



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.

- **Dr. Tabler** served on a panel, “Livestock and Forestry Outlook,” at the 2021 Virtual Agricultural Outlook Conference, Jan. 14.
- **Drs. Beck and Tabler** attended the virtual MS Farm Bureau Federation’s Winter Commodity Conference, Jan. 19.
- **Dr. Tabler** visited a Sanderson Farms broiler grower, Tylertown, Jan 21.
- **Dr. Tabler** participated in the monthly virtual USDA Broiler Group Meeting, Jan. 28
- The following faculty and staff participated in the recent **2021 Virtual International Poultry Scientific Forum (IPSF), January 25-26:**
 - All faculty attended and participated
 - **Drs. Ramachandran, Sukumaran, Wamsley** moderated Zoom sessions
 - **Drs. Adhikari, Nuthalapati, Zhang** served as oral and poster judges
 - **Dr. Beck** coordinated the scientific program and served as Executive Secretary of the Southern Poultry Science Society (SPSS), the main organizer of the meeting; and participated in the Business Meeting of the Society

Kudos and Congratulations to...the following grad students who won Awards of Excellence for their presentations (listed below) at the 2021 Virtual IPSF held at the annual meeting of the Southern Poultry Science Society:

- **Hudson Thames** (MS Grad Student with **Dr. Sukumaran**)
- **Victoria Williams** (MS Grad Student with **Dr. Adhikari**)
- **Jonathan Moon** (MS Grad Student with **Dr. Tabler**)

Recent Publications and Media...

Abstracts presented at the 2021 Virtual IPSF:

- **Hudson Thames**^{*GS}, **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**^{*GS}, **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**^{*1GS}, **Sadie White**², **Tianmin Li**, **Xue Zhang**², **Aaron Kiess**¹, **Li Zhang**¹, “Comparison of DNA extraction methods in poultry litter and fecal samples to identify pathogenic bacteria using real-time PCR
- **Jonathan Moon**^{*1GS}, **Jan DuBien**¹, **Reshma Ramachandran**¹, **Yi Liang**², **Tom Tabler**¹, “Effect of sprinkling on water conservation, house environment, and broiler performance
- **Ishab Poudel**^{*GS}, **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**^{*1GS}, **Kelley Wamsley**¹, **Kevin Roberson**², **Pratima Adhikari**¹, “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^{*1GS}, William Miller², Katie Elliott¹, Saman Fatemi¹, Abdulmohsen Alqhtani¹, 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^{*1GS}, Jason Lee², 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^{*1}, Tianmin Li**, Mark Arick², Chuan Hsu², **Aaron Kiess¹, Li Zhang¹**. “Comparative whole-genome analysis of Campylobacter jejuni strains isolated from retail Chicken in Mississippi”
- **Saman Fatemi^{*1}, Katie Elliott¹**, April Levy², Abdulmohsen Alqhtani¹, **Ayoub Mousstaaid¹, David Peebles**, “Negative impact of a disproportionally high level of dietary 25-hydroxyvitamin D3 on the performance and meat yield of Ross 708 broilers
- **Tianmin Li^{*1GS}, Anuraj Theradiyil Sukumaran¹**, Wen-Hsing Cheng², **Aaron Kiess¹, Li Zhang**, “Phenotypic and genotypic antimicrobial resistance characteristics of avian pathogenic Escherichia coli isolated from broilers
- **Reshma Ramachandran^{*}, 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^{*1UG}, Ayoub Mousstaaid¹, Barr Oakes¹, Seyed Fatemi¹**, Abdulmohsen Alqhtani¹, **Katie Elliott¹**, William Miller², Patrick Gerard³, **E. Peebles**. “The effects of supplementary in ovo and dietary vitamin C on broiler performance through 2 weeks posthatch”

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>