Three couples have recently stepped forward with gifts totaling $22 million, exhibiting a generosity, a belief in our programs and a commitment to education that cannot be overstated. As we experience continued growth in enrollment, this transformative level of investment will allow us to expand our programs, while further establishing our goal of being the top engineering program in the state.

Ike (EE ’65) and Letty Evans, with their belief in a strong educational foundation, have named the Ike and Letty Evans Academic Success Center. Their generosity will help students accessing the center to lay the groundwork for success in their current studies as well as their future careers with workshop offerings on study skills, time management, engineering careers and internships. Assistance through peer-to-peer tutoring, test preparation skills, first-year instruction, and diversity support programs such as Women in Engineering and the Multicultural Engineering Program are also offered.

Tim (CHE ’75) and Sharon Taylor, through their philanthropy, have named the Tim Taylor Department of Chemical Engineering. A gift at this level of support will improve the national ranking for and reputation of the department by providing a triple impact of excellence — creation and expansion of top-of-the-line laboratory facilities, acquisition of state-of-the-art instrumentation for exploring new areas of research and a boost to recruitment of top-tier faculty who can be offered enhanced start-up packages.

Jim (CNS ’84) and Laura Johnson have generously chosen to honor the legacy of Jim’s father, Gil (CE ’55), by establishing the GE Johnson Department of Architectural Engineering and Construction Science. A profound impact of this naming will be to spotlight the need for continued support of competitive salaries to attract and retain the best and most dedicated educators. The engineering and construction industries recognize — evidenced by the nearly 100 percent job placement for ARE/CNS graduates throughout the history of the department — that the success of these students is directly attributable to what experienced and exceptional faculty bring to the classroom.

Highlighting the Evanses, Taylors and Johnsons — the first to step forward at this extraordinary level of naming a center and departments — in no way diminishes the outstanding and ongoing record of philanthropy from many, many others, which has brought this college to where it is today. On behalf of myself and our entire institution, we sincerely say thank you to each and every one of you who continually support the advancement of all areas of the College of Engineering.
There’s a new look in Ward Hall, thanks to a multi-purpose remodeling project funded by the department of mechanical and nuclear engineering, and the College of Engineering.

“We began the project in 2016,” said Bill Dunn, MNE professor and department head, “and have been able to bring a much-needed upgrade and look of uniformity to the facility.”

Major emphasis of the work has been the north wing on the first floor where two laboratory spaces — the NanoMaterials and Characterization Lab, and Kansas State MicroAnalysis Lab — have been repainted, had flooring replaced and new equipment added. On tap for the same work in that location this summer are the Nu-651 Lab and the Radiological Engineering Analysis Lab. The Center for Complex Fluid Flows, also in that hallway, had been updated previously. Funded by a $1.5M DOE grant, later this summer the entire control panel for the nuclear reactor will be replaced in the reactor control room, located in the north wing as well.

The front lobby area was also remodeled with new flooring, paint, furniture and display cases. Included in the project was minor remodeling and reorganization of space in the east wing. At the basement level, upgrades involved painting walls and replacing wall hangings for displays. A major remodel of a lab in the basement is in progress, where a dry room is under construction as part of a grant-funded project.

“The remodel has brought a great synergy to the building, particularly among the labs in the north wing,” Dunn said.
For Zayd Leseman, associate professor of mechanical and nuclear engineering, upgrades to his NanoMaterials and Characterization Lab, or NMCL, have created a space where he and his students can continue their award-winning research on nano-engineering of materials.

“Carrying out research at a scale on the order of an atom’s diameter is demanding,” Leseman said, “and without the proper facilities — impossible.”

The recent renovations have made it possible for Leseman’s group to conduct preliminary research that led to a National Science Foundation grant on nanotriboelectric generators that harvest the buildup of static electricity. Tyler Hieber, MNE doctoral candidate, is the lead graduate student performing experiments on this grant.

Leseman said upgrades to the NMCL have had an immediate impact on the productivity of students working there.

“Students have an increased sense of pride when they walk into the newly renovated, high-tech lab,” he said. “This pride manifests itself into the quality of the students’ work, thereby increasing the quality of research publications and proposals coming out of the NMCL.”

As an example of this, Dipta Sarkar, another MNE doctoral candidate, recently took second place at the American Society of Mechanical Engineers Micro and Nano Technology Forum in Tampa, Florida, for his work on XeF₂ etching of silicon for sensor applications — work performed in the NMCL.

The NMCL also houses projects from MNE’s Senior Capstone Design Course, undergraduate research and local area high school students.

“Its appearance and capabilities give students a feeling of privilege to be in the lab,” Leseman said.

To learn more about Zayd Leseman and his research, visit http://bit.ly/zleseman.

By Mary Rankin

INSIDE WARD
THE NANOMATERIALS AND CHARACTERIZATION LAB

To mark his father’s struggle and determination for a college education, and recognize the people and institution that helped make it possible for him as well as his son, Richard and Linda Fornelli of Carlsbad, California, have established the Anthony D. and Richard A. Fornelli Engineering Faculty Fund.

Their gift will assist in recruiting and retaining the highest quality faculty for the College of Engineering at Kansas State University, as well as honor father and son K-State civil engineering graduates, the late Tony, ’33, and Rick, ’72 and ’73, Fornelli.

“Although we originally considered providing a student scholarship gift, the need for quality faculty in the engineering school is a priority,” Rick said. “This excellent civil engineering program helped both my dad and me obtain our education and have successful professions.”

SUPPORT FOR WHAT MATTERS
EDUCATION, ENGINEERING AND THE ENVIRONMENT

K-State College of Engineering

IMPACT • Spring 2018

LEADERSHIP
LEADERSHIP

K-State College of Engineering

A MOTHER’S GOAL AND A TRACK SCHOLARSHIP

Tony Fornelli was born in 1909 in southeast Kansas where his father, an Italian immigrant, was a coal miner. His father died in 1914, leaving a widow and three children under 9 years old. His mother believed strongly in education as a way to improve a person’s station in life and was determined to keep her sons from entering the mines at 14 or 15 years of age.

“My father had perfect attendance from first grade through senior year,” Rick said, “and all of his siblings attained a professional education beyond high school.”

When Tony graduated from Cherokee Community High School in 1928, he planned to get a job as a draftsman since he had done well in a drafting class and did not have funds to attend college. His teacher and track coach took an interest in helping him set a higher goal and encouraged him to further his education at Kansas State Agricultural College, because he had excellent grades and had excelled in track events. This teacher contacted newly arrived K-State coach, Ward Haylett, for help in enrolling Tony there, where he received an “athletic scholarship” from Coach Haylett consisting of track clothes and socks, the ability to do his laundry at the gym, help in finding a job in Manhattan and a boarding house room with three roommates.

“Dad was forever grateful to Coach Haylett for his help and visited him every time he was in Manhattan,” Rick said.

After graduating in 1933, Tony began his 60+ year engineering career, working with the U.S. Army Corps of Engineers prior to World War II and later in the Army during the war. Projects included the Grand Lake Dam in northeast Oklahoma, Sunflower Ornamental Plant near De Soto and new shipping docks in New York harbor to support the invasion of France. In 1952, Tony was hired as chief engineer designing storm and wash-down water from fertilizer plants, installing lined ponds to capture and reprocess the water containing nitrates.

A FATHER’S INFLUENCE

“This was years before states and the U.S. government developed their environmental requirements,” Rick said, “and was also when I developed my interest in environmental protection and civil engineering.

“My father’s career as a civil engineer, and his concern about the environment and pollution issues, heavily influenced my career choice.”

Growing up, Rick helped his dad with surveying, serving as rod man, chain man, note taker and level surveyor. This was not a paying job, usually more to help out with a new church site, etc.

“Dad always believed an engineering education provided an excellent opportunity for employment, but could also be a good educational basis for any chosen profession,” he said.

Tony’s influence in this direction can clearly be seen, as of his four sons, three are civil engineers, and of his five grandchildren, three are engineers.

While he was in school at K-State, Rick worked with his major professor, Larry Schmid, to develop an extended aeration treatment facility for small communities. After completing his graduate studies, he joined CH2M HILL in Corvallis, Oregon, as an environmental engineer designing water and wastewater facilities.

“In 1979, I returned to Manhattan to partner with Professor Schmid in developing AerodMod wastewater equipment, still manufactured in Manhattan, to provide design/build water and wastewater services for small communities in Kansas, Missouri, Nebraska and Colorado,” Rick said.

In 1986, he rejoined CH2M HILL and worked on multiple environmental projects including the Times Beach, Missouri, and Paducah, Kentucky, environmental clean-up studies; the San Diego reclaimed water facility; Puerto Rico island-wide water and wastewater improvements; Owens Lake, California, dust mitigation for the city of Los Angeles; Oahu, Hawaii, island-wide wastewater improvements; and the London, U.K., Thames River storm water sewage facilities. Rick retired in 2014 after returning from the London project.

“Environmental concerns are still a major issue for the future, and civil engineers will provide the leadership and ability to continue to address the world’s needs in water, wastewater and pollution cleanup,” he said.

A COUPLE’S VISION

“Linda and I want K-State to be a leader in environmental engineering and to continue to produce down-to-earth doers with a practical approach to addressing the world’s environmental issues. Civil engineers solve problems, not just talk about solutions.”

Linda is the only member of her family not to complete a degree from K-State, but she has a bachelor’s degree in nursing from the University of Kansas. Her parents and her four siblings all graduated from K-State, and she has always been a K-State fan.

A”As my wife has said, my dad would be ‘gobsmacked’ that we can make this gift,” Rick said, “but he would agree and be pleased.”

To learn how you can invest in the College of Engineering, please contact the engineering development office at 785-532-7518 or engineering@ksufoundation.org.

by Mary Rankin

an instructor for several years in the nursing program at what is now known as Manhattan Area Technical College, she has a colleague developed the instructional guidelines and certifying exams for health aids in Kansas. The Fornelli’s three adult children are all UC Davis graduates. Their two sons are engineers and their daughter a high school English teacher. The couple has four grandchildren.

Rick currently serves on the College of Engineering Advisory Council, where he hopes his role helps “to promote interest in environmental engineering and provide insight to practical approaches to solving environmental problems.”

The Anthony D. and Richard A. Fornelli Engineering Faculty Fund is to be used to recognize one outstanding faculty member with the Fornelli Engineering Professorship, or award up to four Keystone Research Scholars or Connerstone Teaching Scholars faculty awards. First preference will be given to civil engineering faculty involved in water resources and/or environmental engineering.

“As my wife has said, my dad would be ‘gobsmacked’ that we can make this gift,” Rick said, “but he would agree and be pleased.”

To learn how you can invest in the College of Engineering, please contact the engineering development office at 785-532-7518 or engineering@ksufoundation.org.

by Mary Rankin
LEADERSHIP AWARDS

David and Virginia Braun Innovation Award
Eli Janzen, Dylan Kleissler, Christopher Matson and Sarah Fruherrshome, CHE

W. Leroy Culbertson Steel Ring Leadership Scholarship
Alexandra Lyle, BAE

Tau Beta Pi Underclassman of the Year
Ethan Goppert, IMSE

Clair A. Mauch Steel Ring Advisor of the Year
Lisa Wilken, BAE

St. Patrick
Damian Loya, ECE

St. Patricia
Lily Johnson, IMSE

OPEN HOUSE AWARDS

Yellow brick
Mechanical and Nuclear Engineering

Outstanding department
Chemical Engineering

Technical display
Industrial and Manufacturing Systems Engineering

Curriculum and career display
Industrial and Manufacturing Systems Engineering

Graduate display
Electrical and Computer Engineering

Children’s display
Mechanical and Nuclear Engineering

Ultimate adventure (best overall entire department display)
Electrical and Computer Engineering

Outstanding student organization display
Engineers Without Borders
Carl and Mary Ice, Westlake, Texas, have established two scholarship match funds through the K-State Family Scholarship program to benefit students pursuing degrees in the colleges of Human Ecology and Engineering at Kansas State University. The Ice Family Scholarship match funds support the creation of 30 new scholarships, 15 each for engineering and human ecology. These match funds act as seed money to grow the university’s pool of available scholarships to assist in recruiting and retaining students at Kansas State University, and to inspire new major gift donors.

“We asked leadership what the highest priority at K-State is and they answered ‘student needs,’” Mary Ice said. “We believe in and give support to the university’s message, ‘you are welcome here.’”

Carl Ice is a 1979 graduate with a bachelor’s degree in industrial engineering from the College of Engineering. Mary Ice graduated in 1980 with a bachelor’s degree in home economics education from the College of Human Ecology and in 1988 with her Master of Science in adult occupational continuing education from the College of Education.

Carl and Mary are both members of the KSU Foundation Board of Trustees and serve on the Innovation and Inspiration Campaign steering committee. Carl is the vice chairman of the KSU Foundation Board of Directors. He is past chair of the College of Engineering Advisory Council and a former member of the Industrial and Manufacturing Systems Engineering Advisory Council. Mary is a member of the President’s Advisory Committee on Intercollegiate Athletics and the Ahearn Fund Advisory Group. She is a former member of the K-State Alumni Association Board of Directors and also served as president of the College of Human Ecology Alumni Advisory Board.

“I believe in and give support to the university’s message, ‘you are welcome here.’”

The Ices have provided matching funds for 15 new scholarships. Several donors have already taken advantage of this unique opportunity to double their impact in support of engineering students.

Join Carl and Mary in helping Wildcats before all the match funds are gone — establish your own K-State Family Scholarship today.

Contact Brett Larson, senior director of development for the College of Engineering, by calling 785-532-7519 or via email at brettl@ksufoundation.org.

CREATE YOUR K-STATE FAMILY SCHOLARSHIP

When Carl and Mary Ice learned about the K-State Family Scholarship program, they were inspired to act. They know students are Kansas State University’s highest priority and were impressed at how the match program is an immediate way to create scholarships for K-State students.

Because Carl and Mary created the Ice Family Scholarship match funds for the College of Engineering, students have access to funding today. With the Ice Family Scholarship, new gifts of $30,000 are matched with $30,000 from the seed fund provided by the Ices, for a total of $60,000. Ten thousand dollars goes into an expendable fund, making $2,000 scholarships available to be awarded to students immediately. The remaining $50,000 goes into the permanent endowment. The Ices have provided matching funds for 15 new scholarships. Several donors have already taken advantage of this unique opportunity to double their impact in support of engineering students.

Join Carl and Mary in helping Wildcats before all the match funds are gone — establish your own K-State Family Scholarship today.

Contact Brett Larson, senior director of development for the College of Engineering, by calling 785-532-7519 or via email at brettl@ksufoundation.org.

by Allie Lousch

ICE FAMILY SCHOLARSHIPS TO BENEFIT STUDENTS, INSPIRE OTHERS

“I WE BELIEVE IN AND GIVE SUPPORT TO THE UNIVERSITY’S MESSAGE, ‘YOU ARE WELCOME HERE.’”

by Allie Lousch

IMPACT • Spring 2018

K-State College of Engineering
Service through engineering marks career of 2018 Alumni Fellow Mike Wiegers

Capitalizing on a "natural interest" in science and math, Michael Wiegers chose to study electrical engineering at Kansas State University, completing his degree in 1982. Today he serves as vice president of consumer engineering at Garmin International Inc. and is the 2018 College of Engineering Alumni Fellow.

"It was an exciting time in the late 1970s," Wiegers said, "— a time of automation, computerization and integrated electronics. I had always wanted to work with computers, and K-State was the best engineering school in the state.

"The hands-on electronics labs were my favorite experiences, as they allowed a practical application of what we learned. Understanding and utilizing those cutting-edge technologies led me to an enduring career in consumer electronics," he said.

Alumni Fellow recipients are chosen for high levels of accomplishment and distinguished service in their respective careers.

After graduation, Wiegers joined King Radio in Olathe, Kansas, where he designed VHF aviation communication and navigation radios, working in new technology areas such as flight-critical software and electronic display systems.

In 1993, he joined Garmin as the lead engineer in marine product design, going on to serve in a variety of technical and business leadership roles in all consumer product segments, up through his current position of vice president where he directs the day-to-day operations of Garmin’s worldwide consumer products engineering group.

"It has been in serving others — especially improving the lives of customers — where I have found true satisfaction," Wiegers said. "Receiving the 2018 College of Engineering Alumni Fellow honor reaffirms to me that service should always be the motivation for engineering."

Wiegers’ advice to engineering students today follows that same theme.

"Identify your customers and focus on how you can serve them," he said. "The core value of engineering is that you can improve the lives of your customers — even if they themselves don’t yet realize what it is that’s missing from it."

Wiegers joined the College of Engineering Advisory Council in 2015, and finds value in how the position has linked Garmin and K-State students.

"I am proud to have recruited, hired and mentored hundreds of KSU engineering interns and graduates over my career at Garmin," he said.

"I truly enjoy being part of such a distinguished and active advisory council, which strives to keep K-State as the leading engineering school in the region."

by Mary Rankin

"Receiving the 2018 College of Engineering Alumni Fellow honor reaffirms to me that service should always be the motivation for engineering."

by Mary Rankin
PROFESSIONAL PROGRESS AWARD
Nominated by their respective department heads and confirmed by the dean, 10 alumni were honored for professional career accomplishment during the first 20 years following their graduation.

HALL OF FAME
Induction to the Hall of Fame 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 College of Engineering, dedication to K-State, and professional and public service.

Class of 2018
Doug Stebbins
ME ’85, Westar Energy – retired, speaker, writer and executive coach
Alan Sylvester
CE ’75, pipeline investment company president and non-refining operations general manager, CITGO Petroleum Company – retired

Damian Buessing
ARE ’01, southeast region director of operations, Hessel Phelps
Manoj Chopra
ME ’98, vice president of strategic pricing, Essilor of America
Jason Kieffaber
EE, CMPEN ’04, technical program manager, SpaceX
Steven Lilehsang
CE ’96, city engineer and director of public works, Shakopee, Minnesota
Kyle McKinzie
GAE ’18, drivetrain controls and systems engineering manager, John Deere
David McPherson
ME ’98, owner and operator, MCP Engineering LLC
Matt McPherson
CMPEN ’98, president and CEO, McPherson Contractors Inc.
Ashok Reddy
CS ’91, Founder and CEO, BETNUL
Joe Schrick
EE ’96, vice president-fitness segment, Garmin International Inc.
Laura Winks
CHE ’99, Global Oxo marketing executive, ExxonMobil
Mustaque Hossain, professor of civil engineering, has been appointed department head of civil engineering at Kansas State University.

He had fulfilled the duties of interim department head since August 2017, when then-head Robert Stokes returned to his faculty position in the College of Engineering, later retiring.

Hossain joined the department in 1991. In addition to his teaching and research in the area of highway materials and pavement engineering, he also served as associate director of the Mid-America Transportation Center from 2006 to 2016. He is the Munger Professor in Civil Engineering at Kansas State University and holds the Civil Engineering Alumni Professorship Honoring Dr. Robert Snell at Kansas State University.

“I look forward to working with Mustaque as we seek to move the civil engineering department toward further excellence,” said Dean Darren Dawson.
CASSIDY HARPER — IMSE, AND ENGINEERING LEADERSHIP AND INNOVATION, OR ELI, SCHOLAR — ADDRESSES THE COLLEGE OF ENGINEERING ADVISORY COUNCIL.