

Poultry Science Connections

Spring 2022

UNIVERSITY OF GEORGIA COLLEGE OF AGRICULTURAL & ENVIRONMENTAL SCIENCES

A Note From the Department Head

Dr. Todd Applegate
Department Head and Professor
Dear Friends:

Spring has come to the Athens campus, and we are thankful to our strong, supportive community. This time of year is always bittersweet as students are preparing to leave for their summer internships and study abroad; and for our 66 BSA, 2 MS, and 2 PhD fledglings, we are extremely proud of your accomplishments and excited for your future.

This past week was full of celebration. We honored our current and incoming student scholarship awardees at our scholarship banquet, with over \$40K in scholarships. A huge thank you to those that have and continue to support our next generation of students. It truly was a celebration, as our last banquet was in April 2019. Thus, a new event for all of our undergraduates. We also celebrated with our graduate students and their research successes during our graduate research forum with 32 of our students giving 5 minute synopses or posters. The event was highlighted with invited keynotes from Drs. Kirk Klasing (ret. University of California-Davis) and Mamduh Sifri (ret. ADM).

Campus is looking a little different these days as the ground-work for our new building began mid-March. If you would like to keep up on the progress, please make sure to visit our capital campaign sight for a birds-eye view of the construction: <https://poultrybuilding.caes.uga.edu/>. We greatly thank the Georgia legislature for the third phase of funding for the project, bringing the state commitment for half of the project to over \$27M. I am humbled by the ~\$9M in commitments from our private sector partners towards the \$27M+ private portion goal. You all are helping secure Athens and the state of Georgia as the Epicenter of Poultry Science!

We continue to be actively engaged with our university architect's office, the architectural design firm (FLAD), and construction management firm (McCarthy) throughout the project. We are truly appreciative of their diligence and planning (in spite of supply-chain struggles) to keep to an on-budget and on-time move-in late summer/early fall 2023. Currently, we're in the detail phase of equipment and furniture selection, along with coordination with a local artist and graphic design firm for how our spaces can communicate the "who, what and why" of poultry science.

Our Extension group has been busy this spring, and today are finishing the state 4H poultry judging contest. Their spring has been busy with area/state 4H and FFA poultry judging contests, the International Poultry short-course, Deep South Poultry Conference, Hatchery workshop, and a Precision Poultry Farming Conference.

Our Poultry Science Faculty will also be expanding this fall, with the addition of Dr. Chongxiao (Sean) Chen as one of our Extension/research faculty. Sean obtained his PhD from our department, and is currently a Research Assistant Professor at the North Carolina State

University. This summer, we will also be launching a search for a research/teaching faculty in integrative precision agriculture. Their focus will be centered on how we utilize and manage data throughout the poultry sector to aide in our decision-making processes. This position is part of a larger effort across UGA into Integrative Precision Agriculture and data science.

Last but not least, I would encourage all of you to stay connected to the department, either through one of our social media channels (Facebook, Instagram, and LinkedIn; links through our website homepage), or better yet, reach out to Jessica Fife (jfife@uga.edu; 706-542-9153) and let us know about how we might better connect.

We are so grateful for your commitment to Poultry Science. Because science never sleeps, innovation is impatient, and hungry people around the world will survive and thrive on our success.



Department of Poultry Science
College of Agricultural & Environmental Sciences
UNIVERSITY OF GEORGIA

Chiktopia rules the roost at UGA student entrepreneur competition

By Maria M. Lameiras

The winner of the University of Georgia's 2022 FABricate Entrepreneurial Initiative competition is a novel automated system designed to help pasture-raised egg producers increase their efficiency.

Conceptualized by a team led by poultry science undergraduate student Chris Ayers and biological engineering student Jeffery Whitmire, Chiktopia is an automated chicken tractor designed to move pasture-raised chickens easily and efficiently while preserving the land and saving labor costs.

A chicken tractor is an alternative form of poultry housing used by free-range and pasture-raised poultry producers to house and transport chickens around their pastures. Current chicken tractors on the market must be moved manually using heavy machinery and farm workers.

The Chiktopia chicken tractor is a solar-powered, self-propelled housing system that can be programmed to autonomously move around the producer's pasture to preserve land quality, said Ayers, who helps run his family's poultry farm in Ball Ground, Georgia. He developed the idea based on his own experiences as a producer.

"Four years ago, I started farming chickens ... and I was using rudimentary chicken tractors when I first got started. That got me to thinking how I could make my life easier because my Dad was making me do all the work on the farm," Ayers said.



"There are a lot of alternatives to be tested and considered when finalizing a ready-for-market product, and this funding will enable the Chiktopia team to finalize the development of our chicken tractor," Ayers said.

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The system has automated feeding and watering systems, temperature and humidity control, and a hydraulic lifting system to prevent damage to the coops and the land. The tractor is also designed with a passive egg-collection system to reduce collection time and labor cost.

Ayers and Whitmire have produced four iterations of their prototype and are working on a fifth. Ayers said the \$10,000 FABricate grand prize will enable Chiktopia to complete the prototyping phase of their chicken tractor design so that they can take it to market.

Chris Rhodes, director of industry partnerships and project-based learning for UGA's College of Agricultural and Environmental Sciences (CAES), said the quantity and quality of contestants and presentations has improved every year since the competition was opened to the entire UGA student community in 2020. Originally hosted for CAES students, the competition has been held annually since 2017 and has been co-sponsored by the UGA Entrepreneurship Program since 2020.

"FABricate had the most contestants in its history this year at 20, with the highest average quality of pitches as well. For sure, all six finalists could have won in past years, and probably all 11 semifinalists could have on the right day," said Rhodes.

2021-2022 Outstanding Junior and Senior Awards

Animal Health

Junior: Lyssa Blair

Senior: Erin Moss

Avian Biology

Junior: Rebeclyn Barber

Senior: Grant Bennett

Biological Science

Junior: Zoe Weiss

Senior: Tom Lagen

Poultry Science

Junior: Emily Edelman

Senior: Patti Mitchell



Student Spotlight

Christian Albritton, a third-year avian biology and biological science double major from Butler, Georgia, was selected as the 2022 Student Employee of the Year thanks to his work with Georgia 4-H.

"There have been more times than I can count when I start a sentence with 'What about if we ...' and Christian answers 'that's already been done,'" wrote Kasey Bozeman, UGA Cooperative Extension 4-H specialist for science programs, in her nomination. "His willingness to learn new information, develop his skills, listen to critical feedback and respect diversity among our organization makes him the ideal student employee."

Albritton played a critical role in many Georgia 4-H activities throughout the year, especially its STEM offerings. He created nearly two dozen digital science activities to complement existing resources, equipping more than 200 4-H faculty and staff across the state with tools to lead over 110,000 children in 4-H programs.

Albritton also leveraged connections in his area of study, recruiting a faculty member from the College of Agricultural and Environmental Sciences' poultry science department to be a guest speaker for Georgia 4-H's virtual "Zoom into Science" program. Albritton went on to help provide captions for and publish the recording of the program.

"We would not have been able to publish the videos without Christian's leadership," wrote Bozeman. "He helped over 1,000 youth experience virtual science programs."

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R. Harold and Patsy Harrison Foundation's \$2.6M pledge supports UGA poultry science

Maria M. Lameiras for CAES News

Gifts and pledges totaling more than \$2.6 million from the R. Harold and Patsy Harrison Foundation have established the R. Harold and Patsy Harrison Distinguished Professorship in Poultry Science to support programs in the Department of Poultry Science at the University of Georgia's College of Agricultural and Environmental Sciences (CAES).

"Endowed professorships and chairs are critical to the University of Georgia's ability to recruit and retain the very best faculty," said President Jere W. Morehead. "These generous gifts from the R. Harold and Patsy Harrison Foundation are helping us ensure that the poultry science department at UGA continues to be one of the top poultry science programs in the nation."

UGA poultry science head Todd Applegate has been named the first holder of the distinguished professorship, which will be linked to the department head position in perpetuity. Once the foundation's pledge has been fully realized, the level of support provided through the position will elevate it from a distinguished professorship to a distinguished chair, pending approval by the University System of Georgia Board of Regents.

"We are grateful for the partnership of the R. Harold and Patsy Harrison Foundation and their commitment to the Department of Poultry Science. This Harrison Professorship will, over time, become the first Distinguished Chair in the College of Agricultural and Environmental Sciences, which elevates and recognizes the critical work done in the Department of Poultry Science," said CAES Dean and Director Nick Place. "With this funding, we will be able to immediately fund some of the highest priorities within the department, creating more opportunities for groundbreaking research that propels the poultry industry into the future."

Built into the multiyear gift are immediately spendable funds that give Applegate flexibility to address critical needs within the poultry science department. The commitment is the department's second seven-figure gift from the R. Harold and Patsy Harrison Foundation, which pledged \$1 million toward the Poultry Science Building campaign in July 2021, the foundation's first gift to UGA and CAES.

Creating an endowment that will have a significant impact now and into the future is a fitting tribute to Harold and Patsy Harrison because the couple left a legacy that continues to benefit their company, its employees and the larger community, said Bobbie Ann Harrison Reynolds, who established the R. Harold and Patsy Harrison Foundation in her parents' honor in 2019.

"My father had innate business sense and acumen, but also cared deeply about building relationships with the people he worked with and who worked for him. He and my mother made good investments, both from a business standpoint and in their relationships with people," Reynolds said. "Our home and the poultry operation were on the same street, and everyone knew where they could find them if they needed something. They were all about helping their employees and people in the community."

A noted pioneer in Georgia's poultry industry, the late R. Harold Harrison earned his bachelor's degree in agribusiness from CAES in 1941 and incorporated Harrison Poultry in his hometown of Bethlehem, Georgia, in 1958. Harrison was inducted into the Georgia Agricultural Hall of Fame in 2001.

"My brother, Matthew, and I were able to see Ag Hill for the first time at the groundbreaking for the new poultry science building. We'd heard stories about our grandfather walking up the hill while working to put himself through school," said Graham Harrison Reynolds, R. Harold and Patsy Harrison's grandson. "My grandfather was the first in his family to receive a college degree and instilled in us hard work, generosity and the value of education. We hope this gift will provide support to bring the best and brightest to poultry science and enable students and faculty to make their mark on the world."

Inaugural professorship holder Applegate is an internationally renowned expert on mechanisms of nutrient, pathogen and mycotoxin interaction within the gastrointestinal tract to ultimately improve nutrient absorption and retention in poultry. He is a past president of the Poultry Science Association, served on the U.S. Coordinating Animal Nutrition Committee of State Agricultural Experiment Stations, and is past chair of a U.S. Department of Agriculture working group to minimize the impact of animal agriculture on the environment.

The CAES poultry science department has been a major contributor of research and university-trained experts that have led to the exponential growth of the state's poultry industry for more than five decades.

The department and its faculty are well known for their industry-focused advances, including the evolution of tunnel ventilation in the late 1980s and early 1990s, which revolutionized poultry production efficiency. Current research focuses on poultry health, nutrition, physiology, genetics and molecular biology, environmental management, microbiology and food safety, processing technologies, reproduction and bird well-being.



Meet Our New Avian Ambassadors

Claire Marie Coleman
 Department Communications Intern

The Avian Ambassador Program is a unique opportunity to the Poultry Science Department. Students are selected through an application and interview process each spring semester and go through an orientation and training to prepare them for being the “faces of the department” beginning that summer or fall.

It is an honor to represent our faculty, staff, and students in one of these prestigious positions at recruitment events, tours, conferences, and other various events on and off of campus. Their time is rewarded with excellent resume building opportunities and monetary compensation, as well!

Meet our new Avian Ambassadors starting in August 2022:



Christian Albritton
 Avian Biology
 Biological Science



Christopher Ayers
 Poultry Science



Sage Barlow
 Poultry Science



Grant Bennett
 Avian Biology
 Biological Science



Lydia Connell
 Avian Biology
 Biological Science



Emily Edelman
 Poultry Science



Carter Hart
 Avian Biology
 Biological Science



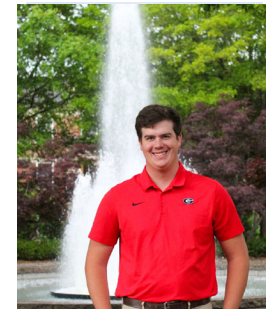
Thomas Jones
 Avian Biology
 Biological Science



Sarah Beth Kersey
 Poultry Science



Sarah LeVan
 Avian Biology
 Biological Science



Gray Miller
 Poultry Science



Micayla Moffitt
 Animal Health



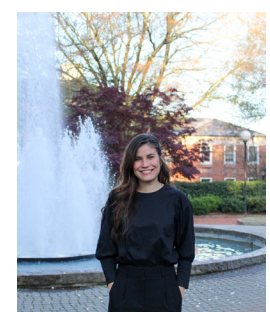
Georgia Orman
 Avian Biology



Thomas Stokes
 Avian Biology



Cory Yarbrough
 Poultry Science



Siara Zedonek
 Biological Science

Poultry Science
Connections

Spring 2022 Graduates

Undergraduates:

BSA Biological Science:

Chidimma Anunobi

Audrey Asis

Meredith Barber

Colin Barcelo

Katherine Barre

Emily Bourque

Logan Brown

John Burn

Malorie Bush

Mattie Capehart

Kelly Carter

Grace Hannah Cason

Anika Chaganti

Calvin Chee

Rebacca Choe

Farhatul Choudhury

Kaitlyn Collins

Cody Collins

John Crawford

Robert Decook

Kyle Falk

Ciara Fleming

Elijah Frix

Luke Frost

Gracie Hall

Jackson Harris

Jordan Harris

Hunter Hatfield

Coleman Hatmaker

Haley Hemmings

James Henry

Anna Hester

Brantley Hughes

Edward Hunda

Oshioyrenoya Iteghie

Garrett Jimmerson

Anvitha Kaguturu

Prashant Kolachala

Jackson Lech

Sojeong Lee

Carswell Leis

Connor Lombardi

Julia Mazel

Kyrie Miles

Reese Miller

Elizabeth Milner

Cayla Morris

Rebecca Rau

Annalise Reed

Kathryn Rothenhofer

Taylor Schwarz

Kyle Sellers

Emma Simonton

Samantha Underwood

Linh Voong

BSA Animal Health:

Sarah Carlisle

Erin Moss

Acacia Worley

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BSA Avian Biology:

Katelyn Baase

Colin Barcelo

Connor Lombardi

Morgan Knupp

Kyrie Miles

Madelyn Morgan

Cayla Morris

Mylinh Voong

Rebecalyn Barber

Michael Davis

Sabrina Dumanowsky

Holly Worden

BSA Poultry Science:

Cody Whitlock

Mary Davis

Patti Mitchell

Peyton Parker

Graduates:

MS Poultry Science:

Carsen Dean

Kristen Miles

PHD Poultry Science:

Keila Acevedo-Villanueva

Anna Villegas



Save the Date:

August 17 First Day of Class

October 14 Alumni + Friends
Homecoming Tailgate

November 11 Open House
Recruitment Event

