

2024 North Central Avian Disease Conference

Tuesday, April 16th

7:00 – 8:00

Registration and Breakfast

8:00 – 8:10

Introduction and Welcome Address

Tim Johnson, Program Chair and Dr. Carol Cardona, Professor and Pomeroy Chair, University of Minnesota

Student Competition

8:10 – 8:50

Invited presentation: *Overview of poultry immunology*

Dr. Mike Kogut, USDA-ARS

8:50 – 9:05

Student competition: *Evidence of non-pathogenic Avibacterium paragallinarum circulating in the North Central region confirmed by a novel differential duplex real-time PCR*

Mostafa Shelkamy, Iowa State University

9:05 – 9:20

Student competition: *Optimization of isolation methods and development of an enzyme-linked immunosorbent assay for detection and differentiation of Avibacterium paragallinarum*

Mariela Srednik, Iowa State University

9:20 – 9:35

Student competition: *Development of turkey reovirus specific ELISA*

Khaled Abosria, South Dakota State University

9:35 – 9:50

Student competition: *Establishment of turkey oviduct epithelial organoids as an in vitro model for avian influenza research*

Pitchaya Santativongchai, University of Minnesota

9:50 – 10:10

Break

10:10 – 10:50

Invited presentation: *APEC: a look back*

Lisa Nolan, University of Georgia

10:50 – 11:05

Student competition: *Decoding the Debut of Avian Metapneumovirus subtype B in the USA: Isolation, Characterization, and Genomic Insights*

Sumit Jangra, South Dakota State University

11:05 – 11:20

Student competition: *Validation of non-invasive sampling as a diagnostic tool for early detection and screening of avian reovirus in turkey flocks*

Mohamed Selim, South Dakota State University

11:20 – 11:35

Student competition: *In vitro assays translate to in vivo cecal colonization and liver dissemination of Salmonella enterica Infantis strains in broiler chickens*

- Dhananjai Muringattu, University of Minnesota
- 11:35 – 11:50 Student competition: *Determining the potential of Propionibacterium freudenreichii postbiotics as a broad-spectrum viral interference strategy*
Amritha Ajayan, University of Minnesota
- 11:50 – 12:05 *Developing an undergraduate experiential learning program in sustainable poultry production – a student learning abroad experience*
Peter Bina, University of Minnesota
- 12:05 – 1:05 **Lunch (Sponsored by Alltech)**
Presentation by Alltech during lunch: Mycotoxins as an emerging disease for poultry production
Alexandra Weaver, Brad Rortvedt, **Dulmelis Sandu**, Alltech

Emerging Issues

- 1:05 – 1:45 Invited presentation: *Campylobacter hepaticus, an emerging issue in poultry*
Catherine Logue, University of Georgia
- 1:45 – 2:00 Case Study competition: *What is it? Found three infections from a flock. A case of heavy respiratory disease in 8 weeks old turkey poults*
Valerie Kim, Iowa State University
- 2:00 – 2:15 Case Study competition: *Hypophosphatemic Rickets in Breeder Pullets*
Alexander Strauch, Four Start Veterinary Service
- 2:15 – 2:30 *Determining Virulence of Enterococcus faecalis Isolates from Commercial Poultry*
Donald Reynolds, University of Nebraska
- 2:30 – 2:45 *Does persistence occur with commercial Salmonella vaccines?*
Tim Johnson, University of Minnesota
- 2:45 – 3:05 **Break**
- 3:05 – 3:45 Invited presentation: *Sustainability in poultry production*
Michelle Kromm and Erin Cortus, Food Forward LLC and University of Minnesota
- 3:45 – 4:00 *Avian Metapneumovirus; Yet Another Emerging Poultry Disease in the US*
Mohamed El-Gazzar, Iowa State University
- 4:00 – 4:15 *Emerging variants of turkey coronavirus associated with 2023 outbreaks*
Muhammad Luqman, South Dakota State University

4:15 – 4:30

*trevoDB: A Comprehensive Resource for Turkey Orthoreovirus
Classification and Comparative Analysis*

Naveen Duhan, South Dakota State University

4:30 – 5:00

Business meeting

Wednesday, April 17th

7:30 – 8:30 **Breakfast**

Emerging Industry Issues

- 8:30 – 9:10 Invited presentation: *Update on poultry diseases in the field*
Steven Clark, Huvepharma
- 9:10 – 9:25 *Assessing the risk and securely moving duck hatching eggs out of an HPAI*
Sylvia Wanzala-Martin, University of Minnesota
- 9:25 – 9:40 *Experiences with Avian Metapneumovirus Type B*
Molly Parker, Select Genetics
- 9:40 – 9:55 *Environmental sampling on Highly Pathogenic Avian Influenza infected commercial turkey farms, from 2022 through 2023*
Carrie Cremers, Jennie-O Turkey Store
- 9:55 – 10:15 **Break**
- 10:15 – 10:45 Hot Topic Discussion: *Messaging and action during emerging issues (HPAI in goats and cows)*
Panel Discussion
- 10:45 – 11:00 *Egg Drop Syndrome Disease Containment in Northeast Indiana: 2024 Update*
John Schleifer and Eric Gingerich, Devenish and Diamond V
- 11:00 – 11:15 *Learning what you can in an outbreak control area*
Rosemary Marusak, University of Minnesota
- 11:15 – 11:30 *Field Vaccination in Layers – What are we seeing out there and how can we improve?*
Fernando Ruiz-Jimenez, Zoetis
- 11:30 – 11:45 *The most urgent need for poultry industry – approved efficacious drugs*
Dan Karunakaran
- 11:45 – 12:00 *Histomoniasis preventing strategies – Thinking out of the box!*
Bertrand Medina, Probiotech International
- 12:00 – 1:00 **Awards Ceremony / Lunch (Sponsored by Alltech) / and Adjourn**