Transition and change have been constant themes throughout my six-year tenure serving as head of the Department of Agricultural Economics at Purdue. As two rounds of retirements ushered in a new era, we rebuilt, hiring around 20 new faculty and 20 new staff over my tenure, including four new faculty starting this fall. While many of the faces have changed, our unwavering commitment to our core values has not. The department remains committed to having real-world impact and building on our pillars of excellence in commercial agriculture, agribusiness and international trade.

I truly believe we have been able to establish ourselves as one of the leading agricultural economics departments in the country. We rank in the top three for number of articles published in the American Journal of Agricultural Economics, our top field journal, and are the top academic department in the world for the number publications in the Agricultural Economics and Policy Category in Web of Science. We have steadily increased external funding per faculty and continue to manage impactful outreach and engagement programs.

While national trends brought challenges to our undergraduate agribusiness program numbers in 2018 and 2019, we rallied back, witnessing an upturn in majors in 2021 and 2022. Despite the challenges presented by COVID-19, we continued to be entrepreneurial and innovative. During the past six years, three new centers have been created: DIAL Ventures, the North Central Regional Center for Rural Development, and the Center for Food Demand Analysis and Sustainability. Our faculty and continue to manage impactful outreach and engagement programs.

Thanks to generous donors, we opened a newly renovated undergraduate advising center and collaborative workspace and will soon have a newly remodeled sixth floor conference room. Our alumni and donors have created five new faculty endowed chairs and one new professorship and given hundreds of thousands of dollars in new undergraduate scholarships and student support. These are just a few of the highlights from my tenure. As you can see, the future is bright for the department.

The time has now come for me to move on. In early August, I will become the next Vice President and Dean of the Division of Agricultural Sciences and Natural Resources at Oklahoma State University (OSU). While I am excited for the opportunity, I am sad to leave so many friends and colleagues at Purdue.

I take great pride in the collective achievements we’ve been able to accomplish together over the past six years. It has been a true honor and privilege to serve as the head of the Department of Agricultural Economics at Purdue. Thank you for all your support and for making my time at Purdue so enjoyable!
Holly Shaver always had a love for travel and exploring new cultures, but she wasn’t sure how she could make studying abroad financially feasible. Her determination to make it happen paid off when she received four scholarships from the College of Agriculture which covered nearly half the cost of a semester-long study abroad program in Toledo, Spain.

During her time abroad, Holly discovered her passion for promoting international education and encouraging students to pursue their own study abroad opportunities. She knew that she wanted to help other students have similar experiences and after returning from her study abroad program in Spain, began working as an intern for Purdue’s International Programs in Agriculture (IPIA).

Through her work with IPIA, Holly had the opportunity to participate in the Mandela Washington Fellowship (MWF) for Young African Leaders Initiative (YALI), which provided her with an incredible opportunity to interact with leaders from Sub-Saharan African countries. Holly was responsible for answering their various questions about U.S. culture and organizing educational sessions that were relevant to their interests.

Working with the Mandela Washington Fellows was a transformative experience for Holly, as she was able to learn from them and forge lifelong friendships. After graduating in May with a bachelor’s degree in agricultural business marketing and a minor in Spanish and international studies, Holly was thrilled to accept a full-time position at IPIA as the Study Abroad Specialist.

In this role, Holly will be able to draw on her own experiences studying abroad and working with students to understand all phases of the study abroad process. She is also excited to work with a new cohort of Mandela Fellows this summer and to continue promoting international education for years to come. Holly’s journey from study abroad student to study abroad specialist is a testament to the power of perseverance and the value of pursuing your passions.

Working with the Mandela Washington Fellows was a great experience where I think I learned just as much from the fellows as they did from me. It created a great opportunity for cultural exchange and lifelong friendships.”

— Holly Shaver, Agricultural Business Marketing graduate and Study Abroad Specialist for IPIA

This year’s AgEcon Spring Fest booth engaged young learners with an array of interactive activities led by passionate AgEcon students. The goal? To unveil the fascinating world of agriculture and economics in a way that young minds could grasp and embrace.

Alejandra Armesto Gómez and Natalie Doelman (image 1) guided Spring Fest attendees through an eye-opening journey of pet ownership. From the predictable expenses like food and toys to the unforeseen visits to the vet, these eager learners got a taste of the financial responsibilities that come with furry companions.

For many, their first encounter with agriculture starts with the beloved morning cereal. Cassidy Colbert (image 2) helped visitors match well-known brands with the single product. Attendees also played a matching game bringing together inputs like wheat, corn and eggs with foods they buy at the store, like bread and cereal. This helped teach awareness of how the creation of everyday food items is dependent on agriculture.

Cai Chen (image 3) assisted by Wesley Fansler, asked young learners to think about the various resources (human, capital and natural) used in the creation of a single product.

Attendees who conquered all four activities earned an exclusive AgEcon-themed Spring Fest souvenir t-shirt (image 4), which could be colored and developed into their own creations.

J.W. Fansler, Director of the Indiana Council for Economic Education, coordinated the day’s activities and was excited to see attendees engaging with the activities.

“Kids grow up to have happier and healthier lives when they are economically and financially literate,” said Fansler. “During Spring Fest, we teach these skills through games and activities that are fun and engaging. We are planting a knowledge seed in their minds that hopefully, through watering and cultivation, will continue to grow throughout their futures.”
Bringing economic benefits while embracing aquaponics in the Midwest, Quagrainie, a Kwamena Quagrainie, a clinical engagement professor in the Departments of Agricultural Economics and Forestry and Natural Resources at Purdue University, first became engaged with aquaculture economics while working as an assistant professor at University of Arkansas at Pine Bluff. At the time, the area’s catfish industry was facing strong competition from Southeast Asia imports. In an effort to support the local industry, Quagrainie delved into researching effective marketing strategies for farm-raised catfish farmers in the United States. Now at Purdue, Quagrainie is encountering a similar challenge in the Midwest aquaculture industry.

Aquaponics is an innovative method which combines aquaculture and hydroponics to produce seafood and plants using less land and water than conventional food production methods. The U.S. aquaculture industry was valued at over $1.5 billion in 2018 and is projected to grow further. For the Midwest, embracing aquaponics could bring economic benefits while also addressing the region’s high obesity rates, as seafood is a healthy and underutilized protein source. However, the industry is facing stiff competition. Just as Quagrainie found in Arkansas’ catfish industry, a majority of seafood consumed in the U.S. is being imported from Asia. With a growing demand for seafood products, Quagrainie recognizes the importance of the industry and is driven to bridge the import gap while boosting the industry’s domestic supply.

Quagrainie’s primary goals are to address the barriers preventing widespread adoption of aquaponics and help farmers grow their businesses. By focusing on the cost of production and economic feasibility, he wants to emphasize that successful aquaponics ventures should not only target on the growth potential but also consider associated costs and the market demand for their products.

Currently, Quagrainie is part of a 5-year, $10 million USDA grant dedicated to increasing seafood production. Working alongside researchers from the College of Agriculture and partner universities, Quagrainie’s role is to ensure the economic viability of the proposed aquaponics project. He plans to form a working group comprising of academia, farmers and suppliers to better understand the industry’s needs. He will also collaborate with the Food Science department’s sensory lab to better understand consumer preferences for aquaponics-grown fish and plants. The final component will include outreach activities, where the team’s research findings will be shared to inform Extension educators and farmers in the aquaponics industry.

Looking ahead, Quagrainie is also hoping to explore a data driven approach to aquaculture. By analyzing online media sentiment and assess seafood trends, he aims to better understand industry trends and utilize that information to benefit the aquaculture industry.

Quagrainie says there are many challenges; however, what’s most important to him is to see the industry thrive. “My desire is to help as much as possible. We need the aquaculture and aquaponics industry to supplement the production of seafood,” said Quagrainie.
In the fall of 2022, timing was everything for four, first-year AgEcon graduate students who began working at the North Central Regional Center for Rural Development (NCRCD) just as the center was about to release its first dataset, the NCR-Stat: Baseline. “Because of the timing, we felt we were in a good position to provide the students experience handling and analyzing a large dataset,” said Maria Marshall, professor, Lois Ackerman Endowed Chair, and NCRCD’s director. The NCR-Stat: Baseline offers primary economic and social data focused on households, businesses and community wellbeing in the 12-states of the North Central Region (NCR). The students worked closely with NCRCD staff to learn how to clean, analyze and visualize the data while gaining valuable insights of the NCR’s rural communities. Based on their findings, the students wrote multiple “Story from Virginia who worked on the project. “Professor Marshall and the other professors/educators in the NCRCD ensured that as we learn the analytical work, we also needed to be able to convey the data story clearly - both in graphs and in our articles. This has helped me to ask better questions in research, and in life, when attempting to understand the full picture.”

Alejandra Armesto Gómez, a graduate student from Colombia, echoed Walls’ sentiments. “This project has allowed me to better understand the social and economic structure of the NCR. It has improved my writing, and I’ve learned how to clean and analyze extensive sets of data. It has been an enriching experience to have the space to propose my ideas but also to hear feedback from all the NCRCD members.”

Antara Chowdhury, a graduate student from Bangladesh, also found the experience to be valuable. “I have acquired skills in interpretation and data visualization, learned how to present enormous data intuitively and captured interesting insights about the NCR’s population. For example, apart from rural and urban areas, there are suburban areas (which I did not see in Bangladesh), and the data shows that the region’s suburban residents have a comparatively higher income than their counterparts.”

Ivanna Carillo Siller, a graduate student from Mexico, also enjoyed the learning experience. “I enjoyed the entire learning process! I became familiar with data and interpreting cross tabulations on a daily basis. I mostly learned to ask for help and join forces with my fellow NCRCD graduate assistants.”

NCRCRD graduate research assistants (pictured, left to right) Ivanna Carillo Siller, Antara Chowdhury, Alejandra Armesto Gómez, and William Walls speaking with NCRCRD’s director, Professor Maria Marshall (center).
DISCOVERIES FROM THE AG ECONOMY BAROMETER

Now in its 8th year, the Purdue University-CME Group Ag Economy Barometer officially launched in October 2015 with its first survey to capture the sentiments of U.S. agricultural producers. A joint venture by the Center for Commercial Agriculture and the CME Group, the barometer has emerged as a powerful tool to gauge and track the ever-evolving sentiment of commercial scale farmers across the United States.

Every February, the survey includes a question to better understand respondents’ growth plans over the next five years, and the responses continue to reveal a fascinating diversity in farm operators’ growth aspirations, with some indicating no plans for growth while others indicating rapid expansion.

To better understand the relationship between farm growth expectations and a producer’s sentiment, all 400 responses from the February 2023 survey were analyzed and individual barometer, future expectations, and current condition indices were calculated. Respondents were sorted into three growth plan categories (reduce/retire, no change, or grow) and averages were computed (See Table 1).

From those results, we found that respondents who plan to reduce their farm size or retire had the weakest sentiment, while respondents who anticipate farm growth had the highest sentiment across all three indices. Notably, the growth category also boasted significantly higher expectations for their current conditions compared to other respondents.

**TABLE 1. Differences in Sentiment by Farm Growth Categories, Purdue Center for Commercial Agriculture, Producer Survey, February 2023**

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**WHAT’S NEXT FOR THE AG ECONOMY BAROMETER?**

In addition to conducting the monthly barometer report, we are committed to delving deeper into the wealth of information gathered from previous years’ surveys. Our goal is to uncover valuable insights and explore the intricate connections. Stay tuned for more captivating discoveries by subscribing to the Ag Economy Barometer reports at the barometer’s website, purdue.edu/agbarometer.

**NEW FACULTY**

**BERNWARD DALHEIMER** • ASSISTANT PROFESSOR, MACROECONOMICS & TRADE

Bernhard Dalheimer will join the department as an assistant professor for macroeconomics and trade. His research focuses on global agri-food value chains and international trade under uncertainty. He also analyzes food commodity market shocks in high- and low-income economies. His work often considers political economy aspects and features data science approaches. Prior to joining Purdue, he was a visiting fellow at the University of Minnesota, a professor ad-interim at Kiel University in Germany, and a postdoc at the University of Göttingen in Germany, where he also completed his Ph.D. He has held positions as an econometrician and data scientist at both the Food and Agriculture Organization of the United Nations (FAO) and the United Nations conference on Trade and Development (UNCTAD).

**CHAD FIECHTER** • ASSISTANT PROFESSOR, AGRIBUSINESS FINANCE

Chad Fiechter will join the department as an assistant professor of agribusiness finance. After spending nearly a decade farming in Northeastern Indiana, Fiechter returned to graduate school; first to Cornell University for a M.S. degree and then to Purdue for his Ph.D. Fiechter’s farming experience has motivated and informed his research on the financing of agricultural production, farm/agribusiness management and agricultural policy. He is specifically interested in how information affects farm-level decision making, like the financing, producing and marketing decisions of agricultural commodities.

**LAURA MONTENOVO** • ASSISTANT PROFESSOR, STATE & LOCAL FINANCE

Laura Montenovo will join the department as an assistant professor in state and local finance. She holds a Ph.D. from the O’Neill School of Public and Environmental Affairs at Indiana University and a M.S. in economic and social sciences from Bocconi University. Montenovo’s primary research interests are in applied microeconomics and public finance. She uses quasi-experimental designs to explore the effects of labor market policies on the performance and dynamics of workers and firms. She is also interested in the economic implications of health and tax reforms on local governments and non-profit organizations.

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**GUY TCHUENTE** • ASSISTANT PROFESSOR, QUANTITATIVE METHODS IN SPATIAL ANALYSIS

Guy Tchuente will join the department as an assistant professor of quantitative methods in spatial analysis. His research interests are in econometrics, labor and health economics. His research has covered several topics, such as the effects of the pandemic, the importance of specific skills acquired in middle school on labor market outcome and causal inference in high-dimensional models in econometrics. Before joining Purdue, he was an assistant professor of economics at the University of Kent in Canterbury. He completed his Ph.D. in economics at the University of Montreal and M.Sc. in statistics and economics at ENSEA, Abidjan.
Growing up in the small town of Livingston, Montana, Emily Forsythe knew she wanted to go to college; she just wasn’t sure what her academic focus might be. Then a high school economics class and field trip to the Federal Reserve Bank in Helena prompted Forsythe to major in economics at Montana State University. During her senior year, she discovered agricultural economics while working as a teaching assistant. Her professors suggested she explore graduate study to build on her interest in natural resource and environmental economics.

“...I was sold. His work in the environmental realm seemed like a great opportunity.” said Forsythe.

Emily Forsythe began her M.S. at Purdue in August 2021. Forsythe is part of a survey project in collaboration with the Indiana Department of Natural Resources (IDNR). The survey was designed to learn about Indiana residents’ hunting and trapping preferences, as well as their experiences and the wildlife they see at different recreational sites like state parks and state forests. The study specifically estimates the values people place on white-tailed deer and furbearer species — bobcats, coyotes, river otters, raccoons and red fox — and how the value changes based on activities, including hiking, picnicking or boating. The data is being used to help the IDNR determine the value of wildlife viewing by estimating willingness-to-pay values for the deer and furbearer species.

“The agency’s furbearer biologists expected white-tailed deer to be of greatest interest, the survey showed red fox ranked highest for every activity,” said Forsythe.

Forsythe intends to stay at Purdue to pursue her Ph.D. after defending her master’s degree during the summer of 2023. “A Ph.D. was always on my radar, but I had an asterisk by it,” said Forsythe. “I love school, but I didn’t know if I’d like Purdue or if I’d like research.” She hopes to continue to focus on topics related to natural resources and environmental economics.

Undergraduate research is a valuable experience that can provide significant changes in students. Through research projects, students may gain a deeper understanding of the breadth and depths of a particular subject by diving deeper into the topic, learning the types of questions to ask, and understanding which tools to use when analyzing data. It gives them an opportunity to determine whether graduate education is the right path for them.

“Even in upper-level courses, students usually get exposed to economic problems and analysis from a 5,000-foot view,” said Todd Kuethe, professor and Schrader Chair in Farmland Economics. “In research, students get to dive deeper into a particular topic. I often describe it as a “low cost” way to find out if graduate education is right for you or if taking a deeper dive is something that matches your personality and interests.”

Kuethe leads the department’s undergraduate honors research program and recently advised a group of agricultural economics undergraduate students working together on a research project entitled, “The Rationality of USDA’s Retail Food Price Inflation Forecasts.” The team, which is comprised of five students: Ethan Buck, Morgan Hinz, Yuxi “Jimmy” Jiang, Xiuyun “Lisa” Wen, published a version of their article in the Purdue Agricultural Economics Report’s Spring 2023 Student Research Issue and presented their findings at NCCC-134 Conference in April.

“We have incredible students in Purdue AgEcon, with a diverse set of talents and interests,” said Kuethe. “The students view economic problems in ways that are surprising and enriched my perspective of the same problems.”

Senior, Jimmy Jiang, who will join the M.S. program at Cornell this fall, said conducting undergraduate research helped him gain writing and research skills that he’ll use in graduate school. He strongly recommends undergraduate research to other students as a great preparation for graduate school and as an opportunity to connect with professors.

Morgan Hinz, a rising junior in agricultural economics, found that her undergraduate research experience increased her passion for food policy and its economic impacts which helped her develop a strong interest in forecasting for other sectors. She learned the value of patience and that failure is possible. Morgan applied those lessons in her other coursework and it helped her to build confidence and gain success within her classes. She firmly believes that undergraduate research is the best experience a student can gain at Purdue and encourages other students to find their area of interest and a professor who will invest time and energy in them and the project.
BRODERICK LEWIS: A GLOBAL LEADER IN PROTEIN SOURCING

Director of Global Protein Sourcing at Tyson Foods, Broderick Lewis, is responsible for working with suppliers, vendors, and other stakeholders to ensure that Tyson Foods has a reliable and sustainable supply of protein products. Lewis’s work can be challenging and complex. He must stay abreast of market trends, forecast supply and demand, and monitor global economic and political developments that may impact Tyson Foods’ sourcing operations. He maintains a keen eye for strategies to optimize quality, cost, and efficiency.

“What makes my current role so interesting is that there never is a simple challenge that we are facing as we look to fulfill unmet protein demand needs across the globe,” said Lewis.

He loves the challenge. He is passionate about his work and is committed to helping Tyson Foods provide high-quality protein products to consumers around the world.

A CAREER IN AGRICULTURAL ECONOMICS

Lewis’s interest in agricultural economics began when he was a student at Purdue University. He was originally interested in international business, but was persuaded to choose agricultural economics by an academic advisor.

“I had an interest in international business beginning in high school,” Lewis says. “But the global economy and job market were rather tough during that time. The pitch from the AgEcon program was that they had a 99% job placement rate and that I would learn all the tools needed to be a dynamic international business professional in or out of agriculture.”

Lewis went on to earn a bachelor’s degree in agricultural economics from the department in 2013 and is glad he made the decision. He says that his education in agricultural economics built a foundation for the skills and knowledge needed to succeed in his career.

After graduation, Lewis went on to chart a career path in a variety of applied areas with a focus on development, trade, macroeconomic policy implications, production and consumption to environmental and resource issues. Before working with Tyson Foods, he spent more than a decade at Cargill in numerous roles including registered lobbyist, international business manager, commodity trader, short-term plant operations manager (China), and production supervisor.

“Years later, I can confirm that choosing a degree in agricultural economics was the right decision for me. I have had the opportunity to travel, see the world, and have worked in many sectors of the food supply chain. I am looking forward to seeing what is next.”

— Broderick Lewis, director of global protein sourcing at Tyson Foods

OUTSTANDING PH.D. DISSERTATION

Wajiha Saeed, “Three Essays Assessing the Economic Implications of Heat Stress in Labor,” Professor Thomas Hertel (chair)

OUTSTANDING ACADEMIC SENIORS

Stewart Douglas
Lisa Wen

OUTSTANDING TRANSFER STUDENT

Joshua Bailey

DISTINGUISHED AG ALUMNI

Randy Kron, B.S., 1983
Paul Patterson, M.S., Ph.D., 1987, 1994

APEX AWARD WINNERS

Gustavo Acosta-Garza (M.S., 2002)
Mesbah Motamed (Ph.D., 2009)
Christina Welch (M.S., 2000)
On the Cover: The 12-annual Ag Week celebration took place on Purdue's campus this Spring. The week-long, student-led event highlights the many aspects of Purdue agriculture and the industry. Agribusiness Marketing & Agricultural Communications dual major, **Abigail Powell** (second from upper left) was this year’s Ag Week president.