

# Sunday, July 31, 2022

Topic	Avian Influenza	Enteric Health
Moderator		
8:00 AM	<p><b>Session Keynote: Global Evolution and Intercontinental Spread of H5Nx clade 2344b High Pathogenicity Avian Influenza Viruses since 2020</b></p> <p>David Swayne, <i>US Department of Agriculture</i></p>	<p><b>Comparison of Antimicrobial Susceptibility Testing of Clostridium perfringens by the Agar Dilution and the Broth Microdilution Methods</b></p> <p>Martine Boulianne, <i>Université de Montréal</i></p>
8:15 AM		<p><b>Natural Prevention of Coccidiosis and Necrotic Enteritis in Experimentally Infected Broilers and Analysis of Gene Expression in Intestinal Tissue Samples</b></p> <p>Julia Pie, <i>BIOVET S.A.</i></p>
8:30 AM	<p><b>Evaluation of Licensed and In-House Vaccines Against Recent H5 Low Pathogenicity Avian Influenza viruses</b></p> <p>Miria Criado, <i>University of Georgia</i></p>	<p><b>Effect of A Feed Sanitizer on The Control of Necrotic Enteritis in Broilers</b></p> <p>Enrique Montiel, <i>Anitox Corporation</i></p>
8:45 AM	<p><b>Effect of co-infection of low pathogenic avian influenza H9N2 virus and Avian pathogenic E. coli on H9N2 vaccinated commercial broiler chickens.</b></p> <p>Wael Elfeil, <i>Suez Canal University</i></p>	<p><b>Experiences using a Recombinant Attenuated Salmonella Vaccine to control Necrotic Enteritis in Commercial Broilers</b></p> <p>Andrea Zedek, <i>Huvepharma</i></p>
9:00 AM	<p><b>Development and Characterization of a Non-transmissible H5N2 Live Attenuated Avian Influenza Virus Vaccine Based on Altered Viral M2/M42 Ion Channel Expression That Protects Against Highly Pathogenic Virus Challenge</b></p> <p>Darrell Kapczynski, <i>USDA-ARS-Southeast Poultry Research Laboratory, Athens, Ga</i></p>	<p><b>Beneficial effects of tea extract and cinnamon oil on avian coccidiosis</b></p> <p>Inkyung Park, <i>USDA-ARS</i></p>
9:15 AM	<p><b>Phylogenetic analysis of H5N1 clade 2.3.4.4b HPAI viruses in wild birds and poultry in US in 2022</b></p> <p>Sungsu Youk, <i>U.S. National Poultry Research Center, ARS-USDA</i></p>	<p><b>The impact of Salmonella Typhimurium and coccidiosis vaccine on microbiome and intestinal integrity markers in broiler chickens</b></p> <p>Andrea Pietruska, <i>Auburn University</i></p>
9:30 AM	<p><b>Investigation of a Low Path Influenza Outbreak on a Turkey Breeder Farm</b></p> <p>Marion Garcia, <i>Hybrid Turkeys</i></p>	<p><b>Differential Analysis of Jejunal mRNA of Broiler Chickens Challenged with Eimeria maxima with or without Clostridium perfringens</b></p> <p>Nima Emami, <i>University of Georgia</i></p>
9:45 AM	<p><b>Dust as a Vehicle and Surveillance Sample of H5N8 Highly Pathogenic Avian Influenza Virus (Clade 2.3.4.4b) in Poultry Farms, France, 2021</b></p> <p>Jean-Luc Guerin, <i>ENVT, University of Toulouse</i></p>	<p><b>Identification of arthropod vectors of Histomonas meleagridis and Heterakis gallinarum in broiler breeder farms</b></p> <p>Maria Tereza Bethonico Terra, <i>Auburn University</i></p>
10:00 AM	<b>Break</b>	
Topic	Avian Influenza	Enteric Health
Moderator		
10:15 AM	<p><b>Temperature and pH stability of low and high pathogenicity avian influenza viruses</b></p> <p>Christina Leyson, <i>Southeast Poultry Research Laboratory</i></p>	<p><b>Focal Duodenal Necrosis: identification of Gram-negative rod-shaped bacteria in intestinal lesions</b></p> <p>Yu-Yang Tsai, <i>The University of Georgia</i></p>

10:30 AM	<b>Addressing common obstacles to bird transfer movements during a highly pathogenic avian influenza outbreak – a cross-commodity approach</b> Rosemary Marusak, <i>University of Minnesota</i>	<b>An Update on Turkey Viral Enteritis Diagnostic Cases in Commercial Turkey Poults in California</b> Shayne Ramsubeik, <i>California Animal Health and Food Safety Laboratories Turlock, UC Davis</i>
10:45 AM	<b>Comparison of the pathogenicity in chickens and turkeys of a US 2022 wild bird H5N1 HPAI virus, clade 2.4.4.4b, and two previous clade 2.3.4.4 H5N8 HPAI viruses</b> Mary Pantin-Jackwood, <i>Southeast Poultry Research Laboratory, Agricultural Research Service (ars.usda.gov)</i>	<b>Surveillance and diagnosis of turkey coronavirus using environmental bootie swabs</b> Becky Tilley, <i>Butterball LLC</i>
Topic	<b>Immunology</b>	<b>Salmonella</b>
Moderator		
11:00 AM	<b>Development of a High Interferon-Inducing Live Attenuated Influenza Vaccine for In Ovo Vaccination of Chickens</b> Amir Ghorbani, <i>The Ohio State University</i>	<b>Understanding NPIP's Pullorum-Typhoid Clean Programs</b> Elena Behnke, <i>USDA National Poultry Improvement Plan</i>
11:15 AM	<b>Systemic and mucosal lymphoid immune responses during Clostridium perfringens-induced necrotic enteritis in broiler chickens</b> Ravi Kulkarni, <i>North Carolina State University</i>	<b>Genetic characterization of Salmonella Infantis recovered from comminuted turkey samples collected by the USDA Food Safety and Inspection Service between 2019 and 2021</b> Roxana Sanchez-Ingunza, <i>RSI Poultry Veterinary Consulting LLC</i>
11:30 AM	<b>Characterizing Pro- and Anti-viral Mirna Regulated Pathways for Newcastle Disease Virus Replication</b> Abhijeet Bakre, <i>USDA</i>	<b>Impact of a New Vaccination Approach in Pullets and Broiler Breeder Layers to Reduce Salmonella Contamination in Broilers.</b> Jaime Ruiz, <i>Elanco Animal Health</i>
11:45 AM	<b>How Many Antigens Can You Give a Pullet: A Field Study Assessing How Multiple Vaccines Influence Antibody Titers</b> Gunnar Dunnam, <i>Mississippi State University</i>	<b>Comparison of Whole Cell Bacteria and SRP Salmonella Vaccines in Broiler Chickens: Evaluation of Protection Against Homologous and Heterologous Salmonella Strains</b> G Ritter, <i>Poultry Business Solutions LLC</i>
12:00 PM	<b>Lunch Break</b>	
Topic	<b>HPAI Focus</b>	
1:00 PM	<b>Vaccine Options for Highly Pathogenic Avian Influenza in the United States</b> David Suarez, <i>USDA</i>	
<b>Room</b>		
Topic	<b>Vaccinology</b>	<b>Case Reports</b>
Moderator		
1:15 PM	<b>Pasteurella multocida Vaccines with Lower or No Post Vaccination Reaction Adjuvants in a Fowl Cholera Challenge Model</b> Charles Hofacre, <i>Southern Poultry Research Group, Inc.</i>	<b>Outbreak Of Multiple Subtypes Of Low-Pathogenic Avian Influenza In Waterfowl And Gamebird Flocks</b> Carmen Jerry, <i>UC Davis</i>
1:30 PM	<b>Experiences with a safe live Pasteurella multocida vaccine</b> Chris Morrow, <i>Bioproperties</i>	<b>Case Report: Investigating Unusual Outbreaks of Neurologic Disease in Broiler Chickens</b> Natalie Armour, <i>Mississippi State University</i>
1:45 PM	<b>Vaccination Trials in a Midwestern Heavy Tom Complex Using a Clostridium septicum Bacterin/Toxoid</b> Andrew Smith, <i>Butterball</i>	<b>My Birds Seemed Terrified!</b> Martha Pulido Landinez, <i>Mississippi State University</i>

2:00 PM	<b>Development of a Novel Vaccine Strategy Against Necrotic Enteritis by Synergizing Immune-enrichment and Immunostimulation in Broiler Chicks</b> Hemlata Gautam, <i>University of Saskatchewan, Canada</i>	<b>Cleaning up an Outbreak</b> Laura Tensa, <i>Cargill</i>
2:15 PM	<b>Effect of Coccidial Vaccines on the Stability of Salmonella and Viral Live Attenuated Vaccines</b> Alejandro Banda, <i>Mississippi State University</i>	<b>Histomonas meleagridis outbreak &amp; transmission pathway investigation on a private farm in Tennessee, United States</b> Richard Gerhold, <i>University of Tennessee College of Veterinary Medicine</i>
2:30 PM	<b>Adenovirus Progeny Protection Trial in Breeders</b> Emma Castillo, <i>Aviagen North America</i>	<b>A Pestilential Poult Problem</b> Jacob Carlson, <i>Select Genetics</i>
2:45 PM	<b>Protection of Ultifend® &amp; Rispens vaccine against Infectious Bursal Disease Virus Variant E Challenge</b> Olivia Faulkner, <i>Ceva</i>	<b>Case report: Clinical investigation of a turkey barn with a recurrent history of histomoniasis</b> Vijay Durairaj, <i>Huvepharma Inc</i>
3:00 PM	<b>Break</b>	
<b>Room</b>		
<b>Topic</b>	<b>Reovirus</b>	<b>Case Reports</b>
<b>Moderator</b>		
3:15 PM	<b>Genetic and Antigenic Relatedness of Avian Reovirus Variants</b> Sofia Egana, <i>UC Davis</i>	<b>Increased Cull Eggs in an Upper Midwest Turkey Breeder Operation</b> Benjamin Wileman, <i>Select Genetics</i>
3:30 PM	<b>Antigenic Variation and In Vitro Neutralization of Avian Reovirus Isolates from Mississippi</b> Rebecca Mackey, <i>Poultry Research and Diagnostic Lab, Mississippi State University</i>	<b>Investigation into an Outbreak of Turkey Coronavirus and Histomonas Infections on Several Turkey Farms</b> Brian Wooming, <i>Cargill Protein</i>
3:45 PM	<b>Genetic, Antigenic, and Pathotypic characterization of newly emerging Turkey Hepatitis Reovirus</b> Sunil Mor, <i>University of Minnesota</i>	<b>Investigating urolithiasis in broiler breeders</b> Randi Clark, <i>Sanderson Farms</i>
<b>Topic</b>	<b>Diagnostics</b>	<b>Case Reports</b>
<b>Moderator</b>		
4:00 PM	<b>Get the flu out of here...HPAIV environmental stability in outbreak waste and environmental testing strategies</b> Erica Spackman, <i>SEPRL-USDA-ARS</i>	<b>Broiler breeder pullets: wrong diet, high mortality, unusual lesions!</b> Tahseen Abdul-Aziz, <i>Rollins Animal Disease Diagnostic Laboratory</i>
4:15 PM	<b>This is How Today's Commercial Meat type and Egg Type Chickens Became ALV-Free</b> Guillermo Zavala, <i>Avian Health International, LLC</i>	<b>Case Report: Kinda Wish it was the M Word!</b> Sara Throne, <i>Simmons Foods Inc</i>
4:30 PM	<b>Nanopore Sequencing: A Promising Tool for Fast Identification and Accurate Characterization of IBV Directly From Clinical Samples</b> Brittany Skaggs, <i>Iowa State University College of Veterinary Medicine</i>	<b>Case Report: HPAI in a Maryland Broiler Farm</b> Michael Quist, <i>University of Georgia, PDRC</i>
4:45 PM	<b>Fast Identification of Emerging Avian Viruses Using Nanopore Sequencing Device</b> Guillaume Croville, <i>ENVT - University of Toulouse</i>	<b>What Are Your Chickens Drinking?</b> Kurt Dobson, <i>George's Inc.</i>

# Monday, August 1, 2022

Room		
Topic	Diagnostics	Case Reports
Moderator		
8:00 AM	<b>Using Spike Males as Vaccinated Sentinel Birds to Diagnose and Track a Chronic Bronchitis Challenge on Multiple Commercial Broiler Breeder Farms.</b> Robinette Gilbert, <i>Sanderson Farms, Inc.</i>	<b>Case Report of Lessons Learned with Mycoplasma Synoviae Surveillance</b> Philip Stayer, <i>Sanderson Farms</i>
8:15 AM	<b>Biomarkers for Rapid Identification of White Chick Syndrome (Astrovirus) Cases at the Hatchery</b> Daniel Venne, <i>Couvoir Scott Itée</i>	<b>Oviduct abnormalities and failure to peak in egg production in layer chickens associated with Infectious Bronchitis Virus in central California</b> H Shivaprasad, <i>University of California, Davis</i>
8:30 AM	<b>Infectious bronchitis virus and chicken laryngotracheitis infectious virus in backyard poultry located around breeder poultry farms in Brazil</b> Helena Lage Ferreira, <i>University of Sao Paulo</i>	<b>A peculiar Avibacterium paragallinarum Infection in Layers with Complete Absence of any Clinical Presentation of Infectious Coryza</b> Amro Hashish, <i>Iowa State University</i>
Topic	Epidemiology	Pathology
Moderator		
8:45 AM	<b>Epidemiological investigation of MS in broiler breeders using the 14 NPIP biosecurity principles</b> Louise Dufour-Zavala, <i>GPLN</i>	<b>West Nile Virus Infection in a Developer Pekin Duck Flock</b> Richard Fulton, <i>Michigan State University</i>
9:00 AM	<b>Development of a multilocus sequence typing scheme for Avibacterium paragallinarum</b> Mostafa Ghanem, <i>University of Maryland-College Park</i>	<b>Reoccurrence of West Nile Virus Infection in Pekin Breeder Ducks Associated with a Drop in Egg Production</b> Mayra Tsoi, <i>Michigan State University</i>
9:15 AM	<b>A time-space investigation for better understanding the epidemiology of Ornithobacterium rhinotracheale in commercial turkeys in Iowa</b> Yuko Sato, <i>Iowa State University</i>	<b>An unusual case of systemic Histomoniasis in a backyard turkey poul</b> Emily Pittman, <i>Georgia Poultry Laboratory Network</i>
9:30 AM	<b>Multistate Psittacosis Outbreak at Chicken Slaughter Plants— Virginia and Georgia, 2018</b> Christine Szablewski, <i>CDC</i>	<b>Black Livers at Processing in Broiler Chickens</b> Veronica Nguyen, <i>Department of Population Health and Reproduction, UC Davis School of Veterinary Medicine</i>
9:45 AM	<b>Turkey Coronavirus Enteritis: Lessons and Experiences From the Field</b> Eric Orozco, <i>Butterball</i>	<b>Spontaneous Testicular Teratoma and Facial Xanthomas in a Spitzhauben Rooster</b> Jarra Jagne, <i>Cornell University Animal Health Diagnostic Center</i>
10:00 AM	<b>Break</b>	
10:15 AM	<b>History Lecture: The History of Poultry Breeding</b> Jim McKay, <i>EW Group</i>	
10:45 AM	<b>Business Meeting</b>	
12:00 PM	<b>Lunch</b>	

Topic	HPAI Focus	
1:00 PM	<b>Epidemiology of the 2022 H5N1 HPAI outbreak in the U.S.</b> Julie Gauthier, <i>USDA</i>	
Topic	Infectious Bronchitis Virus	Coccidiosis
Moderator		
1:15 PM	<b>Session Keynote: IBV surveillance as a tool in a disease prevention program</b> Rodrigo Gallardo, <i>University of California, Davis</i>	<b>Session Keynote: Using Eimeria Lesion Scores and Fecal Oocyst Counts in Addition to Final Body Weight as Parameters in Floor Pen Studies</b> Rüdiger Hauck, <i>Auburn University</i>
1:30 PM		
1:45 PM	<b>Assessment of infectious bronchitis virus (IBV) exposure risks in broiler chicken using spatial analysis, machine learning, and risk factor analysis.</b> Andrea Arruda, <i>The Ohio State University</i>	<b>OPGs: What do they mean?</b> Hector Cervantes, <i>The University of Georgia</i>
2:00 PM	<b>Proactive management of Infectious Bronchitis Virus (IBV) challenge in commercial broilers: Lessons learned from field cases</b> Matilde Alfonso, <i>Ceva Animal Health</i>	<b>Validation a Portable Cell Counter for Enumeration of Eimeria species of Chickens</b> Rocio Crespo, <i>North Carolina State University</i>
2:15 PM	<b>Comparison of Infectious Bronchitis Virus Surveillance Profiles in Layers, Broiler Breeders, and Broilers</b> Brian Jordan, <i>The University of Georgia</i>	<b>Evaluation of Litter Moisture Analyzers and the Effects of Litter Moisture on Cycling of Coccidiosis Vaccine</b> Nicholas Brown, <i>Huvepharma Inc</i>
2:30 PM	<b>The Costs of Controlling DMV/1639: A Comparison of Vaccination Strategies and Their Effects on Broiler Livability, Vaccine Clearance, and Performance</b> Blayne Mozisek, <i>Merck Animal Health</i>	<b>Analyzing Nanopore NGS Data of Vaccine and Field Isolate Eimeria for Identification</b> Benjamin Jackwood, <i>UGA</i>
2:45 PM	<b>Evaluating the Effects of IBV Maternal Antibodies on the Development of False Layer Syndrome</b> Adrea Mueller, <i>University of Georgia</i>	<b>In Ovo Vaccination of Chickens Against Eimeria Maxima Infection Using Recombinant EmaxIMP1 Protein Linked to Nanoparticles</b> Mark Jenkins, <i>ARS-USDA</i>
3:00 PM	<b>Break</b>	
Topic	Infectious Bronchitis Virus	Coccidiosis
Moderator		
3:15 PM	<b>Vaccine Interaction and Protection Elicited by IBV Maternal Antibodies Against Early Challenge with DMV/1639</b> Rachel Jude, <i>University of California, Davis</i>	<b>Control of Poultry Coccidiosis by Vaccination in Pigmented Broilers in Mexico</b> Francisco Rios-Cambre, <i>MSD Salud Animal Mexico</i>
3:30 PM	<b>Evaluation of antibody response and virus shedding following Infectious Bronchitis Virus (IBV) vaccination with Ma5 and DMV/1639 in SPF layers</b> Roel Becerra, <i>University of Georgia Poultry Diagnostic &amp; Research Center</i>	<b>Everything Comes Down to Poo - Most Effective Form of Vaccination Application Using a Commercially Available Live Coccidia Vaccine</b> Jolene Tourville, <i>Jennie-O Turkey Store</i>
3:45 PM	<b>Infectious Bronchitis ELISA antibody titers as an indicator of productive impact in naturally infected broiler flocks</b> Jorge Chacon, <i>Ceva Animal Health</i>	<b>Comparison of Broiler Performance Between Various Coccidia Vaccination Programs Using a Novel Rapid Oocyst-Per-Gram Enumeration Method</b> Andrew Bishop, <i>Amick Farms</i>
4:00 PM	<b>Tracing Genomic Mutations in Spike Proteins of Infectious Bronchitis Virus (IBV) for Predictions</b>	<b>Effect of a Blend of Essential Oils on Growth Performance and Intestinal Lesions during a</b>

	<b>of Neutralizing Epitopes and/or Vaccine Development</b> Kim Bouwman, <i>University of Georgia</i>	<b>mixed Eimeria Challenge or Vaccination in Two Studies</b> Sharon Heins Miller, <i>Devenish Nutrition LLC</i>
4:15 PM	<b>Assessment of mixing coccidia and infectious bronchitis live vaccines for day of age application in chickens</b> Robert Beckstead, <i>Ceva Animal Health</i>	<b>The Impact of Coccidiosis Control Programs on the Field Performance of US Poultry Farms</b> Ha-Jung Roh, <i>Merck Animal Health</i>
Topic	<b>Wealth of Knowledge</b>	<b>Coccidiosis</b>
Moderator		
4:30 PM	<b>Changes to the 2021 OIE Chapter on Avian Influenza and the Economic and Trade Impacts of High Pathogenicity Avian Influenza on the U.S. Poultry Industry</b> Fidelis Hegngi, <i>USDA, APHIS</i>	<b>Production of chicken tumor necrosis factor-<math>\alpha</math> (TNF-<math>\alpha</math>) in coccidiosis and necrotic enteritis</b> Hyun Lillehoj, <i>USDA</i>
4:45 PM	<b>Quantifying Antimicrobial Use in Poultry Production</b> Randall Singer, <i>University of Minnesota</i>	<b>Changes in gut microbiome, immunity, antioxidant capacity and parasite fecundity induced by Oraltreatment of transgenic <i>Bacillus subtilis</i>-cNK2 in <i>E. acervulina</i>-infected broiler chickens</b> Samiru Wickramasuriya, <i>USDA-Agricultural Research Service</i>

# Tuesday, August 2, 2022

Room		
Topic	Wealth of Knowledge	Infectious Bursal Disease
Moderator		
8:00 AM	<b>Report of the Research Priorities Committee 2022 survey results</b> <i>Joel Cline, Wayne Farms LLC</i>	<b>Session Keynote: Isolation and Characterization of Antigenic Variant Infectious Bursal Disease Viruses in the United States</b> <i>Milos Markis, AviServe LLC</i>
8:15 AM	<b>Does this “Stuff” Work? An Applied Poultry Researcher’s Perspective on Experimental Design</b> <i>Matthew Jones, Southern Poultry Research Group, Inc.</i>	
8:30 AM	<b>Investigating true fertility of ‘clear’ eggs at transfer</b> <i>Isabella Hannay, University of Georgia PDRC</i>	<b>Evaluating The Antigenic Relatedness Of Diverse Infectious Bursal Disease Virus Strains</b> <i>Vishwanatha Reddy Avalakuppa Papi Reddy, The Pirbright Institute</i>
8:45 AM	<b>Electrostatic Application of a Bound Residual Antimicrobial to Broiler Breeder Eggs: Impact on Hatchability, Chick Quality and 7-day Mortality</b> <i>Mary Thompson, UGA Poultry Diagnostic &amp; Research Center</i>	<b>Assessment of a Variant IBDV Challenge in Chickens Utilizing Combinations of Recombinant HVT and Live Attenuated IBD Vaccines</b> <i>John ElAttrache, Ceva Animal Health</i>
9:00 AM	<b>Controlled Exposure utilizing a Hemolytic Ornithobacterium rhinotracheale Strain in Commercial Hen Turkeys to Protect Against a Field Challenge</b> <i>Jessica Walters, Virginia Department of Agriculture and Consumer Services</i>	<b>Broiler Protection and Performance Trials of the Newest HVT-IBD Recombinant Vaccine Against AL2 and Group-6 IBDV Challenges</b> <i>Kalen Cookson, Zoetis</i>
9:15 AM	<b>First Week Broiler Mortality: Trends, Lesions, Etiologies and Recommendations</b> <i>Jose Linares, Ceva Animal Health</i>	<b>Deciphering the Mode of Action of MB-1, a Live Hatchery Vaccine against Gumboro Disease</b> <i>Yossi Wein, Phibro Animal Health</i>
9:30 AM	<b>Applications Used to Help Control and Eradicate Low Pathogenic Avian Influenza From Commercial Turkey Farms</b> <i>Carrie Cremers, Jennie-O Turkey Store</i>	<b>Flow Cytometric Analysis of T Regulatory Cells in the Bursa Of Fabricius Of Chickens Infected With IBDV</b> <i>Salik Nazki, The Pirbright Institue</i>
9:45 AM	<b>Outreach Efforts and Newcastle Vaccine Efficacy to Promote Gamefowl Wellness in Southern California</b> <i>Alejandra Figueroa, UC Davis School of Veterinary Medicine</i>	<b>Evaluation of Host Genetic Resistance to Infectious Bursal Disease Virus</b> <i>Julia Blakey, USDA- ARS USNPRC</i>
10:00 AM	<b>Break</b>	
Room		
Topic	Welfare	ILT/Marek’s
Moderator		
10:15 AM	<b>Session Keynote: Welfare Frameworks: History, Evolution and Practical Implementation</b> <i>Katherine Weathers, Cobb-Vantress, Inc</i>	<b>Session Keynote: Comparison of Marek’s Disease Virus Challenge Strains in Commercial Broiler-type Chickens</b> <i>John Dunn, USDA-ARS-USNPRC</i>
10:30 AM		

10:45 AM	<b>The Barnyard Perspective of Animal Welfare: Learning from each other</b> Angela Baysinger, <i>Merck Animal Health</i>	<b>In ovo vaccination with HVT accelerates immunocompetence in chickens</b> Allison Boone, <i>North Carolina State University, College of Veterinary Medicine and North Carolina Veterinary Diagnostics</i>
11:00 AM	<b>Wellness Talk: Options for Loan Forgiveness</b>	<b>Efficacy of a new trivalent vHVT-IBD-ILT vaccine administered to day-old pullets against virulent ILTV challenge performed at two time points</b> Andrea Delvecchio, <i>Boehringer Ingelheim AH</i>
11:15 AM		<b>HVT-ILT Recombinant Vaccines: Dynamics of Replication and Protection in Commercial Broilers</b> Ivan Alvarado, <i>Merck Animal Health</i>
11:30 AM		
12:00 PM	<b>Lunch Break</b>	
Topic	<b>HPAI Focus</b>	
1:00 PM	Mia Torchetti,	
<b>Room</b>		
Topic	<b>Welfare</b>	<b>ILT/Marek's</b>
Moderator		
1:15 PM	<b>Cage Free Housing for Laying Hens: Floor Substrate Provided During Rearing Influences Welfare Parameters</b> Marisa Erasmus, <i>Purdue University</i>	<b>Comparing ILT Live Vaccine Efficacy Through Drinking Water and Eye Drop by On-Site PCR Test</b> Keat Fu, <i>Aviagen Inc.</i>
1:30 PM	<b>Applying the Assessment of Key Indicators in Layer Chicken Systems for Improved Welfare</b> Joe Sullivan, <i>Herbruck's</i>	<b>Lt Serology in Georgia Flocks in the Absence of a Broiler Outbreak</b> Len Chappell, <i>Georgia Poultry Laboratory Network</i>
1:45 PM	<b>Understanding welfare of laying hens in different types of cage-free housing systems</b> Darrin Karcher, <i>Purdue University</i>	<b>Expression of Interferons and Interferon-Stimulated Genes (ISGs) in Larynx, Trachea, and Conjunctiva of Chickens Ocularly Inoculated with Live Attenuated Vaccines and Virulent Strains of Infectious Laryngotracheitis Virus (ILTV)</b> Daniel Maekawa Maeda, <i>University of Georgia</i>
Topic	<b>Welfare</b>	<b>Bacteriology</b>
Moderator		
2:00 PM	<b>Emphasizing Welfare Outcomes and KWIs: NCC Broiler and Broiler Breeder Welfare Guidelines Update and Audit Changes</b> Ashley Peterson, <i>National Chicken Council</i>	<b>Keynote Speaker: Campylobacter hepaticus and its Role in the Emergence of Spotty liver disease in Layers</b> Silke Rautenschlein, <i>Clinic for Poultry, University of Veterinary Medicine, Hannover</i>
2:15 PM	<b>The Case of the Missing Intestines: Peck-Outs in Broiler Breeders</b> Christina Lindsey, <i>Aviagen</i>	
2:30 PM	<b>Broiler Chicken Welfare: Overview of Key Welfare Indicators Used in Broiler Production Systems and a Practical Approach to Achieve Continuous Improvement</b> Chantal Goeree, <i>Maple Leaf Foods</i>	<b>Does a Post-biotic Product have a Protective Effect Against APEC Challenge?</b> Catherine Logue, <i>Univ of Georgia</i>



2:45 PM	<b>The Importance of Key Welfare Indicators in Driving Continuous Improvement in Animal Welfare Outcomes</b> Ken Opengart, <i>Tyson Foods</i>	<b>Enterococcus faecalis Modulates Virulence of Avian Pathogenic E. coli by Stimulating Growth and Production of Capsular Polysaccharides</b> Grayson Walker, <i>NC State University</i>
3:00 PM	<b>Break</b>	
<b>Room</b>		
<b>Topic</b>	<b>Welfare</b>	<b>Bacteriology</b>
<b>Moderator</b>		
3:15 PM	<b>Effects of novel Pulsed Alternating Wavelength System (PAWS) on welfare and skeletal quality of laying hens</b> Brittney Emmert, <i>Purdue University</i>	<b>Identification of Novel Genes Involved in the Biofilm Formation Process of Avian Pathogenic Escherichia coli (APEC)</b> Meaghan Young, <i>University of Georgia</i>
3:30 PM	<b>Understanding Outcomes-Based Welfare Assessments and Internal Audits in Turkey Production Environments</b> Molly Parker, <i>Butterball, LLC</i>	<b>Early turkey mortality related to infection with Streptococcus gallolyticus</b> Ann Wooming, <i>Church and Dwight</i>
3:45 PM	<b>Potential Welfare Issues Affecting Turkey Husbandry and Well-Being</b> Eric Gonder, <i>Consultant</i>	<b>Genotypic Classification of Avibacterium paragallinarum, the Causative Agent of Infectious Coryza</b> Ana da Silva, <i>University of California, Davis</i>
4:00 PM	<b>Evaluation of Foot Pads throughout Production in Commercial Turkeys</b> Kabel Robbins, <i>Butterball, LLC</i>	<b>Development of Core Genome Multilocus Sequence Typing (cgMLST) Scheme for Genotyping of Pasteurella multocida</b> Mohamed El-Gazzar, <i>Iowa State University</i>
4:15 PM	<b>“Good as Hell”: A Discussion Regarding Toe Treatments of Hen Poults</b> Katie Stumvoll, <i>Jennie-O Turkey Store</i>	<b>Case Report: Is The Prevalence of Clostridium Septicum Dermatitis and Septicemia Underestimated in Commercial Egg Layers?</b> Michaela Olson, <i>Wilson Veterinary Company</i>
4:30 PM	<b>A Comparison of Various Euthanasia Devices and Methods in Turkey Hens</b> Brian Wooming, <i>Cargill Turkey &amp; Cooked Meats</i>	<b>Assessing Two Fertile Eggshell Interventions With Luminometry</b> Ricardo Munoz, <i>Neogen Corporation</i>
4:45 PM	<b>Welfare Communication Tools for Field Veterinarians</b> Nancy Reimers, <i>Cutler Associates</i>	<b>Stress during Rearing-Laying Transition changes Gut Microbiota Profile, Intestinal Cytokine Expression and Skeletal Properties in Commercial Laying Hens</b> Prafulla Regmi, <i>University of Georgia</i>
5:00 PM	<b>Adjourn</b>	

# AAAP Posters

## Antimicrobial/Antibiotic Resistance

**Minimal inhibitory concentrations of avilamycin to *Clostridium perfringens* isolates from broiler chicken farms before and after the approval of Surmax® Premix (Avilamycin) in Canada**

Eric Parent, *Elanco Canada*

**The protective role of Coli-vac, a heptavalent vaccine against extraintestinal avian pathogenic *Escherichia coli* (APEC) infection**

Wael Elfeil, *Suez Canal University*

**Chicken Gut Microbiota Dynamics after Amoxicillin and Thiamphenicol Treatment**

Andrea Laconi, *University of Padua*

## Avian Influenza

**Infection of H5N6 HPAIV and evaluation of inactivated H5N6 HPAI vaccine on ducks**

Seojeong An, *Konkuk University of Veterinary Medicine*

**Antigenic Characterization of Low Pathogenic Avian Influenza Virus H9N2 isolated in the Republic of Korea**

Andrew Cho, *Konkuk University*

**Evaluation protection of H5 vaccination regimes against early challenge with HPAI-H5N8 Clade 2.3.4.4**

Wael Elfeil, *Suez Canal University*

**Live Recombinant NDV-Vectored H5 Vaccine Protects Chickens and Domestic Ducks from Lethal Infection of the Highly Pathogenic H5N6 Avian Influenza Virus**

Heesu Lee, *Konkuk University, Seoul*

**Stepwise adaptation of Hemagglutinin of H5N2 Highly pathogenic avian influenza virus in chickens**

Sungsu Youk, *USDA ARS US Natl Poultry Research Ctr*

## Bacteriology

**Molecular characterization of few *Avibacterium paragallinarum* isolates from different US states using whole genome sequencing.**

Mostafa Ghanem, *The Ohio State University*

**Epidemiological Surveillance Of *Chlamydophila Psittaci* In Wild Birds From Perú**

Rosa Gonzalez, *San Marcos University, Lima-peru*

**Does the Nutritionist have a role to play in Managing *Campylobacter jejuni* in Broilers?**

Matthew Jones, *Southern Poultry Research Group*

## **High Mortality Outbreaks in Broiler Chickens Caused by Highly Virulent and Multidrug Resistant *Escherichia coli***

Christopher Poulos, *Animal and Plant Health Agency*

## **Case Reports**

### **Isolation and Characterization of Goose Tembusu Virus in Taiwan**

Hui-Wen Chen, *National Taiwan University*

### **Imposter false layer syndrome**

Emily Pittman, *Georgia Poultry Laboratory Network*

## **Coccidiosis**

### **Sensitivity of *Eimeria* Field Isolates in the United States: An update on responses to current practices**

Luis Gomez, *Phibro*

### **Alternatives Treatments for Coccidiosis and Necrotic Enteritis Management**

Greg Mathis, *Southern Poultry Research, Inc.*

### **Intestinal Integrity (I2) Correlations to Chicken Gut Health**

Francene Van Sambeek, *Elanco Animal Health*

## **Diagnostics**

### **Utilization of the i-STAT1 handheld clinical analyzer and VetScan2 to compare blood values in normal vs. recumbent turkey hens at point of lay**

Jewell Bremer, *Select Genetics*

### **Evaluation of Flongle and MinION Flow Cells for the Whole-Genome Sequencing of Avian Influenza A Virus in Clinical Samples**

Iryna Goraichuk, *USDA/ARS/SEPRL*

### **FTA Card Use as a Sample Collection Method to Type *Avibacterium paragallinarum***

Rachel Jude, *University of California, Davis*

### **Analysis of diagnoses for broiler chicken flocks in Korea between 2017 and 2021**

chung-hyun Kim, *QIA*

### **Identification of the causative agent in broiler chicken showing neurological symptoms**

Hye-Ryoung Kim, *APQA*

### **Infectious bronchitis molecular surveillance in layer farms in Southern California**

Evelin Saenz, *UCDAVIS*

## **Enteric Health**

### **Feed quality assessment with the use of glucose oxidase vs antibiotics**

Josue Sanchez, *excelling SA de CV*

### **Ileal mucosal microbiota in commercial turkey poults**

John Ngunjiri, *Center for Food Animal Health, The Ohio State University*

## **ILT/Marek's Disease**

### **Longitudinal Study of Infectious Laryngotracheitis Virus (ILTV) in Commercial Laying Farms from Sao Paulo State – Brazil**

Renato Luciano, *Biological Institute - Advanced Center of Poultry Research*

### **Characterization of the Backyard (Non-Commercial, Non-Quota) Poultry Population in Alberta, Canada, and the Submission Level Prevalence of Infectious Laryngotracheitis Within this Sector**

Heather Van Esch, *Government of Alberta, Ministry of Agriculture, Forestry and Rural Economic Development*

### **Evaluation of the impact of injector device on Marek's disease vaccine delivery by subcutaneous route**

Andrea Delvecchio, *Boehringer Ingelheim AH*

### **Use of a Novel Medium to Grow Chicken Embryo Fibroblasts that Increases the Yield of Marek's Disease Vaccines**

Isabel Gimeno, *North Carolina State University*

## **Immunology**

### **Assessment of Seroconversion In Commercial Layers During The Rearing Period Using Three Different Elisa Kits After Administration Of An Immune-Complex Vaccine (Novamune®) At One-Day-Old.**

Oscar Sanabria, *Ceva*

### **Comparison of Transcriptional Analysis, ELISA, and Biological Assays of Avian Type I IFN**

Chang Lee, *Southeast Poultry Research Lab, USDA-ARS*

### **Immunometabolic regulation of CpG-ODN-induced antimicrobial trained immunity in chickens**

Iresha Subhasinghe, *University Of Saskatchewan*

## **Infectious Bronchitis Virus**

### **Phylogenetic Analysis of Infectious Bronchitis Virus Circulating in Colombia From 2015 to 2021**

Oscar Sanabria, *Ceva*

**Isolation, Genotyping and Evaluation of Pathogenicity of Different Egyptian Infectious Bronchitis Viruses**

Manal Afify, *Faculty of Veterinary Medicine, King Salman International University*

**Homologous and heterologous live-attenuated vaccines strategy to reduce infectious bronchitis virus transmission**

Robert Beckstead, *Ceva Animal Health*

**Isolation of Infectious Bronchitis virus variant strain from commercial layer birds showing cystic oviduct in India**

Namdeo Bulbule, *Venkateshwara Hatcheries Pvt Ltd*

**Real World Evidence: Economic Assessment of the Impact of Q1-like Infectious Bronchitis Variant in a Broiler Productive Zone in Peru**

Antonio Cobain, *Ceva Animal Health*

**Data Management as a Strategy for Serological Monitoring of Infectious Bronchitis in broiler farms**

Jose Perez, *SPM, NCSU*

**A broad protection spectrum against relevant strains can be achieved by the combination of Mass-type and BR-I-type infectious bronchitis vaccine strains**

Jorge Chacon, *Ceva Animal Health*

**Persistence and intensity of Infectious Bronchitis Virus Vaccine Strain replication and its association with safety aspects**

Jorge Chacon, *Ceva Animal Health*

**Complete Genome Analysis of Two Live Attenuated Infectious Bronchitis Virus Vaccine Candidates Provide Insight Into the Attenuation Mechanism**

Yun Jeong Choi, *Konkuk University*

**A New Diagnostic System for Genotypic Classification and DIVA of Avian Infectious Bronchitis Viruses**

Ido From, *Egg and Poultry Board, Israel*

**Genome Sequence Variations of Infectious Bronchitis Virus Serotypes from Commercial Broilers in Mexico**

Henry Kariithi, *USDA-ARS*

**Surveillance of Infectious bronchitis virus occurred in Korea, 2021**

Hyun-jin Kim, *Avian Disease Laboratory, Konkuk University College of Veterinary Medicine*

**Detection of GI-13 of infectious bronchitis virus in layer chickens in Brazil**

Helena Lage Ferreira, *University of Sao Paulo*

**Development of a live attenuated vaccine for Indonesian QX-like IBVs (GI-19) using heat-adapted attenuation platform**

Hyuk-chae Lee, *KHAV*

**Development of a Highly-Sensitive NGS Method for Analysis of the Complete S1 Region of the Spike Gene from Infectious Bronchitis Viruses Directly from Field Samples**

Derek Moormeier, *Ceva Animal Health*

**Detection of Novel Infectious Bronchitis Viruses in Layers in Mexico and their Control by Using a Synergistic Live Vaccine Combination**

Francisco Rios-Cambre, *MSD Salud Animal Mexico*

## **Infectious Bursal Disease**

**Very virulent IBDV can efficiently replicate and be transmitted in layer-type naive chickens up to 16 weeks of age**

Christophe Cazaban, *Ceva Animal Health*

**Comparison of IBD Antibody ELISA Titers using Kits from Various Vendors**

Brenda Glidewell, *Georgia Poultry Laboratory*

**Developing a Novel Method for Sequencing and Genotyping of Infectious Bursal Disease Virus Directly from Field Samples**

Julia McElreath, *Ceva Animal Health*

**Presence and Distribution of Infectious Bursal Disease viruses belonging to Genotypes 2 and 5 in Mexico**

Francisco Rios-Cambre, *MSD Salud Animal Mexico*

## **Mycoplasma**

**Ms-H Vaccine (Vaxsafe MS) Protection in Broiler Breeders.**

Francisco Perozo, *Boehringer Ingelheim*

**Monitoring of Mycoplasma gallisepticum live vaccine -K Strain –**

Husam Al Bakri, *Vaxxinova International BV*

**Serological monitoring of chicken flocks Vaccinated against Mycoplasma gallisepticum**

Sung Il Kang, *Animal and Plant Quarantine Agency*

**Why not within first week? Success cases of early vaccination with a live Mycoplasma gallisepticum vaccine in Asia**

Ludio Martins Gomes, *Vaxxinova International*

## **Newcastle Disease Virus**

**Newcastle disease virus genotypes circulating in Africa and their determinants of virulence: a systematic review**

Charlie Amoia, *Sokoine University of Agriculture / Southern African Centre for Infectious Disease Surveillance (SAC)*

**Evaluation of protection by ND vaccination protocols against early challenge with Velogenic Newcastle virus-VII.1 in commercial broiler with Maternal Immunity**

Wael Elfeil, *Suez Canal University*

**Epidemiological Surveillance of Avian Paramyxovirus-1 in Wild Birds from Perú**

Eliana Icochea, *Universidad Nacional Mayor de San Marcos*

**The Thermal Stability of Newcastle Disease Virus in Poultry Litter**

Jongseo Mo, *Southeast Poultry Research Laboratory, US National Poultry Research Center, Athens, GA*

## **Parasitology**

**Toxoplasma gondii Prevalence in Waterfowl and Gulls From Eight States in the United States**

Richard Gerhold, *University of Tennessee College of Veterinary Medicine*

**Metabolic profile of Histomonas meleagridis and undefined bacterial population in Dwyer's media with and without rice starch**

Richard Gerhold, *University of Tennessee*

## **Salmonella**

**Effect of AviPro™ Megan™ Vac 1 on growth performance in broiler chicks Orally challenged with S. Typhimurium wild strain**

Priscilla Karina Koerich, *PRISCILLA KOERICH*

**Efficacy evaluation of Salmonella Enteritidis SRP vaccine against challenge by Salmonella Enteritidis, S. Typhimurium and S. Gallinarum in brown laying hens**

Gabrielle Bragaglia, *Vaxxinova*

**Epidemiological investigation of S. typhimurium monophasic at a broiler integrator**

Louise Dufour-Zavala, *GPLZN*

**Quantitative Distribution and Interaction of Salmonella Zega with Host Cells in Visceral Organs of Chickens Infected through Three Routes**

Fakilahyel Mshelbwala, *Federal University of Agriculture, Abeokuta*

**Safety of two Salmonella vaccines and zootechnical performance after vaccination of laying hens for prevention of salmonellosis**

Jeniffer Plmenta, *Vaxxinova*

**Isolation of Salmonella Spp from Trachea of Broiler Chickens and Analysis of its Potential Role as Monitoring Diagnostic Tool**

Martha Pulido Landinez, *Mississippi State University*

**Detection of Salmonella in Quail Eggs for Ambulatory sale in Districts of the City of Lima-Peru**

Magali Salas, *ALFA BIOL S.A.C*

**Changes in Salmonella Serotypes over the last 30-something years**

Doug Waltman, *GPLZN*

## **Vaccinology**

**Duration of Ultifend® & Rispens protection against Newcastle disease virus**

Olivia Faulkner, *Ceva*

**Comparison of the Serologic Response of Two Vaccination Programs with Different IBV Antigen Fractions in Broiler Breeders**

Antonio Cobian, *SPM, NCSU*

**Evaluating IBV and NDV Monovalent or Bi-valent Vaccinations Take by On-Site PCR Test**

Keat Fu, *Aviagen Inc.*

**Development of an indirect Enzyme-Linked Immunosorbent Assay based on ILT gD recombinant protein for the monitoring of HVT-gD vaccine.**

Marina Gaimard, *Innovative Diagnostics*

**Compatibility of A Recombinant HVT-IBD Vaccine with CVI to Provide Protection Against Very Virulent Marek's and Very Virulent IBDV Challenge in SPF Birds**

Angela Hartman, *Zoetis*

**Construction of DIVA capable, low cytotoxic-endotoxic, and immune-competent attenuated Salmonella Gallinarium vaccine candidate**

John Hwa Lee, *Jeonbuk National University*

**New technology vaccines return on investment in commercial broilers under high challenge field condition**

Hazem Negm, *Ceva Animal Health*

**Determining Minimum Protective Dose of Inactivated Trivalent Fowl Adenovirus (4, 8b, 11) Vaccine**

Dam-Hee Park, *Choong Ang Vaccine Laboratories*

## **Virology**

**Molecular characterization of circulating avian reovirus in Egypt**

Ayman El-Deeb, *Evapharma*

**Pathological investigation on Fowl Adeno virus infection in Middle East Area 2019-2021**

Husam Al Bakri, *Vaxxinova International BV*

**Fowl Adenovirus Strain Identification Challenge**

Christophe Cazaban, *Ceva Animal Health*



**Retrospective Study of Tumors of Unknown Origin in Broiler Breeders in the USA (2011-2020)**

Baxter Elliot, *North Carolina State University College of Veterinary Medicine*

**Diverse Single-stranded DNA Viruses Identified in Chicken Buccal Swabs**

Darrell Kapczynski, *USDA-ARS-Southeast Poultry Research Laboratory, Athens, Ga*

**Understanding the Respiratory virome of backyard poultry in Minnesota**

Anita Kumari, *University of Minnesota*

**Pathogenicity Evaluation of a Turkey Coronavirus Isolate (TCoV NC1743) in Turkey Poults for Establishing a TCoV Disease Model**

Qingzhong Yu, *USDA/ARS/USNPRC*

## **Wealth of Knowledge**

**Reduction of Chondronecrosis with Osteomyelitis Lameness in Broilers Fed Metal Amino Acid Complexes Using Two Challenge Models**

Raquel Konrad Burin, *Zinpro*

**Microbiota of the poultry litter beetle (*Alphitobius diaperinus*)**

Teresa Dormitorio, *Auburn University*

**Why Did the Student Cross the Road: Influencing Factors to Become a Poultry Veterinarian**

Linda Flores, *Western University of Health Sciences*

**Women Pioneers in the Poultry Field 1900-Present**

Jessica Hockaday, *Hockaday Consulting*

**Biosecurity and supporting measures to improve its implementation in poultry farms**

Alessandra Piccirillo, *University of Padua*

**Health challenges and interventions in small flock poultry and waterfowl**

Hailey Quercia, *Auburn University*

**Biosecurity as a Promising Tool to Reduce Antimicrobial Use in Poultry Farms**

Giuditta Tilli, *University of Padua*

**Establishment of Chicken Airway and Intestinal 3D Culture Systems**

Nai-Huei Wu, *National Taiwan University*

## **Welfare**

**Understanding stress and welfare of laying hen pullets using stocking density and feeder space stressors**

Meagan Abraham, *Purdue University*