In March 2019, K-State family joined together to champion one cause in one day and raised more than $320,000 to support the immediate needs of K-State students. That was only the beginning. We’re going to do it again March 24, 2021, and you are invited to go #AllInForKState! Visit ksufoundation.org/AllInForKState.
Telling the K-State story

In this issue of Good for K-State, we'd like to introduce the university's new marketing campaign, Don’t Make the World Wait.

Developed and launched this fall as part of K-State's new strategic enrollment management initiative, the campaign specifically targets prospective students with digital advertising from all four university campuses. It’s a fresh and compelling way to convey the possibilities of a K-State education to future K-Staters.

While the look and feel of the campaign is new, the stories will no doubt feel familiar. You will likely identify with the stories of students, faculty and staff who are using their time at K-State to pursue their passions and make a positive difference.

Today K-State, tomorrow the world.

With purple pride,

Greg Willems
President and CEO
KSU Foundation
Welcome to Good for K-State, a magazine devoted to the inspiration and impact of private philanthropy for Kansas State University. We invite your comments, questions and ideas. Just send an email to good@ksufoundation.org. We look forward to hearing from you.

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In recent years, NASA has had an interest in applying machine-learning algorithms to improve the performance of trajectory optimization solvers to prep for the upcoming missions to the moon and Mars. For assistance in improving the current system, NASA has awarded funding toward a joint project involving researchers from Wichita State University, University of Kansas and Kansas State University. The project targets development of new tools for on-ground mission design, making the tool suitable for onboard implementation. Investigative lead for K-State is Arslan Munir, founding director of the Intelligent Systems, Computer Architecture, Analytics and Security Laboratory. “This project will help enable K-State to make significant contributions to a challenging problem and increase the recognition and leadership of Kansas State University in space research,” Munir said.
RENovations in the Livestock Services’ Facilities Increase Safety

The new Livestock Services’ handling and treatment area in the Veterinary Health Center is now open to patients. These renovations came from the need for structural repair but also to meet the new standards in modern, safe, efficient and low-stress handling methods. Upgrades include a new drive-thru unloading feature, holding pens, alleyways, sweep and bud tubs, a new tilt chute, and an upgraded obstetrics handling area. These renovations were made possible with the help of Merck Animal Health and the Veterinary Health Center.

K-State Theatre is Switching up the 2020–21 Theatre Season

With the current pandemic, the K-State theater department has had to rethink how they continue to bring powerful theater to a large audience. They still wanted to share the power of storytelling, as now, more than ever, we need the human connection. In a new partnership between the School of Music, Theatre and Dance and the A.Q. Miller School of Journalism and Mass Communications, they are launching the “Kansas Theatre Works” podcast for the 2020–21 theater season. Inspired by L.A. Theatre Works, a leader in audio theater production, they will be presenting a season of plays by alumni playwrights (along with classic pieces) and featuring Kansas State theater students and faculty.

Mccain Auditorium Launching A New Livestream Series

With live in-person performances canceled, McCain Auditorium is offering a new livestream event series called McCain Connected, a collection of curated shows only available online. This series is free of charge, although there are a few where a ticket will be required. Some events will happen live on the McCain stage, some could be from other locations around the world, and others could be pre-recorded and made available exclusively for the McCain audience. Donations will be accepted with links provided during the stream. Six events are currently scheduled, with more on the way. Learn more at mccain.k-state.edu.

K-State Polytechnic Professor Receives Major Boost from NSF

Siny Joseph, economics professor at K-State Polytechnic, is part of a research project that was recently awarded $1.1 million from the National Science Foundation (NSF). This project aims to improve location-based services for people with disabilities. It allows the team of researchers to design, develop, test and evaluate a system called “CityGuide.” This smartphone app provides important way-finding capabilities for those with disabilities, which is not something that currently exists. The team plans to work on exploring emergency evacuation from indoor environments, remote assistance from a caregiver or family member, and navigation of transit systems. “My background in engineering and economics has helped me appreciate the potential impact of assistive and accessible technologies on people with disabilities,” Joseph said. “I am truly honored to be a part of a team that is addressing societal issues and has the potential to make a change for communities.” Siny’s role is to focus on the economic impact. The grant will support an undergraduate student to help with this research.

Kansas State University Among Top 10 Best Employers in Kansas

An annual survey by Forbes magazine found K-State ranked among the top ten in the state and is the best university employer in Kansas. K-State is the only university to be ranked among the state’s top 25 best employers. Jay Stephens, vice president for Human Capital Services, is very proud of the work K-State has done to be ranked 9th overall. “K-State strives to provide excellence in recruiting, developing and retaining a diverse, highly qualified workforce,” Stephens said. “Along with an unmatched sense of community and inclusiveness, K-State provides employees with a variety of benefits, including health care, retirement options, discounted event tickets and much more.”
BANKING ON THE FUTURE

Wes and Jan Houser invest in student success through estate planning

By Allie Lousch
When Wes Houser attended Kansas State University, he followed his cousin from rural Columbus, Kansas, in the southeast corner of the state, to the "big town" of Manhattan, Kansas. As the first college student in his immediate family, he graduated in 1963 with a business administration degree.

Jan, a few years behind Wes in school and also from Columbus, attended the University of Kansas and was one of two of their first graduates in photography. After many years in places like Missouri and Colorado, Wes and Jan reconnected while attending the funeral of a friend’s father “back home” and later got married. Together, they have made supporting Kansas and community a priority, which includes a planned gift to K-State.

“I did not receive any support when I went to college, but it was a lot easier to go to K-State in the ‘50s and ‘60s because of the difference in cost,” said Wes. “My first semester, I paid $118 and could take 18–21 hours. I could pay for my education by baling hay in the summers and later by working part time at Duckwall’s downtown and the Dugout in Aggieville. It’s a very different thing to do now — to pay for your education working part time and summers.”

At the time he graduated in 1963, there was a placement center on campus in the basement of Anderson Hall, now the K-State Career Center housed in the Berney Family Welcome Center. He signed up for interviews with three companies and received offers from two, Commerce Bank and Boeing Aircraft. "I didn’t know anything about aviation or banking," said Wes, “but I liked the idea of going to Kansas City, so I chose Commerce Bank and worked in Kansas City for six years before transferring to a Commerce Bank in Mexico, Missouri. Later, I moved to a Commerce bank in Joplin, which is about 25 miles from my hometown. When in Joplin, I reconnected with Columbus and bought interest in a local bank there. I eventually sold my bank to my original employer, Commerce Bank.”

Wes says his degree from K-State afforded him the opportunities in business and banking he would not have had if he had not gone to college. “Kansas State University opened doors for me I would never have had without it and allowed me to work in the banking industry.”

With Wes’ business leadership in the community and Jan’s civic leadership — she is a Columbus
City Councilwoman — education and supporting their community continue to be very important to the Houser family. That’s why they created an estate gift, using a charitable gift annuity, to support K-State students in the College of Business Administration. By creating a charitable gift annuity, the Housers realized a charitable tax deduction and a fixed stream of income related to the gift for the rest of their lives. They also chose to apply a portion of the gift now to create the Wes and Jan Houser Scholarship and support students today.

The inaugural Wes and Jan Houser Scholarship recipient was a first-generation and non-traditional student from rural Kansas who graduated in May 2020. In a letter to the Housers, she described discovering that the loans she received to pay for college would not be enough to finish her degree. Because of the Houser’s generosity, she was able to graduate and accepted a job at a locally owned bank in her rural hometown so she could be close to family.

Lydia Johnson is the current recipient of Wes and Jan’s scholarship. Though she didn’t originally have any family, friends or prior connections to K-State, in her junior year of high school, she was drawn to a purple tablecloth at a career fair in her hometown and talked to the representative. “I said I always wanted to do something in business and the lady suggested sales,” said Lydia. “‘We just added a sales major at K-State.’ She also told me about the revamped College of Business, and she had my attention. For the next two years, I kept thinking of it. Even though it is far away from my hometown in Eden Prairie, Minnesota, I knew K-State was the best fit for me.”

Though she is nine hours away from her hometown, Lydia feels like she has made her family here, in the K-State family.

Lydia, a sophomore, is a member of K-State’s sales team, a competition team where students are able to compete in national sales competitions to enhance their professional skills and begin preparing for a career in sales. She hopes her experience at K-State and the sales team opens doors to work in medical device sales to help surgeons improve the lives of their patients.

“The only way I was able to come to K-State was from the generosity of the Housers and the College of Business Administration,” said Lydia. “I couldn’t have made my decision (to attend K-State) without that.
scholarship. And now, being able to go back to classes — even wearing masks — I really thrive.”

This desire to impact others is something Lydia shares with Wes and Jan Houser. “I believe in supporting whatever I can in the state of Kansas,” said Jan. “We need to support our home state any way we can. I hope this support allows students who want to better themselves by going to school at K-State and by staying in Kansas.”

As for Lydia, she offered this counsel to students who are considering applying for scholarships, “It doesn’t hurt to ask for help. It’s humbling, but I know I can’t do this on my own. And the generosity of others helps you be more grateful for what you have. Kindness compels you to be kind to others.”

Jan and Wes give to local causes in Columbus, Kansas, because they are both from there. “We think we should give back to the community we both live in and where I made a living. I would never have had the opportunities in business if I had not gone to Kansas State University,” said Wes.

The Housers hope this scholarship will help students complete school and graduate “without a lot of debt hanging over them.” They also hope to “influence other people who are financially comfortable to give instead of keep it all. Any giving makes a huge difference,” said Jan.

Though they are typically private about what they have been able to do to support Kansas State University, Jan ended the interview on a most compelling note, “We give because we are so fortunate to have each other and be so healthy and be able to go and see the things we can. I want people to remember me as being a kind person and for the incredible love I have for Wes Houser.”

“The only way I was able to come to K-State was from the generosity of the Housers and the College of Business Administration. I couldn’t have made my decision (to attend K-State) without that scholarship.”

— Lydia Johnson
Digital Development Officers (DDOs) at the KSU Foundation help connect you to K-State in meaningful ways.
DDOs connect with donors over social media, phone, text and email, helping them identify their interests related to K-State and higher education. They then serve as philanthropic advisors and match those interests with programs at K-State that could benefit from support. This helps donors ensure their gifts make the difference they want it to at K-State.

The KSU Foundation has two DDOs on staff — Georgina Clemens and Quinlan Stein — who have been at the foundation for more than a year. These new positions represent a progressive way the foundation is reaching out to donors in this digital age.

Meet Georgina Clemens

Georgina Clemens grew up in Emporia, Kansas, before moving to Grand Island, Nebraska. She loved Kansas so much, she decided to return to attend K-State. She graduated with a degree in marketing and a minor in public relations during the spring of 2017.

Why be a DDO? “I was excited for the opportunity to work in an interactive and strategic role that not only would be donor-facing but would also work closely with the advancement of the organization. Being able to incorporate all the different channel approaches, such as social media, was really something I was looking for. Additionally, I wanted to be part of the team that helped provide a really great giving experience for all our donors.”

Favorite aspect of the job. “I love connecting with donors and meeting them where they like to be met. Being able to provide donors with a gratifying gift experience, such as answering their questions in a timely manner, is important to me. I also love hearing the reasons behind why donors and friends feel so connected to K-State and why it’s important for them to give back. They represent what it means to be part of the K-State family and why I love K-State so much!”

Contact Georgina at georginac@ksufoundation.org or 785-775-2147.

Meet Quinlan Stein

Quinlan Stein grew up in Dodge City and Hoxie, Kansas. She graduated from Southwestern College in Winfield, Kansas, with a degree in history and minors in religion, philosophy and leadership. Before coming to the KSU Foundation, Quinlan served as the chapter development officer for Pi Gamma Mu, an international honor society in the social sciences. For two years, Quinlan grew Pi Gamma Mu’s network of college and university chapters, adding new faculty sponsors and memberships to the organization. Quinlan’s diverse experience in the fields of philanthropy and higher education allows her to bring a unique and innovative approach to the pursuit of excellence at the KSU Foundation.

Why work at the KSU Foundation? “I was really intrigued about the Digital Development Officer position being a brand-new role. I liked the idea of being innovative and being on the forefront of that innovation. The KSU Foundation does great work to advance the university and help our students and faculty succeed, all the while, helping our donors reach their philanthropic goals. That mission really resonated with me, and I knew I wanted to be a part of such a caring organization.”

Favorite aspect of the job. “K-Staters, I quickly discovered, are some of the most caring and passionate people, with strong convictions to help others. I love people, and with our multi-channel, digital strategy, I can connect with hundreds of K-Staters each week! It is very rewarding to work with such considerate people, and my favorite part of the job is helping our donors connect back to K-State in ways meaningful to them. I love getting to know each K-Stater I speak with, hearing about their ties to K-State, and learning about their philanthropic dreams. Then, helping to make those philanthropic dreams a reality!”

Contact Quinlan at quinlans@ksufoundation.org or 785-775-2141.
**FY20 fundraising results**

In fiscal year 2020, K-Staters came together to raise $177.4M. These results would not have been possible without the extraordinary leadership and generosity of K-Staters like you.

- **$177.4M** in gifts, pledges and commitments.
- **39%** of giving to endowment.
- **$81M** in planned gifts.
- **41** A record 41 gifts of $1M or more.

- **$91.1M** made available to campus for students, faculty, facilities and programs in FY20.

- **$628.7M** market value of K-State’s long-term investment pool, up from $613.4 million in FY19.

- **$92M** in total real estate holdings.
WHERE DONORS GAVE:

$128.5M to K-State academics and programs.

$45.8M to K-State Athletics/Ahearn Fund.

$2.9M to the K-State Alumni Association.

162 new scholarships created.

$53M gifts and commitments raised for scholarships and student success, up from $47M in FY19.

$18.6M delivered to campus to support student scholarships and success.

$1.6B raised toward the $1.4B Innovation and Inspiration Campaign.

For more information about KSU Foundation’s performance, visit ksufoundation.org/financials/annualreport.
“Financial stability was a huge factor for my mom and me when deciding on a school, and realizing how many resources K-State was able to offer me was a huge blessing for my family and myself. Additionally, these resources have enabled me to meet a lot of amazing people that have helped me in my academic journey. This, in turn, has inspired me to work hard so that one day I can be a similar resource or blessing for someone else. I’m really excited to conduct undergraduate research here at K-State and also hopefully study abroad in New Zealand. I’ve already done some microbiology cancer cell research, and I’m hoping to try other types of research such as horticulture or prosthetics research, both of which I know are available here on campus. I’m hoping to do some really great things during my time here at K-State and also make my mom proud, and your generosity has helped me get a head start on these goals. For that, I cannot thank you enough.”

Juan Pineda Gomez, freshman in biomedical engineering from Lenexa, Kansas, recipient of the Gary and Peggy Edwards Bluemont Scholarship and the Mike and Becky Goss Presidential Scholarship.
“As a child my dream has always been to go into aviation. With my two brothers and I being of college age and my dad having health issues, it makes raising enough money to afford college a very pressing issue on my parents. While the three of us work to earn money for tuition, aviation school is still expensive. The help of scholarships eases the burden of tackling my dream of being the first person to complete both the music and pilot programs simultaneously at Kansas State University. This scholarship makes it possible to worry less about funding and more about flying. I cannot begin to thank you enough for your generous donation. I hope to be in a position to do the same for others in the future.”

**Tate Allen**, freshman in aeronautical technology and member of the K-State Marching Band from Spring Hill, Kansas, recipient of the Vanier Family Scholarship at K-State Polytechnic.

“Scholarships mean a lot to a first-generation student like myself. They provide me with the opportunity to complete my education this spring, and donor-created scholarships mean that someone believes in me enough to support what was once just a dream of attending Kansas State. By supporting me and my journey through college, you are helping me break the cycle of generational poverty and provide a better life for myself and my future family. I will forever be thankful for that.”

**Sarah McFarlane**, senior in elementary education from Newton, Kansas, recipient of the Aarstad Memorial Scholarship for Educators and the Craig Education Scholarship.

“When I first received this scholarship, I didn’t realize how much it was going to impact both me and my family, but as 2020 took its course, it has truly been a blessing. Between all of the craziness that COVID has brought into our lives and also several unexpected medical complications I endured, this year has been full of chaos and uncertainty. I am greatly appreciative to be a recipient of this scholarship not only because it has ensured that I can stay at the school of my dreams, but it will also create opportunities for me in the future.”

**Makenzee Weems**, sophomore in accounting from Parker, Colorado, recipient of the Herbert H. and Neva J. Blevins Scholarship and the Alumni Association Wabash Colorado Scholarship.
TODAY K-STATE, TOMORROW THE WORLD
At Kansas State University, students and faculty don’t make the world wait — they are making a difference today. United in their commitment to the greater good, they harness the collective power of technology, innovative learning, discovery and engagement to solve issues affecting societies across the globe.

In the following pages, you’ll meet K-State faculty and students who are shaping the future and changing lives. They are not waiting to fulfill their dreams, but are pursuing them now and making them come true to meet today’s needs.

Combining the passion of these students and faculty with the philanthropic support of the K-State family, we will achieve beyond what we ever imagined.
Robotics bring long-distance teachers closer
When you first think of a concept like robot teaching, your mind is likely to go to a scene in a science fiction movie. But Lincoln Elementary School in Clay Center, Kansas, was able to make robot teaching a reality, while also giving a student teacher the chance to live her teaching dream from afar.

“The inspiration behind this idea started when we could not reach an affiliation agreement with the district who had the student teacher we wanted because of her geographic location,” said Eileen Wertzberger, coordinator of field experiences for K-State’s College of Education. “We felt strongly that Ashley Disarno, who is a K-State student teacher who lives in Georgia, deserved the chance to teach. This is someone who not only has the skills to be a teacher and wants to be a teacher but needs to be a teacher,” Wertzberger said.

Like everyone at K-State, Wertzberger was always encouraged by her superiors to think boldly and to not be afraid to go outside of the box with her ideas. “Dean Debbie Mercer really encourages us here at the College of Education to not be afraid to try new things,” Wertzberger said. “With that inspiration in mind, I and my colleague, Dr. Todd Goodson, got together, and we came up with the idea for a virtual student teacher.” Ashley Disarno would work alongside the main classroom teacher Sara Peterson and her third-grade class.

The idea of virtual teaching is not new. What made this unique was that Disarno could interact with the students in a far more personal way not available in a typical virtual meeting. “The robot allowed her to be completely three-dimensional,” Wertzberger said. “The robot allowed her to move around the classroom and interact with students in one-on-one or group scenarios and allowed her to really get to know the students. The interaction between them got to such a point of comfortability that the students would help her around the classroom and tell her when obstacles were in her way. It was really cool to see,” Wertzberger said.

While there were several advantages to this teaching method, Wertzberger recognizes that there are some unavoidable drawbacks. “Obviously, we loved all the great things we were able to accomplish with this project,” Wertzberger said. “From the overall innovation we were able to bring to the student teaching field, to the positive interactions we got between the students and Ashley Disarno, we were thrilled with how the project went overall. However, we do recognize that there were some drawbacks; the main one being that if a student needed Ashley Disarno’s attention out of class, we had to set everything up in advance due to having to bring the robot in at an out-of-class time. This was difficult, but thanks to Ashley Disarno’s and Sara Peterson’s commitment, we managed to navigate this obstacle easily.”

For her part, Disarno has nothing but praise for her experience with this new method of student teaching. “My biggest takeaway from my student teaching experience was not only the wonderful students I got to work with, but the wonderful teacher and district I got to work with. I really appreciate all the hard work and dedication that they put in to make this happen,” Disarno said.
THE NEXT PROBLEM SOLVER

Elshaddai Abamegal strives to explore and innovate
Your path in life is all the experiences you have, combined. This statement could not be more true than when you see it in action with recent Kansas State University graduate, Elshaddai Abamegal. As a mechanical engineering student, her college path took her all around the world (literally), and her undergraduate research pushed the boundaries of what we currently know about the world of engineering.

Elshaddai was awarded the Gilman International Scholarship. Congressionally funded, this scholarship helps U.S. undergraduate students participate in study abroad programs worldwide. She was one of two students to be selected for this scholarship at K-State last year.

Elshaddai traveled to the Czech Republic where she took engineering and Czech language courses. While taking these courses, she was able to explore the country and dive into the culture. “As a person of color in engineering, it is very normal to feel like an outsider, or feel like your experience is somewhat of an anomaly,” said Elshaddai. “Then you go abroad, where a classroom doesn’t consist of one race or ethnicity, but of different ones; it made me feel like I belonged. It made me appreciate my background and experiences as an immigrant-turned-U.S.-citizen, in addition to being open to others’ experiences and upbringings, as well.”

In addition to the Gilman Scholarship, Elshaddai is a K-State Cancer Research Award and Koch Impact scholarship recipient. During her time at K-State, Elshaddai had the opportunities to do research on the validity of estimation of secondary cancer from patients exposed to radiation, controls research to calculate the minimum coefficient of static friction required to successfully mobilize a miniature cart, and education research on the trends of academic mindsets behind engineering students who cheat on assignments and tests.

While most of her research does not sound like it would go together, Elshaddai spent most of her college career trying anything and everything to find her perfect niche in this world.

“I was deeply interested in how we can use nuclear engineering for medical purposes, and so joined the mechanical and nuclear engineering department. Then, with more design and mechanics courses under my belt, I wanted more of a design and analysis role as a research assistant, for which I joined the mechanics and controls section of the mechanical engineering department,” explained Elshaddai. “After that, I noticed that it wasn’t only me that suffered from severe impostor syndrome in the engineering curriculum and internships, so I wanted to learn more about that, for which I joined my last research experience in the field of engineering psychology.”

Each time Elshaddai moved to a different subsection of her research, she gained more knowledge of where she wanted her path to go.

Her research knowledge and her love of going abroad is what brought her to her current career path. “I am seeking opportunities to work abroad within my firm (Deloitte),” said Elshaddai. “I wouldn’t have had the opportunity to explore and hone in on my skills and interests, if it weren’t for research. I was able to try different things, and as a result, had a realistic expectation of what I wanted to get out of my professional experience.”
THE NEXT HUNGER SOLUTION

K-State's Feed the Future Innovation Labs tackle food security
Making sure people have enough healthy and affordable food requires innovation and global cooperation. Kansas State University is leading the world in global food security.

K-State was awarded four highly competitive grants from the U.S. Agency for International Development (USAID) to establish a fund for our Feed the Future Innovation Labs. The labs themselves are uncomplicated in their idea: share information and knowledge. They focus on improving the resiliency and production of food crop plants, as well as preventing crop losses in key countries, all to end world hunger. No other university has as many USAID grants awarded or as much funding for this initiative — close to $110 million to sustain what K-State is known for around the world: building human capacity and building institutional development.

The grand challenge of this generation of scholars is to increase food production by 60% before 2050 to meet the needs of 9.5 billion people using existing farmland and without damaging the environment. That is the concept of sustainable intensification — one of K-State’s innovation labs that is leading these global efforts.

“We have to increase our food production by 60% in order to feed the world, and we could take care of 30% of that just by adapting our practices and fixing our food losses and food waste issue,” said Dr. Vara Prasad, a University Distinguished Professor and the director of the Sustainable Intensification Innovation Lab (SIIL). He continued, “We have to produce and provide access to safe and nutritious food to all using ways that are environmentally sustainable, economically viable and socially acceptable” and “focusing on research, education, outreach and building human and institutional capacity is key to the success.”

“Our number one goal is to help our smallholder farmers in the countries we are working in to intensify their farming system,” said Andra Williams, program administrator for SIIL, as well as a graduate student earning a certificate in data analytics. “What is important in our work is to reach out to people here in the U.S. to tell them that this is not just happening ‘over there’; it’s a whole system and we are affected by things across the world.”

— Andra Williams

COURTESY PHOTO
them that this is not just happening ‘over there’; it’s a whole system and we are affected by things across the world.”

“Historically, a lot of the innovation labs were focused on one very specific thing, like a commodity crop. Our lab focuses on farming systems as a whole. At the time the lab was created this was a new approach,” said Andra. “We want to use this wealth of information we have floating around, the years and decades of knowledge and research, and create something out of it that can help people move forward.”

“K-State’s reputation is what gives us this great privilege to be able to fund research projects through grants on our campus. We earned this by reinvigorating the land-grant mission internationally and engaging youth in agriculture. Kansas State University is uniquely positioned to help around the world and be able to create empowerment in ways we can see,” said Andra.

Engaging international youth in this initiative is an issue of national security as well. If we can help other countries and ourselves with food security and provide major opportunities to youth, this will have a positive impact on national security. “Unless you’re dead, you still have time to make a difference,” said Andra. “There are so many ways to consider how you can make a difference. Find out who is innovating in your community in an area that lines up with your interests and go talk to them. There is never a reason to say no to making a difference.”

K-STATE HOSTS FOUR FEED THE FUTURE INNOVATION LABS

Sorghum and Millet Innovation Lab

Focuses on Haiti and the African nations of Ethiopia, Senegal and Niger. Experts are using science and technology to produce innovations such as climate-resilient varieties of sorghum and millet, as well as more profitable market approaches for the farmers in the target nations.

Lab for Applied Wheat Genomics

Aims to develop heat-tolerant, high-yielding, and farmer-accepted wheat varieties for South Asia. Development and delivery of these will have the potential to increase on-farm income and food security throughout South Asia.

Post-Harvest Loss Innovation Lab

Addresses Post-Harvest Loss and food waste of durable staple crops. These losses consist of food already in the production system that could have been used to reduce food insecurity and increase food quality, safety and nutrition.

Sustainable Intensification Innovation Lab

Focuses on increasing production from existing farmland without damaging the environment and addresses this challenge through farming systems approaches that consider aspects of both biophysical and social sciences.

To learn more, visit k-state.edu/research/global-food/news/features/usaidslabs.html.
THE NEXT TRAILBLAZER

Gonzalo Alcantar paves the way for engineering students
Gonzalo Alcantar didn’t really know what he was getting into when he first stepped onto the Kansas State University campus. As a first-generation student, he didn’t have his parents’ experiences to guide him. However, K-State faculty, staff and older students helped him learn how to navigate college successfully.

To give back, and to help incoming freshmen, Alcantar helped start a new residential CAT (Connecting Across Topics) Community for engineering students. As an industrial engineering student, Alcantar knows how hard it can be to not only adjust to the college atmosphere, but also to the rigors of a difficult major. The residential CAT Community provides engineering freshmen the opportunity to live together, take classes together and socialize together, creating an instant social and support network.

“I was presented with the opportunity to be part of creating the first residential CAT Community for engineering students when I was in my intro to general engineering course,” Alcantar said. “I saw this as an opportunity to help students who would be in my shoes when I first started at K-State. I had a passion for engineering, but I didn’t know where I fit in. I wanted to help those students who felt like they were in the same position I had been in.”

Alcantar is encouraged by how much his students grew during their time in the CAT Community. “I have seen many students shine and have a lot of growth from the first day in the community to the last,” Alcantar said. “The CAT Community gave them the chance to meet new people who were in the same situation that they were. I hope that during their time in the CAT Community they were able to feel less alone and gain a comfort level with their peers.”

After graduating from K-State, Alcantar hopes to work for a company that has the same values that his family and K-State instilled in him. “I hope to be at a company that values me and the diversity and perspectives I bring,” Alcantar said. “I have investigated many industries that I think would fit me and my passions. As an active person who loves the outdoors and working out, I would like to work within the sports/outdoors industry. However, if I find a company that aligns with my values and passions, then that is where I will be.”

Alcantar hopes he has served as a role model for others. “I hope that people can understand that it only takes passion and commitment to accomplish your goals,” Alcantar said. “Your work will reflect the passion you put in. I have faced a lot of adversity and even felt like it was too much to juggle. But I know that everything I am involved with is important to me, and it helps me develop, as well as helps others, in a positive way. The days may get long, but when I am doing what I love, I never have to work a day in my life.”

“When you have one life and many decisions to make, why not make the ones that will help people and make a difference?”

— Gonzalo Alcantar
Major grant award funds ground-breaking research at K-State

Krishna Panta, graduate student in Flanders’ lab, assists with research.
By Marisa Larson

Many scientists dream of participating in research that could impact science in a fundamental way. That dream is a reality for two Kansas State University graduate students in physics — Krishna Panta and Shital Rijal. They are part of a team looking at new ways to speed up chemical reactions. Their team’s work was recently awarded a $1 million grant.

Bret Flanders, professor of physics and Paul Smith, professor of chemistry, both at Kansas State University, and their research partner Christine Orme of the Lawrence Livermore National Laboratory in Livermore, California, earned the grant from the W. M. Keck Foundation. The Keck Foundation grant will support the three principal investigators, two graduate students, a post-doctoral student, and the purchase of key pieces of instrumentation, including a total internal reflection microscope, over a three-year period.

The project Flanders, Smith, and the team are working on is basic research, which asks fundamental questions about complex problems. Sometimes, those questions lead to groundbreaking discoveries that change how we view the world or do specific tasks — and Flanders and Smith involve students in making those discoveries.

Their project asks whether there are new physical processes that can bring molecules together under mild conditions to create new, more complex molecules instead of using the “tried-and-true” methods of heating or using an expensive catalyst to make the same molecule. “Applying a new method to making a complex pharmaceutical, for example, could reduce the cost of that drug,” said Peter Dorhout, former vice president for research at Kansas State.

“Imagine trying to build a large and complex house by bringing together two previously-assembled halves — you need large equipment and a lot of energy to move big, heavy pieces in place, and you risk destroying one or both halves in the process,” Dorhout said. “If you could gently move those parts together without all the energy involved, that would be a breakthrough. The same is true for making large molecules — you need a lot of energy (heat) to get the larger pieces together in one step, and...”

“Benefits of this grant extend beyond my research project and even my degree. It helps to build reputation and connections that I will need once I complete my degree.”

— Krishna Panta, doctoral student
that could break them apart. This team is testing whether there are gentler, less expensive ways to make large complex molecules.”

“If Bret is successful in what he wants to accomplish, that new knowledge, that breakthrough may lead to other grants from governmental agencies that suddenly wake up to the fact that despite his concept being pretty risky and unproven, Bret demonstrated he could do it,” said Dorhout. “There’s a proof of concept. It can seed a lot of other new ideas and new discoveries. That is Keck’s goal — they want people to be innovative, change the science, and take risks.”

Based in Los Angeles, the W. M. Keck Foundation was established in 1954 by the late W. M. Keck, founder of the Superior Oil Company. The foundation’s grant making is focused primarily on pioneering efforts in the areas of medical research and science and engineering. The foundation also maintains a Southern California Grant Program that provides support
for the Los Angeles community, with a special emphasis on children and youth.

“The Keck grant is prestigious because they invest carefully and specifically in wanting to make a difference and have an impact in selected areas,” Dorhout said.

“Their grants are few and far between, and they're fairly substantial. This award speaks very highly of our faculty, particularly Bret as primary investigator. To be able to have a creative idea that ultimately gets their attention is fantastic.”

The Keck Foundation grant not only supports cutting-edge research, it helps launch careers of young scientists.

“Let’s face it, it can seed a lot of other new ideas and new discoveries. That is Keck’s goal — they want people to be innovative, change the science, and take risks.”

— Peter Dorhout, former vice president for research

It can seed a lot of other new ideas and new discoveries. That is Keck’s goal — they want people to be innovative, change the science, and take risks.”

— Peter Dorhout, former vice president for research

Graduate student Shital Rijal analyzes data for the project.

Shital Rijal is also a doctoral student working with Flanders and receives support from the Keck Foundation grant. “As graduate students, we need to work diligently on research and also think about the expenses for the entire family,” Rijal said. “Being an international student, I do not have several choices of income. I either have to work as a teaching assistant or as a research assistant. The Keck Foundation grant allows me the privilege of the latter job. It would have been tough to do both teaching and research simultaneously. Instead, I can use the time to focus more on the research part that is the basic purpose of my graduate studies.”
Dreah Kuckelman aspires to connect with people through medicine.
Dreah Kuckelman is getting a head start on changing the world right here on Kansas State University’s campus. Within her research lab, Dreah, a sophomore in medical biochemistry, works with Dr. Jennifer Francois in the College of Health and Human Sciences focusing on childhood developmental psychology.

In her future practice, Dreah hopes to foster personal connections with her patients as a pediatrician or family care practitioner. If she could bring one thing to the world, it would be interconnectedness. This love for interconnectedness is a result of her time at K-State.

“K-State has taught me about what it means to be a family and be connected to other people,” said Dreah. “To those who invest in K-State’s success, you are investing in family, in this whole community. You are not only facilitating research and activities; you are facilitating connections.”

When Dreah toured Kansas State University, she knew it was like no other university she had visited. Even just the simple act of people smiling and welcoming her to campus affirmed to Dreah that K-State was the place she would call home and where she could start to make a difference in the world.

The family that Dreah was drawn to during her tour at K-State continued to surround her as she became a student in the fall of 2019. From participating in Wildcat Warm Up to joining pre-med club, Dreah constantly formed relationships with other students.

“The people here were so willing to welcome me in as family. That family drew me in to want to be more a part of it,” said Dreah.

One of the organizations Dreah got involved in is Alpha Chi Sigma, a professional chemistry fraternity. She sits on the executive board as the assistant outreach coordinator. In this position, she plans visits to middle schools to help students with chemistry experiments. Another way she gets to share her passion for chemistry is through her work as a teaching assistant for the chemistry 1 lab.

Through these roles, Dreah has the opportunity to give back to K-State. Philanthropy is one of the things that drew Dreah to K-State and continues to power her experience.

“This family atmosphere is not only about the students at K-State, it is about this community, the people that live here in Manhattan,” said Dreah.

One way Dreah gets to spread the aspect of family to the Manhattan community is with her job. Dreah helps a woman who lives with C5 quadriplegia with daily tasks. Dreah loves getting to hear stories from the woman’s husband, who is a former K-State professor.

While philanthropy has allowed Dreah to get involved and give back, it is also something that has been shown to her. As a part of the Kansas IDeA Network of Biomedical Research Excellence, Dreah has received a program scholarship. With such widespread involvement, this scholarship has allowed research to be possible for her.

“I have to budget my time wisely and decide what I can and cannot manage,” said Dreah. “My scholarship has made research something that is feasible for me.”

By Ariana Brancato
K-State alumnus uses grain science degree to fight crime and gives back to the community he loves
By Marisa Larson

From matching the genetics of a potato silencer used in a murder to determining if oregano was poisoned on a child’s pizza slice, Frank Padula uses the power of agriculture to solve crimes. Padula, who received his Ph.D. in grain science/cereal chemistry in 2000, leads a team of forensic scientists for the New York State Police Forensic Investigation Center in Albany, New York.

Padula, who is from New York, found his way to Manhattan, Kansas, twice in his career as a scientist. After serving four years in the Marine Corps and getting his master’s in chemistry from State University of New York in Plattsburgh, he decided to explore the West. In 1987, Padula got a job at K-State working in the agriculture experiment station lab in the basement of Willard Hall.

“We worked with all the ag experiment stations around the state,” Padula said. “If your seeds were dying, we helped figure out why. If your crop was failing, we’d figure out why.”

After a few years in Kansas, Padula moved back to New York to be near his large family and taught chemistry at the Hudson Valley Community College. “At 39, I had a bit of a mid-life crisis and decided to go back to school,” Padula said. He ended up back at K-State for his Ph.D. in grain science with a specialty in cereal chemistry. He finished his degree in 2000 but stayed two more years for post-doctoral work.

Padula eventually returned to New York to care for aging parents and teach at HVCC again. An opening for a trace evidence scientist at the New York State Police caught his eye and he applied. “I went in for an interview and they explained to me that they need someone who knows agriculture because a lot of crimes occur with items including cotton, indigo, petroleum, plants, poison seeds and things like that,” Padula said.

Padula supervises a small team of forensic scientists, and they do work for the FBI, U.S. Navy and U.S. Army, on top of the New York State Police.
Their lab is one of just a few in the world with capabilities to run specific tests, and Padula says that even this capacity connects back to K-State.

“We’re more like a special forces team, especially since 9/11 hit here,” Padula said. “Let’s say a bomb goes off in Kabul, Afghanistan. We can analyze that and find the isotopes were actually from Libya in the Quatarra Depression. Our investigative tools and approach are that powerful. I wouldn’t know how to do what I do if it weren’t for my time in Willard Hall. A lot of the stuff I do now, I started doing in Willard Hall in 1987. Two K-State professors, Don Setser and Richard McDonald, laid the groundwork for the excimer laser we have here in our offices in New York. We’re solving crimes all over the world, even in Southwest Asia, due to them.”

It’s one thing to use science to catch a criminal, but convincing a jury of the case is essential. “Evidence is irrefutable, so much of court testimony is your statement of qualifications,” Padula said. “When I say I got my Ph.D. in grain science/cereal chemistry from Kansas State University, that carries weight. Kansas represents honesty, trust and hard work. My degree has been lucrative, not just for my career but for the state police as well. We do a lot of high-profile cases and I testify in court about every two months, sometimes more.”

Padula is so thankful for his time at K-State and the impact his degree has on the success of his career, he pays it forward by supporting programs across campus. From milling science to dance to K-State Libraries to the Konza Prairie, Padula has given to more than 12 programs from the time he was a Ph.D. student to today. “You would think I might just give to grain science, but there are so many worthy programs on campus,” Padula said. “I like spreading around my support.”

Padula has plans to come to Kansas at least once more. “I’ve always said that when I retire, I’ll go back to Kansas, get a jeep and drive around talking to farmers and helping with 4-H.”

Turn to page 36 to see some K-State programs you can support.

“You would think I might just give to grain science, but there are so many worthy programs on campus; I like spreading around my support.” — Frank Padula
Staff and volunteers with the K-State Libraries’ Richard L. D. & Marjorie J. Morse Department of Special Collections at Kansas State University are working to transcribe more than 20 manuscript cookbooks to make them digitally accessible to the public. The department currently owns more than 250 cookbook manuscripts dating from the late 1600s to the 21st century from multiple countries and in a variety of languages, including German, French, Spanish and Hebrew. Staff and volunteers are using From the Page, an online platform often used by universities and historical societies to crowd-source transcription of selected digital images from manuscripts. The use of this software is supported by the Morse Department of Special Collection’s Jean F. Caul Access to Cookery endowment, without which this project would not be possible.

“We currently have 21 cookbooks — a total of more than 2,800 pages — available for volunteers to transcribe,” said Roger Adams, cookery collection curator, associate professor and lead on the project. “The collaborative nature of this online project means that anyone in the world can view the cookbooks and help us transcribe and even translate them.”

Adams said that a key goal of the cookbook transcription project is to share the wealth of cooking knowledge that K-State has access to with those both inside and outside of the university community.

Cindy Von Elling, project support staff, contributed to this effort by scanning and uploading to the website every single page from the manuscripts.

“There is a lot of satisfaction in putting the cookbooks out there for the world to see and transcribe,” said Von Elling. “While we might not know who created an individual cookbook, their method of creation, organization and the recipes they selected allow us to infer things about their lifestyle and personality.”

Faculty from the Department of Modern Languages have plans to incorporate the translation and transcription of foreign language cookbooks as part of their curriculum.

Anybody who has a passion for transcribing or translating documents can help with the cookbook project. Access the project at K-State Libraries’ From the Page website, fromthepage.com/kstatelibraries/manuscript-cookbooks.
Handwritten cookbooks, some hundreds of years old and in various languages, are getting transcribed and translated at K-State Libraries with support from an endowment.
For many programs on campus, gifts of any size can make a big difference. Discover a program you care about.

WellCAT Ambassadors

Physical, mental and nutritional health are things that people of all ages and genders struggle with daily. College students are no exception to these challenges. Lafene Health Center created the WellCAT Ambassadors program that assists students in navigating these obstacles through peer-to-peer counseling. WellCAT Ambassadors are trained to assist students in the areas of mental, physical, nutritional, sexual and substance fields. A tiered approach is used to help students find solutions to their roadblocks. The program utilizes social media to reach the most students possible. Ambassadors give presentations to classes, student groups, student housing units and Greek houses. They also offer one-on-one counseling.

Student Access Center

Since the 1970s, the Student Access Center has remained committed to accommodating K-State students who face unique obstacles in their daily college life. With the help of the Americans With Disabilities Act (ADA), the Student Access Center has aided and given a voice to students in need of assistance. These students often face unforeseen academic and social challenges that go along with college life. Although heavily focused on providing advocacy and accessibility to students with disabilities in the classroom, the Student Access Center also recognizes and is committed to providing safe and reliable campus accessibility and transportation. The Student Access Center works with K-State to ensure all campus sidewalks and buildings meet ADA requirements.

For more information about any of these programs, please contact Heather Strafuss at heathers@ksufoundation.org or 785-775-2146.
Fostering Success

The Parents and Family Program (PFP) connects the K-State family by providing resources to keep families informed, celebrate student achievements and create memories. This year, PFP launched a new initiative to support Wildcats formerly involved with foster care. This initiative personally welcomes these students to campus, creates a space for them to form friendships and provides unconditional support throughout their time at K-State. Through support from donors, students have filled budget gaps and formed their own student group called Fostering Success. This initiative also serves to connect these students to other Student Life resources such as Cats’ Cupboard and Powercat Financial.

Second Wind

Second Wind provides former K-State athletes a second chance at completing their bachelor’s degree and receiving their K-State education. Athletic academic counselors, K-State coaches and college-specific academic advisors work together to personally tailor a degree-completion plan and a graduation timeline for returning students. Additionally, these students are provided with resources to apply for financial aid, housing and employment. With the assistance of K-State Global Campus, students have the flexibility to complete their degree through distance education. Global Campus allows students to transfer courses from other accredited institutions and utilize quiz-out options to help complete their required classes.

GIFT PLANNING
To learn more about giving an estate or planned gift, contact the gift planning team at 785-775-2000 or giftoptions@ksufoundation.org.

COLLEGE OF EDUCATION
Give online at ksufoundation.org/give/education or contact Frank Cummings at 785-775-2094 or frankc@ksufoundation.org.

EDUCATION ABROAD
Give online at ksufoundation.org/give/up or contact Heather Strafuss at 785-775-2146 or heathers@ksufoundation.org.

COLLEGE OF AGRICULTURE
Give online at ksufoundation.org/give/ag or contact Kim Schirer at 785-775-2090 or kims@ksufoundation.org.

K-STATE FIRST/CAT COMMUNITIES
Give online at ksufoundation.org/give/kstatefirst or contact Heather Strafuss at 785-775-2146 or heathers@ksufoundation.org.

COLLEGE OF ARTS AND SCIENCES
Give online at ksufoundation.org/give/as or contact Shelley Carver at 785-775-2066 or shelleyc@ksufoundation.org.

COLLEGE OF HEALTH AND HUMAN SCIENCES
Give online at ksufoundation.org/give/hhs or contact Jeff Haug at 785-775-2061 or jeffh@ksufoundation.org.

K-STATE LIBRARIES
Give online at ksufoundation.org/libraries or contact Heather Strafuss at 785-775-2146 or heathers@ksufoundation.org.
In March 2019, K-State family joined together to champion one cause in one day and raised more than $320,000 to support the immediate needs of K-State students.

That was only the beginning.

We’re going to do it again March 24, 2021, and you are invited to go #AllInForKState! Visit ksufoundation.org/AllInForKState.