



## 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. Beck** participated in a CALS Dean's retreat at Prairie Wildlife Center with other department and R&E Center heads to discuss strategic initiatives for the College, April 30.
- **Mrs. Wells** took incubators to Richland Elementary School for the Hatch-out Program, April 30-May 4.
- **Dr. Tabler** met with a new Peco grower, May 2.
- **Mrs. Wells** and **Dr. Beck** met with the CALS Dean's office to discuss a curricular agreement with Alcorn State University, May 2.
- **Dr. Beck** participated in a video conference with the Poultry Advisory Team at the University of Nebraska-Lincoln, May 3.
- **Mrs. Wells** attended a 4-H briefing meeting, May 3.
- **Dr. Tabler** visited two Mar-Jac farms at Leakesville and Neely to collect water samples, May 4.
- **Drs. Zhai** and **Beck** and **Mrs. Wells** attended Commencement, May 4.
- **Dr. Tabler** conducted paw and gait scores for USDA, May 8.
- **Dr. Tabler** participated in a Sanderson Farms grower meeting in Collins, May 9.
- **Mrs. Wells** took incubators to Ridgeland Elementary School for the Hatch-out Program, May 14-18.
- **Mrs. Wells** met with prospective students, May 15.
- **Mrs. Christensen** and **Mrs. Starkey** assisted with the Poultry Management School at MSU; **Mrs. Wells** cooked chicken for the PMS lunch; **Dr. McDaniel** presented the Poultry Science Department update, May 16-17.
- **Mrs. Wells** held a transfer student orientation session May 21 and a summer orientation session May 30.
- **Mrs. Wells** held a 4-H youth practice session, May 24.
- **Drs. Beck, Kiess, Tabler** and **Wamsley** led a study abroad trip to New Zealand, May 10-29. Students participating were **Andrew Brown** (MS grad student with **Dr. Wamsley**); poultry undergrads **Tiffani Allen, Blake Campbell, Tanner Gallik, Josie Gamble, Caleb Woods**; and Millie Aldridge, Hannah Irwin, Liv Kane, and Haley Zetterholm.
  - **Drs. Kiess** and **Wamsley** presented invited talks at the XXth Massey University Poultry Industry Conference, May 15.
    - **Kiess: *In ovo delivery of probiotics: A novel strategy to the antibiotic dilemma***

- **Wamsley:** *Determining optimum broiler starter particle size*
- Poultry visits in New Zealand:
  - Henergy Cage-Free Hens, Ltd.
  - Massey University
  - Tegel Foods – free range broiler farm and processing plant
  - Poultry Industry Association of New Zealand
  - MainFeeds feed mill, Auckland
  - The Chook Farm
- Other events:
  - Cultural overnight at the Whakarewarewa Maori Living History Village and Marae, Rotorua
  - Sightseeing in Wellington, Rotorua, Auckland, Whangarei
  - Visit to Weta Cave (special effects studio, Wellington), Hobbiton at MataMata, Native Bird Recovery Center at Whangarei, Treaty Grounds at Waitangi
- **Dr. Tabler** visited a Mar-Jac breeder farm at Okolona to take light meter readings, June 1.
- **Mrs. Wells, Mrs. Christensen, and Mrs. Starkey**, assisted by grad students **Mark Lemons, Rosana Hirai, and Courtney Ennis**, hosted the 4-H Club Congress poultry contest, May 30-June 1.

***Congratulations to...our recent graduates:***

- **Dr. Xi Wang**, PhD student with **Dr. Zhai**
- **Chrysta Beck**, continuing in an MS program with **Dr. Kiess**
- **Michael Ty Fulton**, continuing in an MS program with **Dr. Adhikari**
- **Roderick Nicholson, Abigail Case, and David Scott Maw**, who are finalizing career options currently

### ***Cumulative List of Scientific and Extension Publications, 2018***

New at end of 2017:

- **DK Dittoe, CD McDaniel, T. Tabler and AS Kiess**, 2017. Windrowing poultry litter after a broiler house has been sprinkled with water. J of Appl. Poult. Res. <http://dx.doi.org/10.3382/japr/pfx034>
- F. Dustan Clark, Douglas Aldridge, **Tom Tabler**, and Jon Moyle, Poultry Farm Winterization Suggestions, Dec. 2017. [https://poultry-science.uark.edu/\\_resources/PDFs/AvianAdvice\\_December2017.pdf](https://poultry-science.uark.edu/_resources/PDFs/AvianAdvice_December2017.pdf)
- ***Abstracts of the following presentations at the International Poultry Scientific Forum, Atlanta, GA, Jan 29-30 are available at:***  
<http://www.ippexpo.org/ipsf/docs/IPSF-Abstract-Book.pdf>
  - ***Undergraduate Student Presentations at IPSF, Atlanta, GA, Jan 29***
    - **Tiffani Allen\***, **Aaron Kiess**, **Christopher McDaniel** Broiler hatchability following in ovo injection of *Lactobacillus animalis* or *Bacillus licheniformis*
    - **Chrysta Beck\***, **Kelley Wamsley**, **Christopher McDaniel**, **Aaron Kiess** 21 day broiler performance after in ovo injection of individual or multiple probiotic bacteria
  - ***Graduate Student Presentations at IPSF, Atlanta, GA, Jan 29***
    - **Reshma Ramachandran\***, **Christopher McDaniel**, Live pigeon pox virus increases parthenogenesis of in vitro cultured Chinese painted quail eggs
    - **Reshma Ramachandran\***, Midian Nascimento dos Santos, **Christopher McDaniel** Live pigeon pox virus vaccination increases parthenogen size in virgin Chinese painted quail (*Coturnix chinensis*)
    - **Andrew Brown\***, Omar Gutierrez, **Mark Lemons**, Staci Loop, **Kelley Wamsley** Effects of energy density and enzyme inclusion strategy on 0-60 d Ross x Ross 708 male broiler performance, foot pad dermatitis, woody breast severity, and breast yield.
    - **Courtney Ennis\***, **Kelley Wamsley** Growth performance and amino acid digestibility coefficients of broilers fed vegetarian versus conventional diets reared in a research and commercial setting during a 62 day grow-out
      - ***Note: Courtney received an Award of Excellence for scientific content and quality of presentation for her poster presentation.***
    - **Rosana Hirai\***, Leonel Mejia, Cesar Coto, Justina Caldas, **Christopher McDaniel**, **Kelley Wamsley** Determining the digestible lysine requirement of Cobb MV Å~ Cobb 500 male broilers during the first fourteen days of age
    - **Rosana Hirai\***, Leonel Mejia, Cesar Coto, Justina Caldas, **Christopher McDaniel**, **Kelley Wamsley** The impact of feeding varying starter digestible lysine levels to Cobb MV Å~ Cobb 500 male broilers on growth performance and processing yields
    - **Saman Fatemi\***, **Katie Collins Elliott**, Abiodun Bello, **Oluwaseun Durojaye**, Haijun Zhang, Bradley Turner, **E. David Peebles** Effects of in ovo-injected vitamin D3 sources on eggshell temperature and the early post-hatch performance of Ross 708 broilers

- **Seyed Fatemi\***, Haijun Zhang, **Katie Elliott**, **Oluwaseun Durojaye**, **E.David Peebles** Effects of in ovo injection of L-ascorbic acid on early growth performance and systemic antioxidant capacity in broiler chickens
- **Abdulmohsen Alqhtani\***, **Tomi Obe**, **Christopher McDaniel**, **Aaron Kiess** Identifying new antimicrobials that may improve broiler litter quality
- **Bo Zhang\***, **Kacey O'Donnell**, **Xi Wang**, **Wei Zhai** Effects of antibiotics and probiotic additives on the intestinal morphology of d 28 male broilers
- **Kacey O'Donnell\***, **Wei Zhai** Effects of Eimeria challenges and dietary additives on mortality and growth performance of broilers
  - *Note: Kacey received an Award of Excellence for scientific content and quality of presentation for her oral presentation*
- **Claudia Castaneda\***, **Dana Dittoe**, **Kelley Wamsley**, **Christopher McDaniel**, Alfred Blanch, Dorthe Sandvang, **Aaron Kiess** Discovering the optimal concentration of Gallipro Hatch® that enhances broiler hatchability and live performance
- **Dana Dittoe\***, **Claudia Castaneda**, **Kelley Wamsley**, **Chris McDaniel**, Alfred Blanch, Dorthe Sandvang, **Aaron Kiess** Changes to the gastrointestinal tract and yolk sac of broilers previously in ovo injected with different concentrations of Gallipro Hatch®
- **Faculty Presentations at IPSE, Atlanta, GA, Jan 29**
  - **Katie Elliott**, Scott Branton, Jeffrey Evans, Spencer Leigh, Elizabeth Kim, Hammed Olanrewaju, Gregory Pharr, Sharon Heins-Miller, Donald McIntyre, Hillary Pavlidis, **Edgar Peebles\*** Production and humoral immune effects of dietary Original XPC in layer pullets challenged with Mycoplasma gallisepticum
  - **E. Peebles\***, Hammed Olanrewaju, Scott Branton, Jeffrey Evans, Spencer Leigh, Elizabeth Kim, Gregory Pharr, **Katie Elliott** Blood variables of commercial egg-laying pullets following a field-strain Mycoplasma gallisepticum challenge
- **MN dos Santos**, **R Ramachandran**, **AS Kiess**, **KGS Wamsley**, **CD McDaniel**, 2018. Impact of in vitro inoculation and dietary supplementation with Bacillus subtilis on sperm quality of aged White Leghorn roosters, J. of Appl. Poult. Res. <https://doi.org/10.3382/japr/pfx072>
- **Reshma Ramachandran** and **CD McDaniel**, Parthogenesis in birds: A review. Reproduction, The Journal of the Society for Reproduction and Fertility. Advance Publication. 19 March 2018. <http://dx.doi.org/10.1530/REP-17-0728>; <http://www.reproduction-online.org/content/early/2018/03/19/REP-17-0728.full.pdf+html>
- **Tom Tabler**, **Jessica Wells** and Nikki Jefcoat, "Infectious Bursal Disease (Gumboro) in Backyard Chickens," Publication 3211 (**POD-04-18**) [http://extension.msstate.edu/sites/default/files/publications/publications/P3211\\_wellb.pdf](http://extension.msstate.edu/sites/default/files/publications/publications/P3211_wellb.pdf)
- **Tom Tabler**, Jonathan R. Moyle, F. Dustan Clark, Yi Liang, and **Jessica Wells**, "Setback Distances for Poultry Houses," Publication 3209 (POD-03-18). [http://extension.msstate.edu/sites/default/files/publications/publications/P3209\\_wellb.pdf](http://extension.msstate.edu/sites/default/files/publications/publications/P3209_wellb.pdf)
- **Tom Tabler**, "Practice Makes Perfect – Backyard biosecurity critical to flock health," <http://www.chickenwhisperermagazine.com/articles/practice-makes-perfect->

[backyard-biosecurity-critical-flock-health](#). April 2, 2018

- **Tom Tabler**, *“Proper water pressure, volume essential to good flock performance,”* <http://www.thepoultrysite.com/articles/3787/proper-water-pressure-volume-essential-to-good-flock-performance/>. April 3, 2018.