

2023 ISSUE

**KANSAS STATE**  
UNIVERSITY

College of Agriculture

# AgReport

**A BETTER** *K-State,*  
**A BETTER WORLD**

# AgReport

2023 ISSUE

College of Agriculture and K-State Research and Extension

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**PHOTO** DAN DONNERT

**LOCATION** RILEY COUNTY, KS



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**RENDERING** COURTESY OF CLARK & ENERSEN

# Dear Friends

## OUR FUTURE IS NOW

Kansas State University's College of Agriculture is regarded as one of the best in the nation, if not the world. We have an exceptionally talented mix of faculty and students who choose to study with or work for us to explore the opportunities to grow and expand this diverse industry. Our enthusiasm, experience and expertise are sought after by private industry, trade associations and global partners to help examine and solve challenges that impact all of us – such as drought or food shortages. Indeed, it is humbling to lead an organization that touches so many lives, in so many ways.

I am excited to announce that in 2023 we are building upon this strong foundation with multiple new facilities and construction renovation projects. New construction includes two agronomy buildings (dubbed the Agronomy Research and Innovation Center), a modernized Animal Sciences competition arena (located by the Stanley Stout Center north of campus); and the Global Center for Grain and Food Innovation (found in the heart of K-State's campus).

Near the new Global Center for Grain and Food Innovation on campus we will be renovating Call Hall and Weber Hall. Schellenberger Hall will be taken down. We are on an ambitious timeline with these projects, aiming to have them all completed and occupied by late summer 2026. See more details on page 6 of this magazine.

The vision of these projects is to further enable the College of Agriculture to recruit and retain world-class faculty and students.

In turn, this teaching and learning will strengthen Kansas' workforce – improving the skills and tools for the next generation of the agricultural industry – and of course, enhance the allure of attending Kansas State University.

Further, we believe that the results from this infrastructure project will help strengthen public and private collaborations throughout the industry, stimulate innovation and entrepreneurship, attract companies and jobs to Kansas, while concurrently expanding the state's largest economic driver – agriculture.

This year's issue of the *AgReport* includes information providing more detail on our construction projects, along with stories on our influence and impact on our students, and how we support research and extension efforts in the field.

Agriculture is truly an industry in which hope springs eternal. It is all about growth, year over year – and with our new building projects, we can see it happening for the college across this great campus of ours.



### **J. ERNEST MINTON,**

Eldon Gideon Dean, College of Agriculture  
Director, K-State Research and Extension



**PHOTO** DAN DONNERT  
**IN THE PHOTO** DEAN MINTON  
**LOCATION** KANSAS STATE UNIVERSITY  
AGRONOMY NORTH FARM



# BREAKING *Ground*

**Officials say Agronomy Research and Innovation Center is important to the future of agriculture**

Hailing the occasion as “a significant milestone for Kansas State University and the entire agriculture industry in Kansas,” Kansas Governor Laura Kelly joined state and national officials in a symbolic groundbreaking for the university’s Agronomy Research and Innovation Center on May 15.

**STORY** PAT MELGARES AND SUSAN SCHIFF

The new facility, expected to be completed in 2025, will be located on the north end of the K-State campus, in an area known as the Agronomy North Farm across from Bill Snyder Family Stadium. It will serve as a cornerstone for work that K-State agronomy department head Raj Khosla calls “critical infrastructure for the success of our research, teaching and extension missions.”

“In the last 10 years alone, the Department of Agronomy has conducted more than \$50 million of research that is initiated right here at the Agronomy North Farm,” Khosla said. “The new Agronomy Research and Innovation Center will bring research teams together from around campus to create new discoveries and solutions that will address the wicked challenges we are facing in agriculture today, and the ones that will come in the future.”

Ernie Minton, the Eldon Gideon Dean of the College of Agriculture and Director of K-State Research and Extension, added: “The Center is a keystone for the college’s vision to strengthen and diversify agribusiness in Kansas and around the globe and will serve as a demonstration site for public/private partnerships focused on best practices in sustainable/regenerative agriculture, crop production innovation, technology development and training, and conservation and protection of natural resources.”

The May 15 groundbreaking marked K-State’s official kickoff of more than \$125 million in agricultural infrastructure improvements planned through 2026. In fall 2022, the university launched an ambitious campaign to raise \$75 million toward campus projects, which include the new agronomy buildings, the Global Center for Food and Grain Innovation and the Animal Sciences Arena.

K-State President Richard Linton said the university exceeded its goal, raising approximately \$80 million in four months, which was then matched by a \$25 million challenge grant from the Kansas legislature, and \$25 million more from an initial legislative appropriation.

“At K-State, we see this as a new way of thinking,” he said. “We think of infrastructure as a way of being an incubator for strong public-private partnerships where industry can work hand-in-hand with K-State researchers to leverage ideas and funding to move forward and develop the students of tomorrow. In doing so, we will create markets and jobs that are important for our stakeholders.”

“In turn,” he added, “this creates a better economy for all of us in Kansas. It’s a great example of realizing our vision of what we like to call the next generation land-grant university. We are asking questions of what

the interaction needs to look like between the next generation of land-grant students and stakeholders. The project we begin today is a solution.”

Linton added that K-State continues to raise funds toward a projected \$210 million in significant infrastructure improvements to nine facilities over the next several years. Thus far, the university has raised \$140 million toward that bigger goal.

“No place in Kansas will succeed and have a bright future unless our farmers and ranchers have a bright future,” said U.S. Senator Jerry Moran, one of the several supporters in attendance May 15. “One of the significant ways we can improve the lot in life of those who have a noble calling – feeding a hungry world – is to provide them with the knowledge they need to reduce their costs, become more efficient and produce more.”

Agricultural research is critical, Moran said, “and what is going on at K-State is a key that is opening a door wider and wider to agricultural producers, agribusiness and the state of Kansas economy.”



**LEARN MORE** ABOUT THE AG INNOVATION PROJECTS AT [kstate.ag/innovation](https://kstate.ag/innovation)

**PHOTO** DAN DONNERT

**IN THE PHOTO** RAJ KHOSLA, DEPARTMENT HEAD OF AGRONOMY; U.S. SENATOR JERRY MORAN; KANSAS GOVERNOR LAURA KELLY; DEAN ERNIE MINTON; PRESIDENT RICHARD LINTON CELEBRATE THE GROUNDBREAKING OF THE AGRONOMY RESEARCH AND INNOVATION CENTER ON MAY 15, 2023

**LOCATION** AGRONOMY EDUCATION CENTER, NORTH FARM, MANHATTAN, KS



# Investing to Meet the Complex Opportunities and Challenges of Agriculture

The College of Agriculture will soon begin construction on three facilities equipped with the latest research technology and space, which officials say will provide the maximum potential for education, interdisciplinary collaboration and innovation.

The new buildings will advance K-State as a global hub for agriculture-related learning and research, while launching Kansas' economy to new levels.



## GLOBAL CENTER FOR FOOD AND GRAIN INNOVATION

This interdisciplinary teaching and research center will be created within the corridor of the soon-to-be-renovated Call Hall and Weber Hall on the Manhattan campus. The work within will focus on accelerating grain, food, feed, animal sciences and agriculture systems innovation and teaching.

**RENDERING** COURTESY OF  
CLARK & ENERSEN





## AGRONOMY RESEARCH AND INNOVATION CENTER

This will be the future home of the college's collaborative research that supports the development of agronomy and agricultural systems. It will also serve as the new public face and front door to the Agronomy North Farm.

**RENDERING** COURTESY OF PGAV ARCHITECTS



## ANIMAL SCIENCES ARENA

A new multi-species, 3,000-seat competition arena is also planned. It will include a horse teaching and research unit and a modern equine breeding and training facility. Undergraduate, graduate and veterinary medicine students will benefit from the expanded educational opportunities it will offer.

**RENDERING** COURTESY OF GH2 ARCHITECTS

The background of the page is a light gray architectural wireframe of a building, showing various rooms, corridors, and structural elements. The lines are thin and create a complex, geometric pattern.

# BLUEPRINT *for Business*

## **K-State Innovation Partners boosts economic prosperity in Kansas**

**W**hen Scorpius BioManufacturing announced in April 2022 that it would be building a 500,000-square-foot facility and bringing 500 jobs to Kansas, it marked another success for a K-State-led program that aims to bring technology-based businesses to the Sunflower State.

**STORY** PAT MELGARES



**LEARN MORE** K-STATE  
ECONOMIC PROSPERITY PLAN  
[kstate.ag/economic-prosperity](https://kstate.ag/economic-prosperity)

Scorpius – previously known as Scorpion Biological Services – expects to complete its new facility in 2024 just east of Manhattan, on U.S. Highway 24. Officials with the company say the facility will manufacture vaccines and biological medicines – filling an important need that had been deemed insufficient during the recent global pandemic.

“A large percentage of that capability (currently) sits in China, Korea and India,” said the company’s former president David Halverson, when the announcement was first made. “Putting biomanufacturing back in the U.S. will enable us to hold our own in the event of another national emergency.”

That Scorpius picked Kansas for its second U.S. facility (the other is in San Antonio, Texas) was not by chance. Rebecca Robinson, the president and CEO of K-State Innovation Partners, said it was a culmination of several years’ of work making sure that the right partnerships and expertise were in place for success.

“(Scorpius) went through a national selection process,” Robinson said. “They were primarily looking at places that had higher education institutions. K-State, like others, had the types of academic programs that they were interested in.”

In particular, it was K-State’s expertise in infectious disease, biosecurity and bio-defense “that was really compelling in terms of a competitive advantage for a company like that to say that this is a place that is aligned with what they need from an innovation standpoint and a talent pipeline perspective,” according to Robinson.

Kent Glasscock, who served as president and CEO of K-State Innovation Partners for 20 years before stepping down in February, 2023, said most U.S. universities have some form of a program to leverage its faculty’s expertise and attract business.

K-State’s history dates to 1942 under the umbrella of the Kansas State University Research Foundation, or KSURF. In early 2003, Glasscock had just left his position as Speaker of the Kansas House of Representatives when K-State President Jon Wefald asked him to consider leading the university’s efforts in licensing and intellectual property.

“It was a very small organization at the time,” Glasscock said. “K-State was one of three members of a non-profit organization; the others were the State of Kansas and the City of Manhattan. The group also had a role to explore technology-based business startups.”

In 2008, K-State created KBED – Knowledge-Based Economic Development – and hired Robinson as its first intern.

“The purpose of that organization was to leverage Kansas State University talent innovation into attracting companies to this region in partnership with the Kansas Department of Commerce, Manhattan Chamber of Commerce and the City of Manhattan,” Glasscock said. “We were leveraging the smart people and smart ideas of Kansas State University in a way that fully engaged prospective companies. That was different from what was going on at other universities.”

Eventually, K-State's Innovation Partners restructured its own non-profit organization controlled solely by the university. Glasscock said the group's charge now includes:

- technology commercialization,
- economically based global corporate engagement and
- economic development.

"Companies are interested in K-State and the state of Kansas for many reasons," Robinson said. "One reason is our innovation, which might be a faculty member who creates knowledge or an invention. Through our public mission and mandate (as a land-grant university) we can take that intellectual property to the public, primarily through the commercial sector...and to the private sector so that it can be utilized more broadly by the public."

"Beyond that," she adds, "when our faculty members engage with the private sector, they are able to connect as closely as possible to specific needs. So whether it's understanding the challenges in the marketplace, or specific needs that companies have, being that close to the particular challenges informs our research in ways that allow K-State to maintain relevancy."

David Rosowsky, K-State's vice president for research, cites the university's dominance in the world wheat market as an example of the value of being connected to industry.

"K-State is a leader in winter wheat research, contributing to rural profitability and the overall economic strength of Kansas, while making a difference in feeding a growing global population," Rosowsky said. "K-State breeding programs have released nearly 30 wheat varieties, and 80% to 90% of all U.S. hard winter wheat varieties have a line developed by K-State in their pedigree."

Rosowsky said he is especially excited about one of K-State's newest economic prosperity plan efforts, called K-State 105.

"K-State already has a strong presence in each of the state's 105 counties through our extension offices," he said. "The K-State 105 initiative allows us to connect additional strengths at the university to provide communities with resources to address growth issues, support local entrepreneurs and increase prosperity across the state."

In 2019, the Kansas Legislature challenged each of the state's universities to submit their goals for contributing to economic prosperity in the state.

Under the direction of current K-State President Richard Linton, the university is aiming to create 3000 new jobs and \$3 billion in direct investment by companies choosing to locate to and expand within the state by 2029. By the end of 2022, K-State Innovation Partners reports great progress: 1,107 jobs and \$650 million, with another 748 jobs and nearly \$1.1 billion announced or in the pipeline.

"What K-State is doing in this realm is really exciting," Glasscock said. "And K-State is doing it in ways that are similar to, yet different from, other universities around the country and world. We've won national and international awards for our work, and the reason is that K-State knows how to do this."

"The K-State culture is amenable to this kind of activity, and we're committed to that." ■

**PHOTO** DAN DONNERT  
**IN THE PHOTO** DAVID ROSOWSKY, REBECCA ROBINSON, AND  
KENT GLASSOCK  
**LOCATION** KANSAS STATE UNIVERSITY INNOVATION CENTER,  
MANHATTAN, KS



FOCUS ON GROWTH




# TEAMWORK

**Multi-state projects help K-State researchers solve complex agricultural challenges**

In his work to track down a microscopic roundworm that wreaks havoc on Kansas soybean fields, K-State nematologist Tim Todd is a team of one.

And yet, he's not alone.

**STORY** PAT MELGARES



Like his colleagues at many U.S. land-grant universities, Todd is the only nematologist in the state, but he's part of a dynamic group that benefits from the Hatch Act of 1887, a government-supported grant program to solve problems that concern more than one state.

Their target: the soybean cyst nematode, which by some estimates is responsible for more than \$1 billion and 128 million bushels in soybean production losses across the United States. In North America, the soybean cyst nematode is found in 31 states and Canada, and is thought to cause up to 30% yield loss or more.

"Nematologists in the north central region are a lonely bunch; most of us

are the only specialist in our respective states," Todd said. "So, my career has benefited from having regional colleagues with whom to collaborate. There are national meetings, but those don't provide the same opportunities for interaction and planning that our smaller, regional meetings do."

The Hatch Act of 1887 – a portion of which is also known as the Multi-state Research Fund – was passed by Congress to encourage collaboration by researchers at American land-grant universities. It received a boost in the 1998 U.S. Farm Bill, which required multi-state partnerships.

"The federal government allocates about \$1.2 million in Hatch multi-state dollars to K-State that is then

matched by the state," said Marty Draper, who retired this summer as associate dean for research and graduate programs with K-State's College of Agriculture.

"So, at minimum, we're looking at about \$2.3 million at K-State that's going into multi-state research activities, and we sponsor projects in the Colleges of Agriculture, Veterinary Medicine, Health and Human Sciences, Engineering and Arts and Sciences."

Draper said any K-State scientist who wants to work on a multi-state project qualifies for an allocation from the Kansas Agricultural Experiment Station. Numerous projects are available for faculty to participate in

through a numbered program listing known as the North Central Extension and Research Activity, or NCERA.

“Anytime we have collaborative research going on, we gain valuable insight,” Draper said. “Our methodology improves, our thought process toward research questions improves, and our ability to have more hands working toward completion of our objectives improves.”

K-State veterinary entomologist Cassandra Olds is the lead principal investigator in a multi-state project that focuses on fly management in animal agriculture systems, and its impacts on animal health and food safety.

“Our group has members representing most regions in the U.S.,” Olds said. “I have sent flies to collaborators that have been tested for insecticide resistance, providing us valuable data on Kansas flies...If I need flies or comparisons from other regions in the U.S., I have a resource I can tap into.”

Similar to Todd’s situation, Olds said the field of veterinary entomology “is quite small.”

“If I had to rely on an in-state study program, it is unlikely that it would align well with my research interests,” she said. “I would also not have the opportunity

## **"Collaboration provides the opportunity to expand the sampling frame of research projects..."**

— NATALIA CERNICCHIARO

to collaborate and get mentorship from other veterinary entomologists.”

K-State veterinarian and epidemiologist Natalia Cernicchiaro leads a multi-state project that seeks to develop an integrated approach to control bovine respiratory disease (BRD), an infection that causes pneumonia in calves and is thought to be the most common and costly disease affecting beef cattle in the world.

The project involves researchers from Alabama, California, Georgia, Kansas, Mississippi, Nebraska, South Dakota, Texas and Washington.

“Collaboration provides the opportunity to expand the sampling frame of research projects, targeting livestock operations and animals in other regions, which may be advantageous when exploring how regional differences – including management, diet, soil, type of cattle and other factors – may impact animal disease,” Cernicchiaro said.

“As a veterinary epidemiologist working on BRD, I appreciate the perspective that virologists, microbiologists, geneticists and economists – among others – bring to the discussion, and the fact that these collaborations enable development of new fields of inquiry.”

A database provided by K-State’s College of Agriculture indicates that university faculty have participated in 202 Hatch multi-state research projects since 2014, or an average of more than 22 per year.

“With the way that funding runs in our university systems, if we don’t focus on collaborative research, our impact is going to be dramatically reduced,” Draper said. “The collaboration that takes place has to be both internal and external if we want to make sure that we are addressing problems that are relevant and that we are serving underserved audiences.”

Adds Todd: “No one researcher can address all of the important questions for even a single pest. Hatch research projects provide the setting for planning collaborative projects where some of the workload can be spread among the collaborators.”

“This makes for efficient use of individual expertise.” ■





**PHOTO** DAN DONNERT  
**IN THE PHOTO** TOM OAKLEY (LEFT) AND TIM TODD  
**LOCATION** THROCKMORTON HALL GREENHOUSE

# SUPPORTING *a Legacy*

**After a long career as a mechanical engineer, Harold Lonsinger decided to become a farmer.**

**H**e and his wife Olympia purchased a farm about 30 miles east of Alton, Kansas, which eventually grew to 2,300 acres and provided opportunities to support their shared interest in raising cattle and crops while preserving the health of the land.

**STORY** SUSAN SCHIFF

**PHOTOS** DAN DONNERT

**LOCATION** LONSINGER SUSTAINABILITY RESEARCH FARM  
ALTON, KS

**“We have a big obligation to Harold and Olympia to do this right, and we’re committed to doing that.”**

— SPENCER CASEY

In 2009, Olympia died. Eight years later, Harold initiated the process of donating the farm to K-State's College of Agriculture to making it a teaching, research, extension/engagement farm focused on finding the best ways to raise food in a sustainable manner.

In December 2021, Harold got caught in one of the state's worst wildfires brought on by severe drought and winds that reached 100 mph. The 95-year-old Harold was apparently checking the safety of his cattle and property when he ran off the road and was trapped in a ditch just beyond the border of his farm. That day 163,000 acres of Kansas farmland and prairie burned, 42 buildings were destroyed, and hundreds of cattle and three men were killed, including Harold Lonsinger.

“Harold’s death was very traumatic for me,” said Spencer Casey, assistant director for K-State Research and Extension and the person responsible for getting the property ready to serve as a teaching, research and engagement farm. “We had spent a lot of time together talking about what he’d like to see done on the farm. I am so grateful I had the chance to work closely with him,” said Casey. “It gave me the opportunity to really understand his vision.”

Much work has been accomplished to support Harold and Olympia’s legacy, including: creating a new entrance to the headquarters; renovating five buildings, including one that can be used for large field

day, FFA or 4-H presentations; adding electricity, lighting and internet service; replacing fencing; getting permits; and preparing the farm for the work of researchers.

Craig Poore, whose property borders the Lonsinger farm, says he hopes the majority of the property will remain in production, but he’s particularly excited by the opportunities the farm will offer to help children better understand farming practices.

“I would love to see 4-H and FFA groups, ag education and entomology classes come to the farm to dig in the ground and learn more. It would be a great opportunity,” said Poore, the Osborne County 4-H leader, and past chair and former board member of the United Sorghum Checkoff.

Several research projects are currently underway on the farm, including a wildlife survey being conducted by Dan Sullins, assistant professor of K-State’s Horticulture and Natural Resources Department.

“Wildlife is disappearing around the world as more and more habitats are turned into cities, towns and farmland.” said Sullins. “Biodiversity is the foundation of life on Earth. Every species plays a critical role. Our ultimate goal is to better understand how we as humans can share the planet with other species who live here.”

According to Sullins, over 700 million grassland birds have been lost since the 1970s with 74% of grassland species showing population decline. This initial survey will provide a baseline of wildlife living on the farm.

As of March, Sullins and his team identified 52 different species of birds on the property including ring-necked pheasants, northern bobwhite quail, and one lone greater prairie-chicken. Using trail cameras, they also detected the following mammals: white-tailed deer, raccoons, coyotes, eastern cottontail rabbits, striped skunks and an American badger.

Allison Louthan, assistant professor of Biology, and her doctoral student, Aleah Querns, are learning more about interactions between native and non-native plants on the property. Using shelters that allow scientists to control the moisture levels plants experience, the scientists can determine which native and non-native plants grow best in different climates. They are also adding seeds of native plants to invaded areas to determine if native species can grow there again.

“As temperatures become hotter and we struggle with drought, we need to learn more about which plants grow best in those climates,” said Louthan.

She explained while some non-native plant species might become invasive and damaging to native biodiversity under hotter conditions, others might become less damaging. “We need to learn more about their potential,” Louthan said.

Casey believes Harold would be proud of the progress and the direction the farm has taken.

“Sometimes when I’m working at the farm, I can still hear Harold’s voice talking to me about what we need to do next,” said Casey. “We have a big obligation to Harold and Olympia to do this right, and we’re committed to doing that.” ■



**TOP** A COMBINE RECENTLY PURCHASED TO SUPPORT THE LONSINGER FARM  
**BOTTOM** DAN SULLINS AND CABEL DURBIN CONDUCT A WILDLIFE SURVEY  
**RIGHT** SPENCER CASEY AT THE FARM'S NEW ENTRANCE

# HAROLD AND OLYMPIA LONSINGER SUSTAINABILITY RESEARCH FARM



MANAGED BY KANSAS STATE UNIVERSITY COLLEGE OF AGRICULTURE  
GIFTED TO THE KSU FOUNDATION



# INFLUENTIAL *Researcher*

**Vara Prasad recognized as one of the world's top researchers**

**A**s crop and livestock producers are challenged by climatic uncertainty and extreme weather events, each and every day they worry about finding solutions – and K-State's R.O. Kruse Professor of Agronomy Vara Prasad is laser-focused on helping them.

**STORY** SUSAN SCHIFF



**“What’s just as impressive, though, is his commitment to teaching and creating extension services in countries struggling with food insecurity outside the U.S.”**

— DEAN MINTON

Recently, Prasad was lauded for appearing on the list of the top 1% of the world’s most influential and highly cited researchers for 2022. Launched in 2014 by Clarivate, a global research analytics company, the annual list includes those whose work has been cited most in peer-reviewed publications during the previous decade. His research mainly targets how to better manage crops and identify new crop genotypes that respond well to heat stress and drought.

“Kansas is the perfect place to test drought and heat impact since average annual precipitation levels vary from about 15 inches in southwest Kansas to almost 45 inches in southeast Kansas,” said Prasad. “Similarly, in July and August,

temperatures can go above 90 degrees Fahrenheit and a few days above 100.”

As the director of the Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification (SIIL), Prasad is able to apply his research findings in Kansas to improve outcomes in Africa and Asia (e.g., Senegal, Burkina Faso, Ethiopia, Bangladesh and Cambodia). The relationship is reciprocal – he can then bring back what he’s learned in Africa and Asia to benefit farmers in Kansas.

“We have moved beyond looking for ways to just increase crop production,” said Prasad. “We now must find ways to increase crop nutrition, which can



be reduced by drought and extreme temperatures.

“Today, there’s a lot of hidden hunger – approximately 30% of children in West Africa and South Asia are deficient in zinc and iron, which are critical nutrients for normal growth as well as for blood cell, neurologic and cognitive development,” Prasad added.

To date, Prasad has published 380 peer-reviewed journal articles and book chapters, and his research has been cited 23,500 times by other scientists. He has received more than \$120 million — about \$85 million as principal investigator — in grant funding and donations to support his research. Prasad is also an elected fellow of the American Society of Agronomy, the Crop Science Society of America, and the American Association for the Advancement of Science.

Although he is considered one of the world’s most influential researchers, Prasad believes his true legacy will be as a teacher and leader in creating land-grant-type institutions in countries struggling with food scarcity.

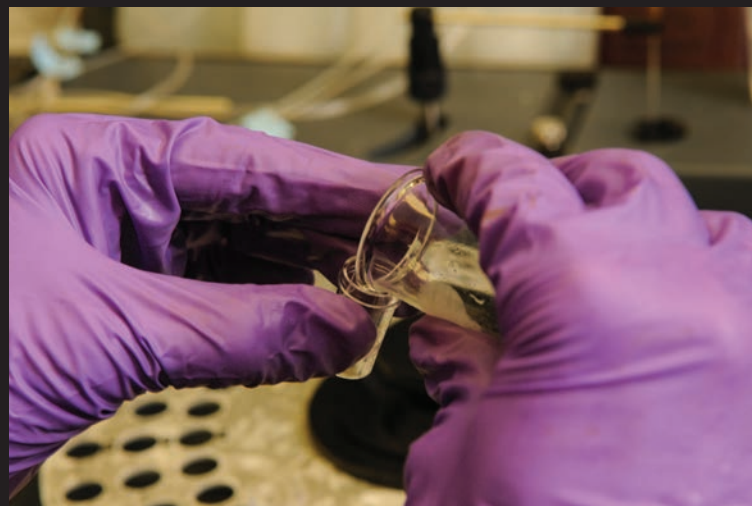
“Personally, teachers and advisers have had the greatest influence in my career,” said Prasad. “Had it not been for my

**PHOTOS** DAN DONNERT  
**IN THE PHOTO** VARA PRASAD CONTINUES  
TO TEACH



**“We now must find ways to increase crop nutrition, which can be reduced by drought and extreme temperatures.”**

— VARA PRASAD



chemistry teacher in middle school and professors at the university during my undergraduate and graduate studies, I would have never become a scientist. I want to be the same kind of teacher and inspire students and show them as a scientist they can do great things that make a difference in lives and livelihoods of people. We need more scientists.”

During Prasad’s 17 years at K-State, he has taught and mentored more than 200 undergraduate and graduate students and research scholars. Many have gone on to become professors, researchers and leaders in ag-related institutions and industries.

“Their influence will continue to grow and compound,” said Prasad.

Prasad said his belief in the value of the U.S. land-grant university mission of providing agricultural teaching, research, outreach and service to the people in the states they serve has led him to set up similar institutional structures in countries he works with through SILL.

“Land-grant universities have to focus on providing relevant research that farmers, ranchers and industries can adopt to improve their yields and their profits,” said Prasad. “Having access to the evidence-based and unbiased knowledge that comes from a research university and the scientists who work there is incredibly valuable to the people they serve.”

“We are extremely proud of Dr. Prasad’s recognition as one of the world’s top

scientists,” said Dean Minton. “What’s just as impressive, though, is his commitment to teaching and creating extension services in countries struggling with food insecurity outside the U.S. That says so much about Dr. Prasad’s ability to identify long-term solutions and his passion for helping people.” ■



**20 YEARS OF**  
**BUILDING**  
*Bridges*

**Zelia Wiley reflects on two decades at K-State**

**A**s a precocious and inquisitive teenager rigorously studying at the High School for Engineering Professionals at Paul Laurence Dunbar High School in Fort Worth, Texas, Zelia Wiley knew she was preparing herself to be a problem solver, possibly even a bridge builder. She just didn't know that this would be a much more figurative statement, rather than a literal one, when defining her successful professional career.

**STORY** JERRY GRASSO

**“I was told to attend K-State because of her ability to guide students.”**

— LONNIE HOBBS JR.



Wiley has studied and led diversity and agriculture programs across different regions of the U.S. – first earning a bachelor’s degree in agricultural economics in 1989 and then a master’s degree in agricultural education and human resources in 1991 from Prairie View A&M University, then she completed her doctorate at Penn State University in 1996. Her career then took her to the University of Kentucky’s College of Agriculture in Lexington, and finally, for the past 20 years, to K-State as the assistant dean of diversity programs for the College of Agriculture and K-State Research and Extension. Wiley is responsible for the recruitment and retention programs of ethnic minorities within the college and works to increase the minority ethnicity application pool in K-State Research and Extension.

“I was excited to come to Manhattan in 2003,” remembered Wiley. “At Kentucky, my appointment was 51% extension and 49% teaching. I was tasked with meeting an extension goal of ensuring that the organization’s personnel mirrored that state’s demographics.”

“Though I checked the boxes on the objective and made progress at the University of Kentucky, I wasn’t dealing a lot with students. The opportunity at Kansas State was, and is, very much student driven – 80% teaching, 10% extension and 10% research. I was excited and eager for the opportunities at K-State,” she said.

When Wiley joined K-State’s College of Agriculture, she became the university’s first assistant dean for diversity for any college on campus. At the time, the only other multicultural leader was an associate provost for diversity. “At that time, ‘diversity’ was the buzzword of choice,” said Wiley. “Today, we have a complete acronym: DEI & B (Diversity, Equity, Inclusion and Belonging).

“In my first year only two percent of students were domestic minorities in the college – and since then we’ve substantially increased the student population,” she said. “In 2023, not only do we have a more diverse, multicultural student population, but all the students can be themselves and feel safe to be so. This in and of itself is an achievement.”



**“[T]he real impact isn’t in the numbers themselves, but the conversations they have helped to drive.”**

— ZELIA WILEY

Success has been steady year-over-year since 2003. From 2003 until 2023, the College of Agriculture increased multicultural graduate students by 224%. It also increased multicultural undergraduate student enrollment by 453% from 2003 to 2022. Statistics and measurements such as this are key to the impact of DEI & B, and how the results help drive and shape leadership discussions.

“In 2003, we did not have any metrics, or even any ideas, around measurement and data,” Wiley stated. “Today, we can measure every angle – from retention to drop out numbers. But the real impact isn’t in the numbers themselves, but the conversations they have helped to drive. Multicultural and multi-ethnic concerns, issues and approach are part of ongoing strategic planning.

“DEI & B is threaded to the dialogue about the future of the college, and of course, K-State as a university.”

“It has been an honor for me to work with Dr. Wiley on a variety of projects during our time together,” said Dean Minton. “I have worked with her for many years to bring multicultural students to K-State for a summer research experience.

“My involvement with her through that program has been extremely gratifying. I marvel at the network of contacts she has developed, especially with the nation’s 1890 land-grant universities,” Minton added.

The program Dean Minton refers to is the K-State Research and Extension Fellowship program that Wiley’s Diversity Program Office sponsors. The program is a multicultural undergraduate and graduate summer research program for members of ethnic minority groups and other under-represented groups. Students are paired with faculty in research projects that match a student’s interest. At the end of the program, students are expected to present an oral presentation.

So how does she drive this success?

“Simply put, K-State has evolved with partners and staff. Across the university there are point people embedded within each college to work with, and at, all campuses – Manhattan, Olathe and Salina. We also have support staff and student workers, many different people and roles ensuring we all work together, understand the definitions of success and aren’t siloed. We have each other to bounce thoughts, ideas and successes off of.”

“But of course, the best model of success for any college or student is to see success, and I’m very proud of the multicultural students we have in PhD programs,” Wiley added.

Lonnie Hobbs Jr. is an assistant professor and MANRRS co-advisor at K-State. He’s worked closely with Wiley since 2017 and has personally seen and felt her influence.

“Dr. Wiley is the primary reason I chose K-State, and am currently thriving in my program,” said Hobbs. “More specifically, I was explicitly told to attend K-State because of her ability to guide students.

“As ethnic minority students, we are often placed in environments and situations where we understand what we need to do, but do not know where to begin with how to do it and we end up wasting our time and becoming frustrated. Dr. Wiley provides resources and counsel to guide us today and better prepare for tomorrow,” said Hobbs.

**PHOTO** DAN DONNERT  
**IN THE PHOTO** ZELIA WILEY  
**LOCATION** UNIVERSITY GARDENS, KANSAS STATE UNIVERSITY





Hobbs added that Wiley provides insight and coaching so students enhance their strengths and improve their weaknesses. “I believe I’m thriving because of her professional and emotional support, and I’ve seen the results with other students across campus, whether they are ethnic or non-ethnic minority students,” he added.

Though she has no plans to slow down, Wiley did pause for a moment to consider what, after 20 years, might her legacy be at both the college and K-State.

“I would like my students and partners to remember that I was tenacious on their behalf,” said Wiley. “Also, I hope, that when I do leave, the office continues to prosper – that we have people who continue to advocate and speak up for diversity, equity, inclusion and belonging. This framework and dialogue are a part of who we are now, what makes us great.

“Finally, I hope that when I depart, that people recognize that I did what I did with a smile and integrity – and we did it together as a team.” ■



*Celebrating*  
**20 YEARS  
AT K-STATE**



# BUILDING *a Pathway*

**Agriculture can be the intersection of academic and professional development**

Many Kansans and graduates know K-State for its love of community and “heart,” but for California native Lola Plum, K-State's College of Agriculture is also literally serving as a springboard for a career as a cardiothoracic surgeon.

**STORY** ANNIKA WEIBERS, SHELBY SPREIER AND SUSAN SCHIFF



**“We like to think we are not just preparing students for their first job – we are preparing them for a successful and meaningful career.”**

— DAN MOSER

Plum is double majoring in animal sciences and industry and biology, which together, she believes, will give her a more comprehensive understanding of the human body and its functions and better prepare her for work as a surgeon.

Likewise, Brian Owuoché spent 13 years living in Kenya and has seen firsthand drought and starvation on that continent. He plans to put his double major in agronomy and economics to work by joining a non-government organization, like C.A.R.E. or the World Food Programme, to focus on helping eliminate global hunger.

“Students like Lola and Brian represent an exciting area of growth in the College of Agriculture,” said Deana Core, assistant dean and director of recruitment for the College of Agriculture. “We’re seeing an increase in the number of students choosing a less traditional path with agriculture majors. Students have a lot of freedom to build a pathway that will lead to a fulfilling career.”

To support students like Plum and Owuoché, the College of Agriculture is running a direct mail and social media campaign called “Think Outside the Field” to help students, particularly

those without an agricultural background, better understand all a degree in agriculture can offer. The options range from combining personal passions and interests with traditional agriculture majors in agronomy, animal sciences or agribusiness to selecting less traditional majors, like turf management, horticulture, agricultural communications and journalism, and wildlife and outdoor enterprise management.

“It’s important to show students, particularly those living in urban areas, they don’t need to own a farm or come from a ranching background to play a significant role in the agricultural industry,” said Core.

The College of Agriculture offers 16 majors and 16 minors from which students can mix and match classes to create a personal educational program or acquire a second major or minor within the university’s other colleges.

“Our goal is to provide the best educational experience for students, so they have the foundation to become the professionals and leaders Kansas needs to grow and advance,” said Dan Moser, associate dean of Academic Programs for the College of Agriculture. “We are extremely proud of the 98%

rate our new graduates have in finding jobs or furthering their education soon after they graduate.

“It’s also extremely rewarding to see how many of our alumni go on to later serve as national and international leaders in agricultural-related industries, commodity groups and government agencies,” Moser added. “We like to think we are not just preparing students for their first job – we are preparing them for a successful and meaningful career.”

To attract more in-state students, the university and the College of Agriculture provide many scholarships, including the University Scholar Award – the state’s top academic scholarship. To attract more out-of-state students, the university offers deep tuition discounts to attract the best-of-the-best incoming freshmen and transfer students.

“It’s a long-term, sound investment. When these students graduate many will stay in Kansas, grow our state’s agricultural workforce and expand and strengthen our economy,” said Moser.

Agriculture continues to be Kansas’ largest industry and economic driver. According to a report from the Kansas Department of Agriculture published in January 2023, food and food-processing sectors combined represented \$53.4 billion in direct output to the Kansas economy and 14% of the state’s workforce.

“Agriculture continues to evolve. Producers and industry have different needs and the college has evolved to meet those needs by offering new majors and research opportunities,” said Moser. “Traditional agricultural programs, like agronomy, animal and grain sciences will always be a backbone of the college, but the new majors we offer are critical for the agricultural industry and attract a new group of students who might not have considered an agriculture career in the past.

“Kansas has always been an agricultural powerhouse. And for generations, the College of Agriculture has been a national leader in the research and education that keeps Kansas ag strong,” said Moser. ■



**LOLA PLUM** PRACTICES SURGICAL TECHNIQUES ON A PIG HEART. SHE BELIEVES HER DOUBLE MAJOR IN ANIMAL SCIENCES AND INDUSTRY AND BIOLOGY ARE PREPARING HER WELL TO BECOME A SURGEON  
**PHOTO** COURTESY OF LOLA PLUM



**BRIAN OWUOCHE** DREAMS OF JOINING A NON-GOVERNMENT ORGANIZATION TO HELP ELIMINATE GLOBAL HUNGER

**PHOTOS** DAN DONNERT  
**RIGHT PHOTO** DAN MOSER AND DEANA CORE  
**LOCATION** KANSAS STATE UNIVERSITY



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