

The Poultry Wire

FALL 2016 EDITION

DEPARTMENT NEWSLETTER

Word From the Department Head



I have very much enjoyed meeting our alum and those directly and indirectly involved with the poultry community. For those that I haven't had the pleasure of meeting yet, I would love to hear from you. The start of the Fall semester brings new energy, as well as faces, to campus. Poultry Science is no

different with several new undergraduate and graduate students. By the numbers, we now have 76 Poultry Science/Avian Biology majors, as well as an ever growing graduate program now up to 36! It is an exciting time to be in the department.

Faculty faces will also soon be changing within the department. Dr. Beckstead moved this past summer to NC State University—Poultry Science Dept., and we send him best wishes in his new role with the Prestage Endowed Professorship. This coming January, we will be welcoming Dr. Manpreet Singh from Purdue University into the Extension Poultry Processing/Safety Specialist position, formerly held by Dr. Scott Russell. Dr. Singh has several Georgia ties already from his former graduates when he was on faculty at Auburn University-Poultry Science. We also are very thankful to administration for allowing us to move forward on advertising for two new faculty positions: Molecular Poultry Scientist and an Immunologist to add to our research expertise and to build further collaborations, particularly with our partners in PDRC and USDA/ARS in Athens.

Our staff faces are also changing with the additions of Jessica Fife (Program Coordinator) and Ivy Blackwell (Administrative Specialist), as well as professional advisors Aimee Dowd, Caitlin Dye, and Devin McLeod. These are welcome additions, as this allows us to focus on advising and mentoring our current

students, all while broadening our ability to reach out to our alum and recruit our next generation of students.

Within my first nine months at UGA-PS, I have been impressed with the passion our faculty and staff have for students (current and prospective), and making an impact with the poultry world. I have too many examples to list in the newsletter, but highlights that come to mind include our summer Avian Adventures/Academy programs to high school students and Vocational Ag./STEM teachers, Dr. Pesti leading students through France to understand food production differences in the European Union, Dr. Davis leading students through Costa Rica to understand bird adaptation mechanisms and how that relates to poultry production issues, Dr. Aggrey working on capacity building of scientists in Kenya on poultry genetics as part of his Carnegie Foundation Fellowship, Drs. Fowler and Webster's further training of poultry growers in Ghana, as well as Dr. Fairchild and Mike Czarick facilitating ventilation expertise.

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BIOSECURITY FOR THE BIRDS

By: Dr. Casey Ritz - Professor, Extension Poultry Specialist

Our University of Georgia Poultry Research Center (PRC) is a bastion of learning, research, and outreach activities. The PRC at its core is a teaching facility designed to instruct students through applied and basic research and educational activities. Implementing biosecurity procedures designed to protect our PRC poultry from the intrusion of disease organisms is a multi-faceted challenge.

- ⇒ **Many visitors, students, and service personnel who enter the PRC have no intended bird interactions while at the facility.**
- ⇒ **Faculty and staff who have routine contact with off-site poultry and other fowl can potentially compromise biosecurity efforts at the PRC.**
- ⇒ **Resident populations of Canada Geese within the vicinity of the PRC and adjacent grounds can compromise implemented biosecurity measures.**

Under the heightened disease awareness conditions with the recent Avian Influenza (AI) outbreak in the United States, a single confirmed positive test for AI at the PRC would result in the immediate depopulation of all birds at the PRC per Georgia Department of Agriculture and USDA policy and procedures. That is a potential scenario that we must avoid at all costs.

Given the complex nature of the activities at the PRC, separating the live bird growing areas from the rest of the grounds and making the entry ways into the live bird facilities as the first line of defense is our best option for disease prevention efforts. In doing so, we can help to minimize the entry of pathogens that may be present on the farm into our live bird populations.

Individual awareness of all who regularly enter the PRC for research and teaching activities is needed to help protect the

PRC as a whole, not just a given house or room of birds. We are also sending those pesky geese a message — with fireworks — which they seem to readily dislike!

Additional efforts by our department Extension faculty to assist our Georgia poultry industry began with the implementation of an Avian Influenza college website dedicated to poultry biosecurity for both the industry and small flock owners, providing a series of informational publications and web links to help with biosecurity efforts. This can be found at <http://extension.uga.edu/topics/poultry/avian-flu/>.

Two in-service webinars for county agricultural agents were conducted to update the county faculty on the potential impact of Avian Influenza, biosecurity efforts needed to protect Georgia poultry, and to introduce the collaborative efforts between UGA and the Department of Agriculture in the event of an AI outbreak within the same state.



A decision-tree questionnaire has been provided to county extension offices to enlist the help of county personnel in identifying small flock disease concerns, which can be found at <http://extension.uga.edu/topics/poultry/avian-flu/documents/Small-Flock-Decision-Guide-fillable.pdf>. The decision guide was created to serve as a common questionnaire across the state to triage sick bird calls and identify which suspected disease concerns

needed to be directed to the Georgia Avian Influenza Hotline (770/766-6850; aihotline@gapoultrylab.org)

The mobilization of the UGA Extension county delivery system to inform and empower agents to reach out to constituents in their respective counties and to prepare an effective defense against poultry disease has been a tremendous tool for Georgia in its preparations to combat Avian Influenza should it strike our state.

UGA FACULTY RETURN TO GHANA WITH APP

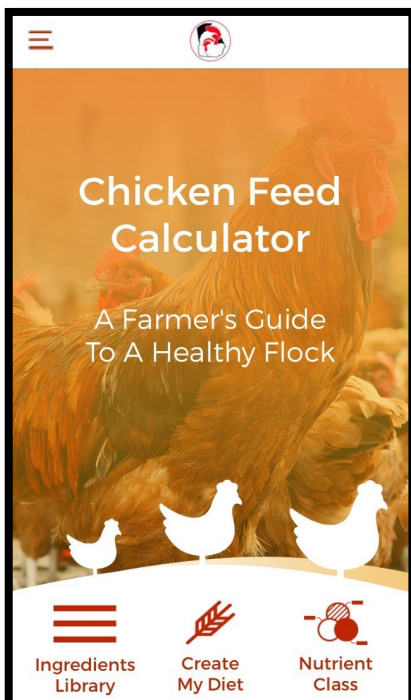
By: Dr. Justin Fowler – Assist. Professor, Extension Poultry Nutrition Specialist

Drs. Justin Fowler and Bruce Webster made a return trip to Ghana in June to complete a joint World Poultry Foundation (WPF) project to train a select group of Ghanaian poultry industry leaders and government officials in the basics of poultry management, nutrition, biosecurity, and marketing. This follow-up trip was to observe training sessions conducted by members of the Ghana National Association of Poultry Farmers who had attended the Train-the-Trainer event hosted by the WPF and UGA Poultry Science the previous year. Attendees of the 2015 training were left with presentation materials and encouraged to set up a continuing education program for the Ghanaian poultry farmers, even being able to give the presentations in the regional language. It is expected that the 30 plus Ghanaians trained in 2015 will be able to reach another 480 producers throughout Ghana.

Webster and Fowler were there this year to provide a direct evaluation, along with feedback and suggestions regarding the effectiveness of the training sessions the Ghanaians had developed. Also, they had the opportunity to visit several poultry farms and feed mills in the cities of Accra and Kumasi, an invaluable opportunity in terms of advising trainers on topics that should be given priority for future training sessions to address specifics in a Ghanaian context. Particular suggestions were noted for items such as: using closed water systems with nipple drinkers, the importance of circulation fans and insulation to the underside of metal roofs to manage heat, altering stocking density for broilers, supplying night-time feeding for layers, and pelleting feed.

Participants from the 2015 trip reported being most interested in receiving more information on nutrition and feed formulation. Farmers asked about the health of their flocks, but when asked “How much protein are they getting?” or “How much calcium do you have in the diet?” they wouldn’t know. As a result, Dr. Fowler collaborated with the same developing team that produced the “CHKMINVENT” smartphone app for Mike Czarick and Dr. Brian Fairchild to make an app that could help producers know exactly what they are feeding their birds when they are on-site mixing their own feeds. “FeedMix” is designed to allow them to enter in what they’re mixing into the feed and will give them feedback on the nutrient balance of that particular mix.

The future scope for this project will be to communicate with the Ghana National Association of Poultry Farmers to determine the most effective way for the individuals we reached with this program to be the leaders in training the other Ghanaian poultry producers, growing their industry as a sound source of food and income for their country.



UPCOMING EVENTS

Dept. of Poultry Science

- 9.27.16—Shooting Clay Event, *Elberton*
- 9.28.16—Georgia Broiler Conference, *Watkinsville*
- 9.28.16—Georgia Layer Conference, *Watkinsville*
- 9.29.16—CAES Major Madness, *Athens*
- 10.6.16—FAES Career and Internship Fair, *Athens*
- 10.11.16—Sanderson Farms Super Chicken Road show Dinner, *Athens*
- 10.14.16—Poultry Science Annual Alumni Homecoming Tailgate, *Athens*
- 10.17-20.16—Sunbelt Ag. Expo, *Moultrie*
- 1.31-2.2.17—IPPE/College Student Career Program, *Atlanta*



DR. ANDREW P. BENSON

Assistant Professor

In January, Dr. Drew Benson joined the Poultry Science Department at UGA as an Assistant Professor responsible for instructing Avian Anatomy & Physiology, Introduction to Poultry Science, and Avian Biomedical Techniques.

A Jefferson, GA native, Benson received his B.S.A. in Poultry Science from the University of Georgia, and went on to receive his Ph.D. in Poultry Science there as well.

Benson's research is focused in the area of reproductive physiology. He is currently working on determining the proteins involved in the initial interaction between sperm and the IPVL during avian fertilization with the goal of improving reproductive fitness in poultry.

We have been so fortunate to have him with us thus far and cannot wait to see all of the great things he will do in the Poultry Science Department at UGA!



NEW ADDITIONS

Exciting things are revealing themselves around the Poultry Science Department in the past several months! With the influx of changes comes new faces, and therefore new opportunities. With the addition of professional academic advisors, this allows for those three specific people to be fully dedicated to advising our close to 700 students in the department.



Aimee Dowd

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Caitlin Dye

Food Science, Biological Science Majors Last Name A-J

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Devin McLeod

Ag.Comm., Ag. Edu., Animal Health, Avian Bio., Poultry Sci.

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With these new delegations, it opened the Program Coordinator II position (previously held by Katie Chapman) to solely focus on recruitment efforts, alumni relations, communications, and website management. Jessica Fife filled this position in late August after almost two years in UGA Extension at the State 4-H Office. She can be reached at 706/542-9153 or via email at jfife@uga.edu.



Ivy Blackwell joined us just after Labor Day as our new Administrative Specialist. She comes also comes to us from within the University where she was the undergraduate coordinator for the Master of Avian Medicine Program at the Poultry Diagnostic and Research Center. You can reach her at 706/542-1337 or via email at ivyb@uga.edu.





DEPARTMENT OF POULTRY SCIENCE

Happenings and Honors

2016 Avian Academy

This is the second year that Avian Academy has been offered. It is a program to familiarize teachers with Poultry Science and the career opportunities that the poultry industry has to offer. The teachers received continuing education credit from either the FFA program or their school system for their participation. This year, we had 19 vocational agriculture teachers and three STEM teachers. The educators went through two and a half days of physiology, nutrition, processing, genetics and poultry management lectures and lab exercises. Three teaching modules (Nutrition, Incubation, and Alternative Production Systems) are being developed for these instructors and the nutrition. This nutrition module will be provided to the 2017 participants next summer. Avian Academy allows us to focus on 21 educators that will be instructing over 5,000 students combined this academic year. It is our hope that as these teachers become more familiar with the poultry industry and poultry science that they can incorporate this into their classes. The teachers also act as advisors and it is our hope that they will encourage their students to look to the poultry science department at UGA for their secondary education and the poultry industry as a career in the future.



2016 Avian Adventures

For the past nine years, the Department of Poultry Science has been conducting a summer program for high school students that are interested in Poultry Science. This year we had 14 high school students participate in the Avian Adventures program. A focus on students that had an interest in food animal poultry production and their likelihood of being accepted to UGA was used to select this year's participants. While this may have reduced the number of Avian Adventure students, this methodology should increase the return on investment in the number of students coming in as freshmen.



Honors and Awards

Nicholas M. Dale—Fellow of the Poultry Science Assoc.

Pratima Adhikari—2016-17 Phibro Animal health \$5,000 Graduate Fellowship

Roshan Adhikari—Student Research Paper Certificate of Excellence, *Effect of different levels of 20(S)-hydroxylcholesterol on osteogenic and myogenic differentiation of mesenchymal stem cells isolated from compact bones of broilers (Abstract #137)*

Jundi Liu—Student Research Paper Certificate of Excellence, *Evaluation of an encapsulated sodium butyrate on broiler performance following challenge with a nalidixic acid resistant Salmonella Typhimurium (Abstract #36)*



SUMMER INTERNSHIPS

Lindsay Brannon
Cobb-Vantress

Michael Corbin
Pilgrims

Elizabeth Davis
Pilgrims

Michael Garrett
MarJac Poultry

Garrett Hibbs
**USDA Toxicology
& Mycotoxin
Research**

Carly Marchese
Tyson

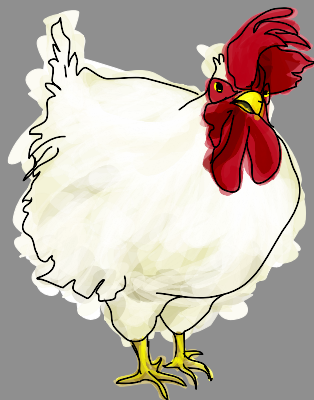
Laura McClear
Fieldale Farms

Jarred Oxford
Pilgrims

Kaleigh Payne
Koch Foods

Margaret Petree
All Things Dental Lab

Christian Walker
**Oral & Maxillofacial Surgery
Practice**



POULTRY SCIENCE CLUB

UPDATES

The Poultry Science club kicked off the 2016-2017 school year with a bang! Thus far, it has included our Back-to-School Cookout, first club meeting sponsored by Harrison Poultry, CAES Fall Kick-Off, and our second club meeting sponsored by Wayne Farms. Preparation for IPPE resume turn-in is in full swing!

This is a publication of the UGA Department of Poultry Science.

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