

Poultry Science

Connections

Fall 2020

UNIVERSITY OF GEORGIA COLLEGE OF AGRICULTURAL & ENVIRONMENTAL SCIENCES

A Note From the Department Head

Dr. Todd Applegate
Department Head and Professor

Dear Friends:

I hope this newsletter finds you well, as I know this year has been quite taxing to all. As I write this just prior to our Thanksgiving break, I am ever so thankful for our UGA Poultry Science family of students, staff, faculty, alum and friends. I wanted to give a huge shout-out to our faculty, staff, and graduate students for pulling together to put safety procedures in place to resume research, in-person and simultaneous virtual classes, and initiate creative Extension offerings. It certainly has taken a village, and I applaud your resilience and patience.

While we have done our best at resolving and continuing our Poultry Science family "connectedness", I am reminded that while COVID-19 has caused us to occasionally get lost on our road, we still have our shared "North star" mission of providing the most affordable proteins to the world.

My heart goes out to students as they seek ways to connect with their peers, as well as strive to find their place in the world with internships and career placement. I know I've mentioned before how many of our students' financial situations has been strained. I'll reiterate now how even more thankful we are to our scholarship donors that makes situations like we've experienced a little less stressful for those students.

I am also thankful to be moving forward on our plans for a new Poultry Science building. Pending approval from the Board of Regents in January, we will kick off and complete the detailed design work in calendar year 2021 with an architectural firm. This fall, we accelerated our capital campaign for our new 80,000 ft² building and are striving to raise \$27.5 M from private donors as half of the building's cost, while UGA and the University System of Georgia will be asking the state for a matching public contribution. I am humbled by the support of the project, and giddy with excitement for what the facility will do for solidifying public and private investment in the poultry sciences now and well into the future.

As we talk and plan more for the facility, I get even more excited for the site selection for the new building. For those unfamiliar, we will be between Boyd and Conner Halls (a hop, skip and jump to our west). It's an amazing location, as with the campus master plan, we'll be poised at the northern end of the green-pedestrian DW Brooks corridor. An astounding location to attract new students near the peak of Ag Hill.

In our Fall newsletter, we introduced Dr. Nada Tamim, our new undergraduate teaching coordinator. This spring term, we'll be starting a review of our undergraduate curriculum to dig into the "what", "why", and "how" we offer to make sure it is meeting the needs of today's student. I mention this as we will be reaching out to garner input not only to our recent alum but also to those that hire or may hire our graduates.

This January, we will also be welcoming Dr. Prafulla Regmi, currently on faculty from North Carolina State University. Dr. Regmi is no stranger to Athens, as he completed a collaborative post-doctoral position with USDA/ARS (Dr. Deanna Jones) and Purdue University. Prafulla's position will help move the department into the next generation of the science of poultry well-being with an intersection of technology applications.

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 (jffife@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

Dr. Prafulla Regmi Joining The Department of Poultry Science January 2021

Claire Marie Coleman
Department Communications Intern

Our department will be welcoming a new faculty member in January 2021, Dr. Prafulla Regmi. Dr. Regmi is originally from Nepal where he completed his bachelor's degree in Veterinary Science and Animal Husbandry. He then came to the U.S. in 2012, where he completed his Ph.D in Animal Science from Michigan State University. There, he studied bone fractures and associated risk factors in laying hens. After earning his Ph.D, he had a joint postdoctoral appointment with Purdue University and USDA-ARS in Athens, GA. Since 2018, he has been working as an Assistant Professor in the Prestage Department of Poultry Science at North Carolina State University with a major focus in applied welfare science in commercial poultry.



"I have enjoyed collaborating with faculties from UGA Poultry Science since my postdoctoral time in Athens. Those collaborations and the growth of the poultry science program at UGA in recent years were quite appealing to me. The prospect of close collaborations with faculties at Georgia Tech and developing tools for objective examination of welfare issues in poultry was another factor that attracted me to UGA." - Dr. Prafulla Regmi

When asked what attracted him to UGA, he said, "I have enjoyed collaborating with faculties from UGA Poultry Science since my postdoctoral time in Athens. Those collaborations and the growth of the poultry science program at UGA in recent years were quite appealing to me. The prospect of close collaborations with faculties at Georgia Tech and developing tools for objective examination of welfare issues in poultry was another factor that attracted me to UGA."

Dr. Regmi will be joining the department in the position of Assistant Professor where he will drive research and teaching efforts towards precision poultry management and well-being. In particular, this entails developing intra- and inter-institution collaborations to use different sensing technologies in assessing and resolving welfare challenges in poultry. Welcome to the team, Dr. Regmi!

Ben Lorentz Joins the Department of Poultry Science as a New Staff Member

Claire Marie Coleman
 Department Communications Intern

This August, we had the pleasure of welcoming Ben Lorentz into the department as a new staff member. Lorentz is a Bioinformatics Research Professional in the Poultry Science Department. Lorentz holds a Bachelor of Science (2019) and Master of Science (2020) in Bioinformatics from Loyola University Chicago. While completing his degrees at Loyola, Lorentz worked in a microbial ecology lab examining microbial communities in freshwater ecosystems and their relationships with wastewater treatment plants. He has also completed some comparative genomics work in poultry science at The Ohio State Agricultural Research and Development Center as part of a summer internship.



Lorentz says, "I found UGA to be an impressive place of research overall, especially in Poultry Science." Here at UGA, Lorentz will be working on developing some analytical pipelines to help answer research questions related to chicken and turkey gut microbial health in poultry grown without antibiotics. We're happy to have you on the team, Ben!



Student Spotlight

This edition's student spotlight is Cierra Dunham, an outstanding fourth year double major in Avian Biology and Biological Science. Cierra says her favorite thing about her major is, "The diversity of courses offered compared to other pre-vet majors such as Animal Health and Animal Science, which don't foster such a family environment quite like my majors do so well." Alongside her academics, she is also very involved on campus. Cierra is the President of the Pre-Vet Club, a member of the One Health Club, Poultry Science Club, and Kappa Delta Sorority. She is also serving as an Avian Ambassador for the Department of Poultry Science in the College of Agricultural and Environmental Sciences. Cierra has completed several local internships through the Wildlife Treatment Crew and Large Animal Emergency Critical Care Team at UGA's Veterinary Teaching Hospital. When asked what her favorite poultry science memory thus far is, she said, "My last surgery during the POUL 3000 course! As a bonus opportunity, we got to attempt to place a water balloon in the reproductive tract of a chicken and have it laid within a hard-shelled egg. You can imagine the excitement when I cracked open an egg and along with the yolk was a small blue water balloon! I definitely shocked my friends and family when I showed them the video!" We are so pleased to have Cierra as a Bird Dawg and look forward to all she will accomplish in the future!

From Microscope to Stethoscope: UGA students pursue health careers through agricultural science programs

Josh Paine for CAES News

There's one college at the University of Georgia from which you might not expect to hear students applying to medical school — the College of Agricultural and Environmental Sciences (CAES).

But the core and elective science classes, diversity of majors and smaller classes are appealing to students who choose a pre-professional path in the college. Plus, the connections between food, animal and human health add another layer of interdisciplinary learning.

Adam Davis, associate professor in the Department of Poultry Science, teaches a reproductive endocrinology class using case studies that attracts many pre-professional students.

"It's all direct application — you're getting a description of a patient and from that you have to deduce what the problem is," said Davis. "That immediately lends itself to veterinary or medical school, so the class is full of pre-vet, pre-med and pre-dental students. It's a different style of class than they're normally used to. When they have a take-home test with five days to complete, it's a different world."

CAES alumnus and current medical student Jake Goodman credits Davis' course for preparing him for both the MCAT and medical school, saying, "The reproductive and endocrinology topics on the MCAT were my strongest due to Dr. Davis' teaching."

Goodman's degree in biological science is one of the more popular programs for pre-health students, but majors including animal science, applied biotechnology, avian biology, entomology and food science are all pre-health pathways in the college.

Grant Bennett, a sophomore avian biology student who hopes to pursue a career in medicine, enjoys the personalized attention and unique curriculum in the college.

"You stand out a whole lot more," he said. "CAES has the only undergraduate course in the whole country that does hands-on surgery through poultry science. Plus, it's really a big family. You really find a home in the College of Ag. It's full of people that care about you."

About one-third of CAES graduates surveyed by the UGA Career Center pursued graduate or professional school in 2019.

Alumni from the class are now enrolled in in-state medical programs at Augusta University, Mercer University and Emory University, as well as at the University of Michigan and University of South Florida, among

Getting into medical or veterinary school isn't an easy task, however.

"Students just think it's grades and scores, but it's more than that," said Davis. "You have to put the whole package together. I can't tell you the number of vet students who want to do a specialty but have no experience in that area. Be logical — don't just follow the herd mentality of getting good grades and scores."

"I push my students to start internships working with a doctor — getting them in clinics where they're going to see what they're getting into," he said. "The key is really to get that exposure and, if it's something they love, those hard courses like organic chemistry are easier when you have an end goal and you know what you want."

When it comes to applying, Davis urges students not to be discouraged if they aren't accepted right away. He says students who are persistent and smart about their applications will likely eventually be accepted.

"I always tell students that these schools are competitive. Figure out what you want to do and stick with that. Students think all med schools or vet schools are the same, and they're looking to do a cookie-cutter thing, and it's not that way. Target schools appropriate to what you want to do," Davis said.

Goodman learned this firsthand — he was denied from 25 schools over two application cycles, but kept applying while working part-time jobs. Now a fourth-year medical student in the Sidney Kimmel Medical College at Thomas Jefferson University, he started sharing stories about his path to medical school on social media after realizing many others were in a similar situation. The challenges he's faced resonate with many students, and he now has over 210,000 followers on TikTok.

He took a short break to pursue an MBA in the UGA Terry College of Business over the last year and realized the demand for pre-med advice while volunteering in the pre-health advising office.

"You don't have to get into med school right after undergrad," he explained. "Everyone will get there at a different pace. If you need to, take a gap year or two, do a post-baccalaureate program, or get healthcare experience. Take your time and focus on maintaining a good GPA without burning out. And take electives that you're genuinely interested in."

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 serving as the “student 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 that began in August:



Christian Albritton



Grant Bennett



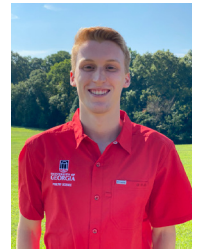
Kylie Bruce



Hayley Parker



Alyssa Rauton



Dylan Reagan



Dana Bubka



Emily Cason



Lorretta Chappell



Madison Smith



Logan Waldrop



Cory Yarbrough



Audri Crews



Whitley Dale



Sabrina Dumanowsky



Cierra Dunham



Amelia Hamil



Shakir Jones



Kyrie Miles



John Mark Palmer

Connect with us on social media!



UGA Department of Poultry Science



@ugapoultrysci



@UGApoultryscience

UGA poultry science creates high school curriculum and transfer pathway with UNG

Josh Paine for CAES News

Students interested in careers in the poultry industry will now have access to more poultry science-based resources and a new path to pursue an undergraduate degree through a transfer agreement between the University of Georgia and the University of North Georgia.

The opportunities for good-paying jobs in poultry and related industries are plentiful, with graduates receiving between one and five job offers, according to Todd Applegate, head of the UGA Department of Poultry Science in the College of Agricultural and Environmental Sciences.

“We really need young people going into poultry across the entire sector. There’s a breadth of opportunity with integrated poultry companies and also other supporting companies such as finance, feed, equipment supply, pharmaceutical, food safety/quality and more. We try to communicate these options, as well as the available managerial roles and ability to move up in leadership through various companies,” he said.

With the high demand for graduates, the department is looking to improve visibility of the industry and pathways into the industry.

A new transfer agreement with UNG — with its main campus situated in Gainesville, Georgia — builds on an existing partnership between the two universities and gives transfer students assurance that courses will transfer seamlessly.

“They don’t have to waste any time, money or stress that they don’t have to,” said Jessica Fife, outreach coordinator for UGA’s poultry science department.

“Students still have to qualify for admission to UGA as a transfer student, so it doesn’t circumvent that, but it does expedite the pathway. It’s a win-win to get the associate degree at UNG and bachelor’s at UGA,” said Applegate. “What distinguishes our program is the focus on the whole animal — it’s much more tangible to talk through the science of that. Our program touches on so many different disciplines beyond what biology may cover, such as health and disease, preventative medicine, engineering concepts and animal behavior.”

Linda Purvis, lecturer in biology at UNG, has spent almost a decade building the poultry science pathway in the associate of science degree program. She was a transfer student from UNG to UGA, where she earned her bachelor’s degree in poultry science before earning master’s and doctoral degrees from the UGA College of Veterinary Medicine.

“(Purvis is) very energetic and very passionate about poultry,” said Applegate. “She’s a good mentor for those students and helps them think about what career options look like.”

In order to reach students before college, UGA’s Department of Poultry Science has also designed a new high school introductory course into poultry science and avian biology as part of the Georgia Agriculture, Food and Natural Resources Pathways. The purpose is to establish an in-depth understanding and appreciation of Georgia’s top agricultural industry among high school students.

Approximately 168,000 Georgian jobs are connected directly or indirectly to the poultry industry, and producers in 101 counties generate more than \$1 million worth of poultry at the farm level according to UGA research.

The high school presentations and activities introduce students to terminology and basic knowledge of modern poultry science and the commercial poultry sector, including anatomy and physiology, reproduction, genetics, nutrition, conventional and alternative housing/production methods, poultry varieties, avian health, processing, marketing and more.

“There are so many applications of STEM in the poultry industry, such as machine learning and artificial intelligence. For students looking for real-world applications, I think they need those real-world applications much earlier to think about their careers. As we go into technology applications, this next generation is ready for that,” said Applegate.

Fife developed the curriculum in collaboration with UGA poultry science and agricultural leadership, education and communication faculty and Georgia Agricultural Education Curriculum and Technology Director Christa Steinkamp.

“This will be the first time Georgia will have courses dedicated solely to poultry science in a high school agriculture education course,” said Steinkamp. “Even nationally, stand-alone poultry science courses are rare. A few other states have similar high school poultry science curriculum, but there are only a few national Agriculture, Food and Natural Resources (AFNR) standards relating to poultry. This is an interesting fact, considering the role the poultry industry plays in the overall agriculture industry in Georgia and globally.”

Another set of lessons and activities developed by the department is geared toward elementary-aged students in partnership with Georgia Farm Bureau to use in elementary classrooms. They will be distributed to all of Farm Bureau’s 10 districts through the organization’s Ag in the Classroom and new Mobile Ag Classroom.

Fall 2020 Graduates

BSA Biological Science:

Alexandria Maddox
 Branden Annakie
 Sierra Cannon
 Clara Castresana
 Jae Choi
 Kati Coker
 Bishop Dancy
 Cole Demott
 Lexi Durling
 Spencer Evans
 Ryan Grady
 Dwight Griffeth
 Jordan Henson
 Melanie Jones
 Lexi Kenna
 Min Lee
 Ajeng Mahardiyanti
 Betsy Nguyen
 Chinyere Ohuoba
 Charlotte Pilcher
 Bridgette Pronesti
 Halley Psathas
 Robyn Yokoi

BSA Poultry Science:

Emily Cason
 Lorretta Chappell
 Shakir Jones
 John Palmer
 Blakeston Sowell
 Thomas Waldrop

BSA Avian Biology:

Jessica Chambers

MS Poultry Science:

Ragini Reddyvari

PHD Poultry Science:

Nour Ramadan
 Jinquan Wang
 Cassandre P. Juzaitis-Boelter



Save the Date:

December 9th Virtual HACCP Roundtable for Poultry & Meat Processors

Early 2021 International Poultry Training Series (Virtual)

January 28th and February 2nd, 4th, & 9th Salmonella & Campylobacter Control in Antibiotic Free Poultry Production Systems (10am- Noon)

For the most updated information on our conferences and events, please visit poultry.caes.uga.edu.