Friday Notes
from
MSSTATE Poultry Science

Friday Notes – to keep you informed about noteworthy news from Poultry Science at Mississippi State...and let us hear from you as well!

Poultry Science Department News:
 Faculty, Staff, and Student Travel and Activities.

• **Makayla Minton** (undergrad research scholar with Dr. Zhai) presented her research project, “Effects of Riboflavin and Bacillus subtilis on Internal Organ Development in Ross 708 Male Broilers with or without Coccidial Challenge,” at the 2nd annual IDeA Conference on Biomedical Research in Jackson, Aug. 2; **Sabin Poudel** (MS grad student with Dr. Zhai) was a co-author on the paper.

• **Dr. Tabler** attended the Sanderson Farms summer internship presentations in Laurel, Aug. 6.

• **Drs. Adhikari, Beck, Kiess, Peebles, Wamsley, Wells, Zhai and Mrs. Christensen, Mrs. Starkey, Ms. Morgan** and **Dr. Elliott** attended the DAFVM annual summer celebration, Aug. 9.

Congratulations to...

• **Bo Zhang** (PhD grad student with Dr. Zhai) on the successful completion of his preliminary examinations for the doctoral degree and admission to candidacy, Aug. 5.

• **Chrysta Beck** (MS grad student with Dr. Kiess) on the successful defense of her Master’s thesis, Aug. 7.

• **Tomi Obe** (PhD grad student with Dr. Kiess) on the successful completion of her preliminary examinations for the doctoral degree and admission to candidacy, Aug. 8.

• **Peter Ishola** (non-thesis Master of Ag grad student with Dr. Peebles), on the successful completion of degree requirements, Aug. 8.
Cumulative List of Scientific and Extension Publications, 2019

- **Abstracts of Presentations at the IPSF, Atlanta, February 11-12, 2019; these can be accessed at [www.ippexpo.org/ispf](https://www.ippexpo.org/ispf):**
  
  
  
  - Andrew Brown*, Mark Lemons, Christopher McDaniel, Joseph Moritz, Kelley Wamsley, “Determining the average particle size (APS) consumed between two broiler strains (S) receiving diets varying in feed form (FF) and feed quality (FQ) and the subsequent impact on starter performance (0-6 and 0-18 d)”
  
  - Courtney Ennis*, Mark Jackson, Omar Gutierrez, Staci Cantley, Kelley Wamsley, “Effects of superdosing phytase and use of carbohydrase enzymes in low energy diets on 56 day male broiler performance and processing”
  
  
  - Bo Zhang*, Wei Zhai, “Effects of riboflavin on growth performance, processing yield, and internal organ development of Ross 708 male broilers”
  
  - Saman Fatemi*, Katie Elliot, Abiodun Bello, Bradley Turner, Haijun Zhang, Edgar Peebles, “Effects of the in ovo injection of vitamin D3 and 25-hydroxyvitamin D3 on immunity and small intestine morphology in broilers fed commercial or calcium and phosphorous-restricted diets”
  
  - Rosana Hirai*, Leonel Mejia, Cesar Coto, Justina Caldas, Christopher McDaniel, Kelley Wamsley, “Impact of feeding varying grower digestible lysine and energy levels to female Cobb MV × Cobb 500 broilers on 42-day growth performance and processing yield”
  
  - Katie Elliott*, Scott Branton, Jeffrey Evans, Edgar Peebles, “Early chick immunity after in ovo vaccination of F strain Mycoplasma gallisepticum and the influence of sex on the response to the vaccination”
  
  - Josie Gamble*, Claudia Castaneda, Kelley Wamsley, Christopher McDaniel, Aaron Kiess, “In ovo injected Bacillus subtilis probiotic serotypes alter broiler hatchability and intestinal microflora”
  
  - Lauren Lindsey*, Katie Elliott, Seyed Fatemi, Peter Ishola, Patrick Gerard, Edgar Peebles, “Incubational and embryonic temperature relationships in Ross 708 broiler hatching eggs”


- Xi Wang Yuhua Z Farnell Aaron S Kiess E David Peebles Kelley G S Wamsley Wei Zhai, 2019. “Effects of *Bacillus subtilis* and coccidial vaccination on cecal microbial diversity and composition of *Eimeria*-challenged male broilers,” Poultry Sci. [https://doi.org/10.3382/ps/pez096](https://doi.org/10.3382/ps/pez096)


NOTE: This manuscript is an Editor's Choice for the current issue of Poultry Science!


Tom Tabler, “Cooling chickens with sprinklers has multiple benefits,” https://poultryhealthtoday.com/cooling-chickens-with-sprinklers-has-multiple-benefits/?utm_source=Poultry+Health+Today+Newsletter&utm_campaign=b10fef64dc-AAAP_antimicrobial_stewardship_PHT_1_8_2018_COPY_0&utm_medium=email&utm_term=0_5ac605299-a-b10fef64dc-315441937


Mark E Lemons, Christopher D McDaniel, Joseph S Moritz, Kelley G S


Peebles, E. David, 2019. Presenter and panelist for “Jumpstarting the Development of the Chick” live editorial webinar. Webinar was broadcast 8:30-10:00 AM on Tuesday, March 5, 2019 to approximately 200 listeners. The editorial webinar was an online Feed (FeedNavigator) production by William Reed Business Media, Le Belem-355 rue Vendemiaire, 34000 Montpellier, France. The webinar was sponsored by DuPont Industrial Biosciences. https://www.feednavigator.com/Events/Jumpstarting-the-Development-of-the-Chick

Abstracts presented at the Reciprocal Meats Conference, Fort Collins, CO, June 23-26

- 166-REDUCTION OF SALMONELLA IN PORK TRIMMINGS
  H. C. Cobb; D. Sajeev, H. T. Thames, S. Park, S. B. White, J. M. N. Feugang, A. T. Sukumaran, T. T. N. Dinh,
• 180-EFFECTS OF ELECTROSTATIC SPRAY AND NATURAL ANTI-OXIDANTS ON CHEMICAL QUALITY OF GRASS-FINISHED BEEF STRIPS STEAKS

https://meatscience.org/docs/default-source/default-document-library/abstract-by-number.pdf?sfvrsn=ac1b15cc_0


• Abstracts presented at the 108th Annual PSA Meeting – all abstracts may be found at: https://www.poultryscience.org/psa19/docs/PSA19_Program.pdf until officially published by PSA later this summer (*, undergraduate student; **, graduate student; ***, faculty):
  - Lauren Lindsey*, Katie Elliott, Seyed Fatimi, Peter Ishola, Patrick Gerrard, and Edgar Peebles, “Effect of reduced incubational temperature on broiler post-hatch body temperatures and growth.”
  - Claudia Castañeda**, Julio Miotto, Li Zhang, Kelley Wamsley, Christopher McDaniel, and Aaron Kiess, “Impact of in ovo injected Lactobacillus species on hatchability, growth performance and broiler immune status.”
  - Jessica Wells***, Laura Downey, Tom Tabler, Kelley Wamsley and Chris McDaniel, “An environmental scan of recruitment practices in poultry science departments located in the United States.”
  - Jessica Wells***, Laura Downey, Tom Tabler, Kelley Wamsley and Chris McDaniel, “Current recruitment practices and their relationship with student numbers, graduation rates, and satisfaction within poultry science.”
  - Jessica Wells***, Laura Downey, Tom Tabler, Kelley Wamsley and Chris McDaniel, “Internal and external factors influencing poultry science student college choice.”
  - Tianmn Li**, Claudia Castañeda, Julio Miotto, Chris McDaniel, Aaron Kiess and Li Zhang, “Effects of in ovo administration on the incidence of avian pathogenic Escherichia coli (APEC) in broilers and an evaluation on the virulence and antimicrobial resistance properties of APEC.”
  - Mercedes Smith*, Alyssa Easterling, Nikhil Nuthalapati, Li Zhang, Aaron Kiess and Anuraj Theradiyil Sukumaran, “Prevalence of plasmid carried virulence..."
genes by *Escherichia coli* isolates from litter, feces, and cloacal and tracheal swabs collected from “no antibiotics ever” commercial farms.”

- **Tomi Obe**, Rama Nannapaneni, Wes Schilling, **Chris McDaniel**, and **Aaron Kiess**, “Prevalence of *Salmonella enterica* on processing equipment after sanitization procedures.”

- **Milan Sharma**, **Chris McDaniel**, **Aaron Kiess**, and **Pratima Adhikari**, “Housing environment and hen strain alter egg production, egg quality, and tibia strength, as well as eggshell and cloacal microbiology in post-peak laying hens.”

- Bishnu Adhikari, Se-Ran Jun, Young Min Kwon, **Aaron Kiess**, and **Pratima Adhikari**, “Effects of housing types on egg production and cecal microbiota of two different strains of laying hens during the late production stage.”

- **Sabin Poudel** and **Wei Zhai**, “Effects of riboflavin and *Bacillus subtilis* on growth performance of Ross 708 male broilers with or without coccidial challenge.”

- **Wei Zhai** and **Sabin Poudel**, “Effects of riboflavin and *Bacillus subtilis* on internal organ development in Ross 708 male broilers with or without coccidial challenge.”

- **Andrew Brown**, Mark Lemons, **Chris McDaniel**, Joseph Mortiz, and **Kelley Wamsley**, “Determining the relationship among average particle size consumed and gastrointestinal characteristics of two broiler strains in the starter phase.”

- **Saman Fatemi**, Katie Elliott, Abdulmohsen Alqhtani, Abiodun Bello, and **Edgar Peebles**, “Effects of the *in ovo* injection of vitamin D3 on the small intestine morphology and immunity of broilers challenged with coccidiosis.”