Media Contact: Jessica Wesson jlwesson@uark.edu 479-575-3327

Aug. 10, 2022

**New poultry science faculty member focuses on intestinal health research**

By Jessica Wesson

Center of Excellence for Poultry Science

U of A System Division of Agriculture

## Fast facts

* Danielle Graham joined CEPS on July 1
* Research will focus on poultry intestinal and gut health

(536 words)

Related photos: <https://flic.kr/p/2nAmCyr>

FAYETTEVILLE — Intestinal health is a major concern in the poultry industry to mitigate disease and avoid drug resistance.

Danielle Graham joined the Center of Excellence for Poultry Science (CEPS) and the Department of Poultry Science as an assistant professor with the University of Arkansas System Division of Agriculture on July 1. Her research will include *in vitro* and/or *in vivo* studies with various parasites, including *Histomonas meleagridis, Eimeria* spp. and *Enterococcus cecorum*.

“We plan to broaden our molecular toolbox to identify genetic polymorphisms related to drug resistance in *Eimeria* spp.,” Graham said. “There is an urgent need for research to identify methods to prevent disease and improve poultry intestinal health and welfare.”

Graham said her long-term research goal is to utilize the knowledge base and established direct challenge or horizontal (lateral) transmission models, with a primary focus on parasitic diseases, to investigate commercially applicable tools to enhance immunological protection and reduce pathogen transmission and invasion.

Graham will conduct research for the Arkansas Agricultural Experiment Station, the research arm of the Division of Agriculture. Her expertise is in poultry parasitology.

“I will be working to optimize intestinal health to prevent [intestinal] disease, with a particular emphasis on parasitic diseases affecting commercial poultry,” Graham said. “In the classroom and the lab, I plan to incorporate industry perspectives and new research findings that are pertinent to the project and/or course.”

David Caldwell, poultry science department head and director of the Center of Excellence for Poultry Science, said Graham’s research will propel the center’s work.

“Our faculty-led research programs in the areas of intestinal and gut health have been highly productive through the years, and they are valued by our colleagues in the commercial industry,” Caldwell said. “We fully expect Dr. Graham’s program will allow us to further extend our existing programs and allow us to increase our relevance in this important field for our industry stakeholders.”

Graham is not new to the University of Arkansas or the Division of Agriculture. She received her bachelor's degree in animal science in 2015, her master’s degree in poultry science in 2018 and her Ph.D. in poultry science in 2021 — all from the University of Arkansas.

Graham worked as a program associate for the Division of Agriculture from August 2018 to June 2022. She helped with research, managing/mentoring students and technicians, as well as administrative duties. She currently serves as the president of the Southern Conference of Avian Diseases and is a member of the World Poultry Science Association and the Poultry Science Association.

“I am thrilled to join the poultry science department faculty,” Graham said. “Not only is this my dream job, but it is at an institution that I hold near and dear to my heart. I am excited about new opportunities for collaboration, mentoring and teaching students, and pursuing industry-applicable research related to poultry intestinal health and parasitology.”

Starting in the fall, Graham will also teach classes through the Dale Bumpers College of Agricultural, Food and Life Sciences.

“In addition to her contributions to our research mission, we are also expecting Danielle to make impactful contributions to our teaching and outreach programs here in the Center of Excellence for Poultry Science. We are thrilled to have her on board,” Caldwell said.

To learn more about Division of Agriculture research, visit the Arkansas Agricultural Experiment Station website: <https://aaes.uada.edu/>. Follow us on Twitter at [@ArkAgResearch](https://twitter.com/ArkAgResearch).

For information about the Cooperative Extension Service, visit <https://www.uaex.uada.edu> and follow us on Twitter at [@AR\_Extension](https://twitter.com/AR_Extension).

To learn more about the Division of Agriculture, visit <https://uada.edu/>. Follow us on Twitter at [@AgInArk](https://twitter.com/AgInArk).

## About the Division of Agriculture

The University of Arkansas System Division of Agriculture’s mission is to strengthen agriculture, communities, and families by connecting trusted research to the adoption of best practices. Through the Agricultural Experiment Station and the Cooperative Extension Service, the Division of Agriculture conducts research and extension work within the nation’s historic land grant education system.

The Division of Agriculture is one of 20 entities within the University of Arkansas System. It has offices in all 75 counties in Arkansas and faculty on five system campuses.

The University of Arkansas System Division of Agriculture offers all its Extension and Research programs and services without regard to race, color, sex, gender identity, sexual orientation, national origin, religion, age, disability, marital or veteran status, genetic information, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.

# # #