



## 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.***

- **Drs. Tabler, Wells, and Beck** met with the Animal Systems Extension Program Group, PO/ADS Connector, April 27.
- **Dr. Tabler** visited a Mar-Jac grower, Richton, April 28, and a Sanderson Farms grower, Tylertown, April 29, to assess management conditions
- **Dr. Wells** hosted the Senior Social for our graduating students and their families, PO/ADS Connector, April 29
- **Drs. Beck, Adhikari, Wamsley, Kiess, Peebles, Ramachandran, Zhang, Tabler, and Sukumaran**, joined by **Dr. McDaniel** and family, met with personnel from BankPlus and Peco Foods, to discuss topics of mutual interest, April 30.

#### ***Congratulations and all best wishes to our graduates, April 30, 2021!***

- Master's Degree: **Courtney Fancher** under the supervision of **Dr. Sukumaran**
- Bachelor's Degree:
 

○ Abigail Aigee	○ Emma King
○ Mason Brock	○ Richard Lopez
○ Christopher Carter	○ Caleb Marshall
○ Cassidy Catrett	○ Nathaniel Miller
○ Kelsie Daniels	○ Logan Morris
○ Farley Fondren	○ Seth Nerowski
○ Tanner Gallik	○ Robert Oakes
○ Thomas Hedge	○ Brittain Rainey
○ Crawford Hunter	○ Savannah Stapleton
○ Zachay Kennedy	

#### ***Recent Publications...***

- **Claudia D. Castañeda, Josie N. Gamble, Kelley G.S. Wamsley, Christopher D. McDaniel and Aaron S. Kiess**, "In ovo administration of *Bacillus subtilis* serotypes affect hatchability, 21-day performance, and intestinal microflora," Poultry Sci. 100:6: <https://doi.org/10.1016/j.psj.2021.101125>

**Cumulative List of Scientific and Extension Publications, 2021**

- **Claudia D. Castañeda**, Dana K. Dittoe, **Kelley G.S. Wamsley**, **Christopher D. McDaniel**, Alfred Blanch, Dorthe Sandvang, **Aaron S. Kiess**, “In ovo inoculation of an Enterococcus faecium-based product to enhance broiler hatchability, live performance, and intestinal morphology,” Poultry Sci., 2020; Vol. 99:11:6163-6172. <https://doi.org/10.1016/j.psj.2020.08.002>
- Pratik Parajuli, Yang Zhao, **Tom Tabler**, “Evaluating avoidance distance and fleeing speed of broilers exposed to aerial systems,” 2020 Int. J. Agric & Biol Eng. Vol 13:6:34 <https://ijabe.org/index.php/ijabe/article/view/5591/pdf>
- Yi Liang and **G. Tom Tabler**, “Litter management for broiler production,” U of Arkansas Extension, <https://www.uaex.edu/publications/pdf/FSA1098.pdf>

**Recent Publications and Media...****Abstracts presented at the 2021 Virtual IPSF (abstracts can be found at****[https://poultryscience.org/files/galleries/2021\\_IPSF\\_Abstracts.pdf](https://poultryscience.org/files/galleries/2021_IPSF_Abstracts.pdf)**

- **Hudson Thames**<sup>\*GS</sup>, **Courtney Fancher**, **Mary Gates Colvin**, **Mika McAnally**, **Emily Tucker**, **Nikhil Nuthalapati**, **Li Zhang**, **Aaron Kiess**, **Thu Dinh**, **Anuraj Sukumaran**, “Prevalence of Salmonella, Campylobacter, and spoilage bacteria on broiler meat at different stages of commercial poultry processing,”
- **Courtney Fancher**<sup>\*GS</sup>, **Hudson Thames**, **Mary Gates Colvin**, **Li Zhang**, **Nikhil Nuthalapati**, **Aaron Kiess**, **Anuraj Sukumaran**, “Prevalence of Clostridium perfringens in no antibiotics ever broiler farms in Mississippi”
- **Sabin Poudel**<sup>\*IGS</sup>, **Sadie White**<sup>2</sup>, **Tianmin Li**<sup>1</sup>, **Xue Zhang**<sup>2</sup>, **Aaron Kiess**<sup>1</sup>, **Li Zhang**<sup>1</sup>, “Comparison of DNA extraction methods in poultry litter and fecal samples to identify pathogenic bacteria using real-time PCR
- **Jonathan Moon**<sup>\*IGS</sup>, **Jan DuBien**<sup>1</sup>, **Reshma Ramachandran**<sup>1</sup>, **Yi Liang**<sup>2</sup>, **Tom Tabler**<sup>1</sup>, “Effect of sprinkling on water conservation, house environment, and broiler performance
- **Ishab Poudel**<sup>\*GS</sup>, **Aaron Kiess**, **Mary Beck**, **Pratima Adhikari**, “The effects of monochromatic light on the growth, egg production, egg quality, behavior, and hormone concentration of Hy-Line® W-36 laying hens
- **Victoria Williams**<sup>\*IGS</sup>, **Kelley Wamsley**<sup>1</sup>, **Kevin Roberson**<sup>2</sup>, **Pratima Adhikari**<sup>1</sup>, “Effects of varying protein/amino acid level of diets with or without protease on 30-50 wk layer performance and egg production parameters
- **Ayoub Mousstaaid**<sup>\*IGS</sup>, **William Miller**<sup>2</sup>, **Katie Elliott**<sup>1</sup>, **Saman Fatemi**<sup>1</sup>, **Abdulmohsen Alqhtani**<sup>1</sup>, **E. David Peebles**, “Effects of the in ovo and dietary administration of L-ascorbic acid (L-AA) on the concentrations of L-AA in the eyes and nitric oxide in the serum of Ross 708 broilers
- **Andrew Brown**<sup>\*IGS</sup>, **Jason Lee**<sup>2</sup>, **Kelley Wamsley**, “Determining the optimal digestible isoleucine to lysine ratio in Ross x Ross 708 male broilers from 14 to 28 days of age
- **Sabin Poudel**<sup>\*1</sup>, **Tianmin Li**<sup>1</sup>, **Mark Arick**<sup>2</sup>, **Chuan Hsu**<sup>2</sup>, **Aaron Kiess**<sup>1</sup>, **Li Zhang**<sup>1</sup>, “Comparative whole-genome analysis of Campylobacter jejuni strains isolated from retail Chicken in Mississippi”
- **Saman Fatemi**<sup>\*1</sup>, **Katie Elliott**<sup>1</sup>, **April Levy**<sup>2</sup>, **Abdulmohsen Alqhtani**<sup>1</sup>, **Ayoub Mousstaaid**<sup>1</sup>, **David Peebles**, “Negative impact of a disproportionately high level of dietary 25-hydroxyvitamin D3 on the performance and meat yield of Ross 708 broilers
- **Tianmin Li**<sup>\*IGS</sup>, **Anuraj Theradiyil Sukumaran**<sup>1</sup>, **Wen-Hsing Cheng**<sup>2</sup>, **Aaron Kiess**<sup>1</sup>, **Li Zhang**, “Phenotypic and genotypic antimicrobial resistance characteristics of avian pathogenic Escherichia coli isolated from broilers
- **Reshma Ramachandran**<sup>\*</sup>, **Chuan-Yu Hsu**, **Anuraj Theradiyil Sukumaran**, **Li Zhang**, “Validation of probe-based multiplex real-time PCR assays for the rapid and accurate detection of avian pathogenic Escherichia coli
- **Nathaniel Miller**<sup>\*1UG</sup>, **Ayoub Mousstaaid**<sup>1</sup>, **Barr Oakes**<sup>1</sup>, **Seyed Fatemi**<sup>1</sup>, **Abdulmohsen Alqhtani**<sup>1</sup>, **Katie Elliott**<sup>1</sup>, **William Miller**<sup>2</sup>, **Patrick Gerards**<sup>3</sup>, **E. Peebles**, “The effects of supplementary in ovo and dietary vitamin C on broiler performance through 2 weeks posthatch”
- **Tom Tabler**, “Cooling Poultry Flocks During Hot Weather,” <https://m.info.boehringer-ingelheim.ca/webApp/TheFeedMar2021#colleague-commentary>
- **Xiao Yang**, **Yang Zhao**, **Hairong Qi**, and **Tom Tabler**, “Characterizing sounds of different sources in a commercial broiler house,” *Animals* 2021, <https://doi.org/10.3390/ani11030916>
- **Tom Tabler**, **Yi Liang**, **Jessica Wells**, and **Jonathan Moon**, “Broiler Litter Production and Nutrient Content Characteristics,” [http://extension.msstate.edu/sites/default/files/publications/publications/P3601\\_web.pdf](http://extension.msstate.edu/sites/default/files/publications/publications/P3601_web.pdf)

- Bonnie Coblenz, “Plan well before starting a backyard chicken flock,” Feature Story with **Tom Tabler**: <http://extension.msstate.edu/news/feature-story/2021/plan-well-starting-backyard-chicken-flock>