity and Inclusion is **Christopher Burrell**, junior in mechanical engineering.

Upon his arrival to K-State, Burrell quickly became involved with the Black Student Union and was nominated to run for Mr. BSU, which he won, a rare feat for a freshman.

His work to enhance diversity and inclusion at K-State is

extensive, including active membership in the National Society of Black Engineers and the K-State Mechanical and Nuclear Engineering Advisory Council, where he works to advocate for underrepresented students. He also serves as a student worker in the college's Multicultural Engineering Programs office, where he volunteers at recruitment events and serves as a mentor to younger engineering students.

Burrell also is committed to leadership, serving as chair of the planning committee for the 45th annual Big 12 Conference on Black Student Government hosted at K-State in 2022, as well as joining the Engineering Leadership and Innovation program through the college.

Each recipient received a plaque and cash award at the ceremony, which featured Barsamian as the keynote speaker alongside a panel discussion and breakout sessions on a variety of topics related to diversity and inclusion.

Faculty award recipient



The recipient of the inaugural Sue Barsamian Engineering Faculty and Staff Award for Excellence in Diversity and Inclusion is **Jessica Heier Stamm**, Gisela and Warren Kennedy cornerstone teaching scholar, Steve Hsu keystone research scholar and associate professor in industrial and manufacturing systems engineering.

In addition to being known as a professor who treats every student with dignity and respect,

Heier Stamm has been involved in a variety of efforts to increase diversity and inclusion throughout the college.

She has offered more than a dozen workshops to support K-State EXCITE!, GROW and Upward Bound Math and Science programs. Through this work, she has engaged with hundreds of K-12 students, challenging them to think about problems in humanitarian logistics and helping them understand how science, math and engineering help to solve our biggest societal problems.

By the Numbers

It's hard to quantify just how valuable the University Engineering Initiative Act has been to the Carl R. Ice College of Engineering. The renewal secures an additional 10 years of \$3.5 million of annual funding, matched by the college, to support our goals. Below are some of our accomplishments since receiving this critical funding nearly a decade ago.

in the last 10 years, graduated

nearly **6,000**
students



the number of **KANSAS COMPANIES** offering internships increased by **MORE THAN 200**

student internships increased by **more than 850**




increased number of graduates by **40%**

increased scholarships by **113%** 
which is **\$6.5 M**

College editor retires

Longtime editor for the College of Engineering, Mary Rankin, retired in September 2021 after more than 33 years of service.

Rankin joined K-State as a half-time instructor in the English department in the fall of 1988 and began as a part-time editor with the college in January 1989. She held both positions until the summer of 2000 when she became a full-time editor for engineering.

“I have enjoyed my association with five different deans and two interims in producing clear and accurate communications for the college,” Rankin said.

“In working on many, many issues of Impact magazine, I have always appreciated the expertise and cooperation of faculty when reporting on their activities and research, as well as being continuously touched by our more-than-generous alumni who so graciously shared their stories of what the college has meant and means to them.”

Promotions, tenure and sabbaticals

The following faculty members have been promoted to associate professor with tenure:

Amir Bahadori, MNE; **Shannon Casebeer**, ARE/CNS; **Eric Fitzsimmons**, CE; **Ryan Hansen**, CHE; **Dong Lin**, IMSE; **Katie Loughmiller**, ARE/CNS; **Walter McNeil**, MNE; **Arslan Munir**, CS; **Prathap Parmeswaran**, CE; **David Thompson**, ECE; **Hongyu Wu**, ECE

The following faculty members have been promoted to full professor:

Ray Buyle, ARE/CNS; **Behrooz Mirafzal**, ECE; **Pavithra Prabhakar**, CS; **Gurpreet Singh**, MNE; **Chi-Hang (John) Wu**, IMSE

The following faculty members are on sabbatical leave for 2021-2022:

Jessica Heier Stamm, IMSE; **Pavithra Prabhakar**, CS; **Punit Prakash**, ECE; **Hayder Rasheed**, CE; **Caterina Scoglio**, ECE; **Aleksey Sheshukov**, BAE

Carl R. Ice College of Engineering Advisory Council



Kevin Burke, ME '86, Burke Construction Group
Chrysta Castañeda, IE '85, The Castañeda Firm
Tim Chadwick, CNS '90, MMC Corp.
Nick Chong, CE '70, Zoom Video Communications Inc.
Jim Coen, CE '82, MVP Holdings LLC
Darold Davis, CE '70, Garver – retired
Roger Farrell, CE '75, Natural Gas Industry

Richard Fornelli, CE '72 and '73, CH2M – retired
Kimberly “Kim” Gerard, CE '84, 360 Electrical LLC
Don Glaser, ME '74, Glendo LLC – retired
Deyona “Dee” Hays, EE '89, Excellence Engineering
Kevin Honomichi, CE '86, BHC
Warren Kennedy, CHE '90, Burns & McDonnell Engineering Co. Inc.
Ryan McGuire, IE '92, J.B. Hunt Transportation Services Inc.

Karl Miller, ME '84, Jingoli Power LLC
Mark Nyquist, CNS '80, DynaTen Corporation – retired
Robert Reichenberger, EE '89, Solar Prime
Simeon Terry, IE '91, Austin Commercial
Art Umble, CE '82, Stantec Consulting Services Inc.
Beth Ward, IE '93, Hallmark
Jerry Westhoff, CE '74, J.J. Westhoff Construction Co.

In-person commencement



Check out “The Next Greatest Generation” video to hear portions of the ceremony’s speech by Leanne Caret at engg.us/spring-2021.



The Carl R. Ice College of Engineering spring 2021 commencement ceremony took place on Sunday, May 16, 2021, in the K-State Student Union Grand Ballroom after inclement weather forced a change from the planned event at Bill Snyder Family Stadium. The ceremony’s speaker was Leanne Caret, a K-State alumna and president and CEO of Boeing Defense, Space & Security.



Alan Levin, ME '69, poses with Dean Matt O’Keefe and President Richard Myers after walking across the stage at the spring 2021 commencement.



DeLoach wins Presidential Award

Scott DeLoach, professor and head of the computer science department, is the recipient of the 2021 Presidential Award for Outstanding Department Head.

Since becoming interim department head in 2014 and his appointment as permanent head in 2016, DeLoach has worked to boost his department's enrollment, expand its undergraduate and graduate academic programs, increase scholarship funding, strengthen diversity and inclusion efforts and improve facilities and infrastructure.

"Being the department head of computer science has been the absolute best professional experience of my life," DeLoach said. "I work with great faculty and staff who have great passion for our students, both in the classroom and in research. My goal is to support them as much as possible and stay out of their way so they can be free to be themselves and do great things."

Each award includes a \$5,000 honorarium sponsored by the university president's office and Curtin Property Company.



Keen appointed Coffman chair

Julia Keen, Bob and Betty Tointon engineering chair and professor of architectural engineering and construction science, served as the Coffman chair for Distinguished Teaching Scholars for the 2020-2021 academic year.

Keen spent her tenure as chair utilizing her professional knowledge and skills to conduct an assessment of all K-State classrooms for compliance with ventilation requirements to reduce COVID-19 risk as the university prepared to partially reopen for the fall 2020 semester. The assessment was turned over to K-State's Division of Facilities to confirm proper operation of ventilation systems serving classrooms. The impact extended into 2021, with more than \$4 million invested into projects to improve classroom indoor air quality.

"Ultimately, when we think about the purpose of the Coffman chair, it's to enhance undergraduate teaching and learning," Keen said during the 2020-2021 Provost Lecture Series. "There is nothing more important, as we're trying to be on campus and provide that education for our undergraduate students, than for our classroom environment to be safe."

The Coffman chair was created in 1995 to highlight the university's commitment to excellence in undergraduate teaching and learning.



KSU Foundation promotes Brown, adds Billings

Jenna Brown was promoted to senior director of development for the Carl R. Ice College of Engineering in August 2021.

The nearly eight-year veteran of the Kansas State University Foundation has spent the last 4 ½ years with the college, beginning as assistant director of development in 2017 before moving into the executive development officer role in 2020.

Brown earned her bachelor's degree in management and marketing in 2008 and her master's in counseling and student development in 2010, both from K-State. She lives on a small ranch outside of Manhattan with her husband, a 2010 mechanical engineering graduate, two young daughters and their dog.

Billings joins engineering development team

Mallory Billings became a senior development officer for the Carl R. Ice College of Engineering in June

2021. She holds a bachelor's degree in communication studies from Texas Christian University.

Before joining the KSU Foundation, Billings led the development team for the College of Education and The Burkhardt Center for Autism Education and Research at Texas Tech University. Throughout her six years in development, she has reinvigorated donor relationships, gained trust and impacted the organizations she has worked for through successful fundraising strategies.

Although a native Texan, Billings has deep roots in Hutchinson and now resides in Manhattan with her husband.



In memoriam

Warren White, Jr., Manhattan, died May 24, 2021. He began a career in the mechanical and nuclear engineering department at K-State in 1985 teaching many courses over the years and serving as an advisor to Women in Engineering, the Wildcat Wind Power Team and the Final Frontier Aerospace Systems and Technology group. He is survived by his wife, Georganne; daughters Heather and Chelsea; and sons Warren III and Steven.

College awards



Front row, from left: **Mitzi Farmer**, MNE, Clair A. Mauch Steel Ring Advisor of the Year; **Raymond Clotfelter**, COE, Engineering Unclassified Staff Award of Excellence and Team Award of Excellence; **Pavithra Prabhakar**, CS, Dean's Award of Excellence – Research; **Erik Grimm**, COE, Team Award of Excellence; **Amber Jacobs**, COE, Team Award of Excellence; **Kyle Evans**, COE, Team Award of Excellence; **Behrooz Mirafzal**, ECE, Dean's Award of Excellence – Service; **Bala Natarajan**, ECE, Myers-Alford Memorial Teaching Award; **Gurpreet Singh**, MNE, Frankenhoff Outstanding Research Award; **Vicky Geyer**, IMSE, Engineering Support Staff Employee of the Year

Back row, from left: **Shannon Casebeer**, ARE/CNS, Larry E. and Laurel Erickson Public Service Award; **Jason Richards**,

COE, Team Award of Excellence; **David Pacey**, MNE, Robert R. and Lila L. Snell Excellence in Undergraduate Teaching Award; **Russell Feldhausen**, CS, Team Award of Excellence; **Emily Alfs-Votipka**, CS, Team Award of Excellence; **George LaVezzi**, CS, Team Award of Excellence; **Dan Flippo**, BAE, Charles H. Scholer Faculty Award

Not pictured: **Terry Beck**, MNE, Myers-Alford Memorial Teaching Award; **William Hageman**, ECE, Dean's Award – Teaching; **Stacey Kulesza**, CE, James L. Hollis Award for Excellence in Undergraduate Teaching; **Caterina Scoglio**, ECE, Engineering Distinguished Researcher Award; **Joshua Weese**, CS, Team Award of Excellence

New faculty

From left: **Jan Sebek**, ECE, research assistant professor; **Alexander Gibson**, MNE, instructor

Not pictured: **Greg Newmark**, CE, research associate professor



Carl Ice named to state board of regents and as chair of search committee

Kansas Governor Laura Kelly appointed Carl Ice, 1979 graduate in industrial engineering, to the Kansas Board of Regents in June.

Ice is the former president and CEO of BNSF Railway where he worked for 42 years. He is currently chairman of the KSU Foundation board of directors and is a former chair of the engineering advisory council at Kansas State University.

In 2018 he and his wife Mary invested in creating the first named college at K-State — the Carl R. Ice College of Engineering.

In another related appointment, the Kansas Board of Regents in July named 25 members to a committee that will assist and advise the board in its search for the next president of K-State, with Ice to serve as chair of that group.

The search committee includes representation from university students, faculty, alumni and the Manhattan community. For more information and a list of all members, visit:

k-state.edu/presidential-search/search-committee.

Recognitions

1985

Cindy Wallis-Lage (CE), Leawood, president of the water business at Black & Veatch, has been elected to the National Academy of Engineering.

2003

Ben McBride (CMPEN; EE, M.S. '07), Tijeras, New Mexico, was part of a three-person team competing for L3Harris Trenchant, that was awarded \$40,000 in the Pwn2Own live hacking event organized by Trend Micro's Zero Day Initiative.

2007

Tony Reames (Engr Mgmt, M.S.), Farmington Hills, Michigan, was recently named a senior advisor for the U.S. Department of Energy.

2013

Romil Bhandavat (MNE, Ph.D.), Beaverton, Oregon, was awarded the Intel Achievement Award for 2020, the highest recognition of the Intel Corporation.

2015

Kristine Davis (ME), Houston, Texas, is a recipient of the K-State Alumni Association Student Alumni Board 2021 Distinguished Young Alumni Award. She works for NASA on the exploration extravehicular mobility unit spacesuit that will be used for the planned Artemis missions.

In memoriam

1942

Leo Wendling, Jr. (AGE, M.S. '56), Manhattan, died Jan. 27, 2021. He taught for K-State Extension Biological and Agricultural Engineering for 35 years. He was preceded in death by his wife, Ruby, and is survived by his son, Phillip; four grandsons and three great-grandchildren.

1951

Robert "Bob" Dahl (ARE, M.S.'54), Peoria, Arizona, died Nov. 6, 2020. He taught and served as department head in architectural engineering and construction science at K-State. He is survived by his wife, Charlotte; daughter, Carolyn; sons, Robert and Michael; and three grandchildren.

1954

Virgil Snell (ARE), Lenexa, died Dec. 15, 2020. He had a long career with the power division of Black & Veatch. He is survived by his wife, Jane; daughters, Mari, Rhonda and Patricia; son, Walter; 26 grandchildren; 32 great-grandchildren; and three great-great grandchildren. He was preceded in death by two daughters, Cathi and Janice.

1955

Kenneth Gowdy (ME, M.S. '61), Lansing, died Feb. 28, 2021. During his career of nearly 50 years at K-State, he served in the following capacities in the College of Engineering: professor, assistant dean, head of engineering technology and associate dean. He is survived by his wife, Delores; two sons, David and Mark; 11 grandchildren; and 24 great-grandchildren. He was preceded in death by a son, Michael and daughter, Elizabeth.

1958

Frank Green (CE), Leawood, died Sept. 20, 2020.

1959

Gordon Carlson (EE, M.S./Ph.D.), Rolla, Missouri, died Jan. 27, 2021. He spent his professional life at Autonetics in California and then as a professor of electrical engineering at the University of Missouri at Rolla. He is survived by his wife, Kathryn; daughters Susan and Virginia; son, John; eight grandchildren; and two great-grandchildren.

1970

Dennis Kuhlman (BAE, M.S. '75), Salina, died Dec. 7, 2020. He was an Extension Agricultural Engineer at K-State from 1977-1997, and then became dean and CEO of K-State at Salina until his retirement in 2012. He is survived by his wife, Carol; sons Brock and Les; daughter, Breanna; and three grandchildren.

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Kansas State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, ancestry, disability, genetic information, military status, or veteran status, in the university's programs and activities as required by applicable laws and regulations. The person designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning the nondiscrimination policy is the university's Title IX Coordinator: the Director of the Office of Institutional Equity, equity@k-state.edu, 103 Edwards Hall, 1810 Kerr Drive, Kansas State University, Manhattan, Kansas 66506-4801. Telephone: 785-532-6220 | TTY or TRS: 711. The campus ADA Coordinator is the Director of Employee Relations and Engagement, who may be reached at charlott@k-state.edu or 103 Edwards Hall, 1810 Kerr Drive, Kansas State University, Manhattan, Kansas 66506-4801, 785-532-6277 and TTY or TRS 711. Revised Aug. 29, 2017.

Below: Fall 2021 Career Fair Reception in Engineering Hall.



Do you know someone interested in attending K-State? Have them connect with us to receive all the latest information.

k-state.edu/request-info