

71st North Central Avian Disease Conference

March 16th – 17th, 2020

Minneapolis Convention Center

Minneapolis, Minnesota

Monday, March 16th

7:00 – 7:45

Registration and Breakfast

7:45 – 8:00

Introduction and Welcome Address

*Mohamed El-Gazzar, Program Chair and
Rodger Main, Director of Veterinary Diagnostic Laboratory,
Iowa State University*

#Key Note Speaker

^Invited Speaker

*Student Competition

**Case Study Competition

Submitted Presentation

Symposium: Genotyping vs Phenotyping

Moderator:

Mohamed El-Gazzar

8:00 – 8:30

#**Genotyping and Phenotyping: Distinction and Their Associations**

Chang-Won Lee, The Ohio State University

8:30 – 9:00

^**Identification of Molecular Determinants that influence Virulence, Tissue Tropism, Transmission Potential, and Genetic Diversity of Turkey Reoviruses**

Sunil Mor, University of Minnesota

9:00 – 9:30

^**Pathotyping and Serotyping of Avian Reoviruses Associated with Viral Arthritis/Tenosynovitis**

Milos Markis, AviServe LLC

9:30 – 9:45

Break

9:45 – 10:15

^**Avian Mycoplasma Strain Sequence Typing: What's New? What Does It Mean?**

Mostafa Ghanem, University of Maryland

10:15 – 10:45

^**Genotype and Phenotype Inferences of North America Infectious Laryngotracheitis Virus Strains**

Maricarmen García, University of Georgia

10:45 – 11:15

^**Genotyping Panel Discussion**

5 speakers from the first session

11:15 – 11:30 **Lunch (Sponsored by Alltech)**
Moderator: *Geoff Lossie*

11:30 – 12:15 **Alltech presentation**
Optimizing the Role of Feed Additives to Control Pathogens and Achieve Food Safety
Daniel Graugnard, Alltech, Inc.

Avian Virology Session
(*Student Presentations Competition and **Case Study Competition)
Moderator: *Don Reynolds*

12:15 – 12:30 ***Differential Pathogenesis of Turkey Reoviruses Associated with Arthritis, Enteritis and Hepatitis**
Rahul Kumar, University of Minnesota

12:30 – 12:45 **Pathogenesis of Viral Arthritis/Tenosynovitis in Turkeys: Age-Associated Susceptibility to Disease, Development of Lesions, and Reovirus Persistence and Transmission**
Milos Markis, AviServe LLC

12:45 – 1:00 ***Exploiting the Genomic Characteristics of Elite Interferon-Inducing Influenza Viruses to Engineer Next-Generation Live Vaccines**
Amir Ghorbani, The Ohio State University

1:00 – 1:15 ****Non-Specific Enteropathy Syndrome in Commercial Turkey Poults**
Elizabeth Beilke, West Liberty Foods

1:15 – 1:30 **Break**

Avian Bacteriology Session
(*Student Presentations Competition and **Case Study Competition)
Moderator: *Tim Johnson*

1:30 – 1:45 ***Development of Core Genome Multilocus Sequence Typing Scheme (cgMLST) for *Ornithobacterium rhinotracheale***
Amro Hashish, Iowa State University

1:45 – 2:00 ***Likely Tissue Sources in Market-Age Turkeys Responsible for *Salmonella Reading* Contamination at Processing**
Aaron Ashcraft, University of Arkansas

2:00 – 2:15 ****Decrease in Hatchability of Pheasant Eggs Associated with *Enterococcus faecalis***
Donald Reynolds, University of Nebraska

2:15 – 2:30 ****A Series Suspect Vitamin E Deficiency Submissions**
Kristen Hill-Thimmesch, Purdue University

2:30 – 2:45 ****An Interesting Case of Caseous Sinusitis in Ring-Necked Pheasants**
Geoffrey Lossie, Purdue University

2:45 – 3:00 **Break**

Biosecurity Session

(***Student Presentations Competition** and ****Case Study Competition**)

Moderator: *Rosemary Murasak*

3:00 – 3:30 **#Biosecurity Concepts and Approach**
Derald Holtkamp, Iowa State University

3:30 – 3:45 **An Application of Carrying Agent Entry Events Assessment of a Layer Operation**
Kelly Hewitt, Iowa State University

3:45 – 4:00 ***The Use of Drone Technologies to Aid in Site Specific Biosecurity Mapping, Grower Education, and Disease Outbreak Response**
Caley Ellington, Lincoln Premium Poultry

Newcastle Disease Session

(****Case Study Competition**)

Moderator: *Chang-Won Lee*

4:00 – 4:30 **^Research Update for Southeast Poultry Research Laboratory**
David Suarez, SEPRL, USDA ARS

4:30 – 4:45 ****Response of Turkeys to Live Newcastle Disease Vaccine**
Jill Nezworski, Blue House Veterinary LLC

4:45 – 5:00 ****Inadequate and Late Immunity Against Newcastle Disease in Turkey Flocks**
Saad Gharaibeh, University of Minnesota

5:00 – 5:15 **Combining Social Sciences and Disease Modeling to Respond to the vND Outbreak in Southern California**
Maurice Pitesky, University of California Davis

5:15 – 5:45 **NCADC Business Meeting**

5:45 – 6:00 **Social**
6:00 **Awards Dinner**

(Sponsored by Maple Leaf Farms and Alltech)

Tuesday, March 17th

7:00 – 8:00 **Breakfast**

Layer Health Session

Moderator: *Dan Shaw*

8:00 – 8:30 **^Infectious Coryza in Pennsylvania**

Sherrill Davison, University of Pennsylvania

8:30 – 9:00 **^Infectious Coryza in the West Coast: Persistence, Genotyping and Vaccine Efficacy**

Rodrigo Gallardo, University of California Davis

9:00 – 9:15 **Runting and Stunting Syndrome in a Flock of Commercial Brown Layers**

Jim Stockam, Merck Animal Health

9:15 – 9:30 **Is Avian Pathogenic *E. coli* a Foodborne Pathogen? Evidence vs. Speculation**

Tim Johnson, University of Minnesota

9:30 – 9:45 **Effect of Electrostatic Aspersions of a Novel Silane Quaternary Ammonium Compound (sQAC) on Hatchability and Chick Quality**

Ivan Alvarado, Merck Animal Health

9:45 – 10:00 **Efficacy and Safety of a New Vaccine Using Siderophore Receptors and Porin (SRP) Proteins in Decreasing Colonization of *Salmonella Enteritidis* in Chickens**

D. Domingo, Epitopix LLC

10:00 – 10:15 **Break**

Turkey Health Session

Moderator: *Elizabeth Beilke*

10:15 – 10:35 **^Historical Trends of Turkey Diseases: The Turkey Industry Annual Report**

Steven Clark, Devenish Nutrition, LLC

10:35 – 10:55 **^Utility of Turkey Health Screening Data**

David Rives, Zoetis

10:55 – 11:10 **Using Machine Learning Based Approaches to Explore Predictions in Poultry Production**

Maurice Pitesky, University of California Davis

11:10 – 11:25 **A Perspective on the Role of Turkey *Eimeria* Vaccines and Anti-Coccidials in Today's Industry**

Lisa Beilke, The Ohio State University

- 11:25 – 11:40 **16s Phylogenomic Analysis of Environmental and Tissue Microbiota for Correlating Management Strategies Related to Incidence of Clostridial Dermatitis in Turkeys**
Yuko Sato, Iowa State University
- 11:40 – 11:55 **Recombinant Pichinde Virus Vector Vaccine for Turkey Arthritis Reovirus**
Tamer Sharaf Eldin, University of Minnesota
- 11:55 – 12:10 **Live *Salmonella Typhimurium* Vaccination of Turkeys Results in Cross Protection Against a Salmonella Reading Isolate**
Manuel Da Costa, Zoetis
- 12:10 – 12:25 **Spiked Mortality in Young Poults Caused by Reovirus Hepatitis**
Saad Gharaibeh, University of Minnesota
- 12:25 Closing Remarks and Adjourn