Emerging and Reemerging Zoonotic Diseases

o AUGUST 6-9 0 2016

► AAAP Scientific Program includes 148 oral presentations and 82 poster presentations

Symposium & Scientific Program

THE AMERICAN ASSOCIATION OF AVIAN PATHOLOGISTS

promotes scientific knowledge to enhance the health, well-being, and productivity of poultry to provide safe and abundant food for the world.



San Antonio, TX August 6-9, 2016

AAAP 2016 Annual Meeting

San Antonio Convention Center San Antonio, Texaz, USA August 6-9, 2016

Saturday, August 6, 2016 (7:30AM – 12:30PM) AAAP Symposium *Emerging and Reemerging Zoonotic Diseases* San Antonio Convention Center, Room 221AB

Saturday, August 6, 2016 (2:00PM – 5:00PM) **AAAP Committee Meetings** Marriot River Center Hotel

Saturday, August 6, 2016 (5:00PM – 7:00PM) **AAAP New Member Meet and Greet** AAAP Members are invited to welcome new members Marriot River Center Hotel, Salon I

Sunday-Tuesday, August 7-9, 2016 (8:00AM – 5:30PM) **AAAP Scientific Program** San Antonio Convention Center Sessions A: Room 221AB Sessions B: Room 221CD Poster Room: 220

Sunday, August 7, 2016 (9:30AM – 9:45AM) Reed Rumsey Basic Research Award Winner: **Correlation between Interferon Response and Protective Efficacy of NS1-Truncated Mutants as Influenza Vaccine Candidates in Chickens** Hyesun Jang *The Ohio State University* San Antonio Convention Center, Room 221CD

Sunday, August 7, 2016 (11:00AM – 11:30AM) Keynote Speaker: **Emerging and Reemerging Poultry Diseases: An International Perspective** Guillermo Zavala *Avian Health International, LLC, Flowery Branch, GA* San Antonio Convention Center, Room 221AB

Sunday, August 7, 2016 (11:30AM – 12:30PM) **AAAP Business Meeting** San Antonio Convention Center, Room 221AB Monday, August 8, 2016 (11:15AM – 11:45AM)

Lasher-Eckroade History Lecture: **The History of the First Generation Marek's Disease Vaccines: The Science and Little Known Facts** Karel Schat *Cornell University, Ithaca, NY* San Antonio Convention Center, Room 221AB

Monday, August 8, 2016 (12:00PM – 2:00PM) **AAAP Awards Luncheon** Marriot River Center Hotel, Salon E

Monday, August 8, 2016 (4:30PM – 5:30PM) **Wine & Cheese Social in Poster Room** Poster Presenters will be present at their posters during this time. San Antonio Convention Center, Room 220

Tuesday, August 9, 2016 (8:15AM – 8:30AM) Richard B. Rimler Memorial Paper: **Evaluation of Viral and Host Mechanisms Involved in Permanent Marek's Disease Virus Induced Immunosuppression** Faiz Nik Mohd Azmi *North Carolina State University* San Antonio Convention Center, Room 221AB

Tuesday, August 9, 2016 (1:15PM – 1:30PM) Reed Rumsey Clinical Research Award Winner: **Study on the Prevalence and Association of a Novel Mycoplasma sp. with Reproductive Disease in Commercial Goose Breeders.** Silvia Carnaccini *CAHFS-UCDavis* San Antonio Convention Center, Room 221CD

San Antonio Convention Center Meeting Level 3



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Name or Group	Meeting Date	Beg. Time	End Time	Beg. Time End Time Contact Person	Room	Location
AAAP Board of Directors Meetings						
AAAP Board of Directors	Thursday, Aug 4 8:00am	8:00am	5:00pm	Janece Bevans-Kerr	Conference Room 9	Marriott
AAAP Board of Directors	Friday, Aug 5	7:00am	5:00pm	Janece Bevans-Kerr	Conference Room 9	Marriott
AAAP Board of Directors	Tuesday, Aug 9	7:00am	12:00pm	Janece Bevans-Kerr	Conference Room 17&18	Marriott
Committee Meetings						
Media Training	Friday, Aug 5	1:00pm	5:00pm	Janece Bevans-Kerr	Conference Room 15	Marriott
Histopathology/Case Report Interest Group	Friday, Aug 5	1:00pm	5:00pm	H.L. Shivaprasad	Conference Room 12	Marriott
Backyard Flocks Interest Group	Friday, Aug 5	4:00pm	5:00pm	Vicky Bowes	Conference Room 10	Marriott
Committee Review Committee	Friday, Aug 5	5:00pm	6:00pm	Bruce Stewart-Brown	Conference Room 19	Marriott
Poultry Scholarship Committee	Saturday, Aug 6	6:30am	7:00am	Mark Bland	Conference 5	Marriott
AAAP Committee Chairs and BOD Meeting	Saturday, Aug 6 12:45pm	12:45pm	2:00pm	Suzanne Dougherty	Conference Room 17&18	Marriott
Awards Committee	Saturday, Aug 6 2:00pm	2:00pm	3:00pm	Kate Barger	Conference Room 11	Marriott
Avian Diseases Editorial Board	Saturday, Aug 6 2:00pm	2:00pm	3:00pm	Mo Saif	Conference Room 1-4	Marriott
Avian Diseases Manual Editorial Board	Saturday, Aug 6	2:00pm	3:00pm	Martine Boulianne	Conference Room 19	Marriott
Diseases of Public Health Significance	Saturday, Aug 6	2:00pm	3:00pm	Bill Pierson	Conference Room 9	Marriott
Enteric Diseases Committee	Saturday, Aug 6 2:00pm	2:00pm	3:00pm	Marco Quiroz	Conference Room 15	Marriott
LAC Committee	Saturday, Aug 6 2:00pm	2:00pm	3:00pm	Suzanne Dougherty	Conference Room 10	Marriott
Preceptorship Committee	Saturday, Aug 6 2:00pm	2:00pm	3:00pm	Francene Van Sambeek Conference Room 16	Conference Room 16	Marriott
Toxic, Infectious, Miscellaneous & Emerging Diseases Committee	Saturday, Aug 6	2:00pm	3:00pm	Sunil Mor	Conference Room 17&18	Marriott
Drugs and Therapeutics Committee	Saturday, Aug 6	3:00pm	4:00pm	Steven Clark	Conference Room 16	Marriott
Education Committee	Saturday, Aug 6 3:00pm	3:00pm	4:00pm	Gabriel Senties-Cue	Conference Room 8	Marriott
Membership Committee	Saturday, Aug 6 3:00pm	3:00pm	4:00pm	Deirdre Johnson	Conference Room 6	Marriott
Avian Diseases Advisory Board	Saturday, Aug 6 3:00pm	3:00pm	4:00pm	Mo Saif	Conference Room 5	Marriott
Tumor Virus Committee	Saturday, Aug 6	3:00pm	5:00pm	Isabel Gimeno	Conference Room 12	Marriott
Animal Welfare Committee	Saturday, Aug 6	3:00pm	5:00pm	Rosemary Marusak	Conference Room 1-4	Marriott
Research Priorities Committee	Saturday, Aug 6 3:00pm	3:00pm	4:00pm	lvan Alvarado	Conference Room 11	Marriott
Respiratory Diseases Committee	Saturday, Aug 6 3:00pm	3:00pm	5:00pm	Mark Jackwood	Conference Room 17 &18	Marriott
Epidemiology Committee	Saturday, Aug 6 4:00pm	4:00pm	5:00pm	J. P. Vaillancourt	Conference Room 6	Marriott
Food Safety Committee	Saturday, Aug 6	4:00pm	5:00pm	James Barton	Conference Room 9	Marriott
History Committee	Saturday, Aug 6	4:00pm	5:00pm	John Dunn	Conference Room 13 & 14	Marriott
AAAP Foundation Development Committee	Monday Aug 8	R-00am	0-00am	Frad Hoarr	Salon C	Marriatt

Name of Group	Meeting Date	Beg. Time	End Time	Beg. Time End Time Contact Person	Room	Location
Program Events						
Stakeholder Meeting with CVB	Friday, Aug 5	3:00pm	5:00pm	Janece Bevans-Kerr	Conference Room 1-4	Marriott
AAAP Symposium	Saturday, Aug 6 7:30am	7:30am	12:30pm	12:30pm Janece Bevans-Kerr	221AB	Convention Center
New Member Orientation	Saturday, Aug 6 4:30pm	4:30pm	5:00pm	Janece Bevans-Kerr	Conference Room 8	Marriott
Meet and Greet New AAAP Members	Saturday, Aug 6 5:00pm	5:00pm	6:00pm	Janece Bevans-Kerr	Salon I	Marriott
AAAP Business Meeting	Sunday, Aug 7	11:30am	12:30pm	Janece Bevans-Kerr	221AB	Convention Center
AAAP Awards Luncheon	Monday, Aug 8	12:00pm	2:00pm	Janece Bevans-Kerr	Salon E	Marriott
AAAP Wine and Cheese Social in Poster Room	Monday, Aug 8 4:30pm	4:30pm	5:30pm	5:30pm Janece Bevans-Kerr	220	Convention Center
ACPV						
ACPV Exam #1	Friday, Aug 5	7:00am	8:00pm	Janece Bevans-Kerr	Conference Room 13 & 14	Marriott
ACPV Exam #2	Friday, Aug 5	7:00am	8:00pm	Janece Bevans-Kerr	Salon K & L	Marriott
ACPV Exam Grading Room	Friday, Aug 5	7:00am	10:00pm	10:00pm Janece Bevans-Kerr	Conference Room 11	Marriott
ACPV Board of Governors Meeting	Sunday, Aug 7	6:30am	10:30am	10:30am Janece Bevans-Kerr	Salon C	Marriott
ACPV Reception/Annual Meeting	Monday, Aug 8	6:30am	8:00am	Janece Bevans-Kerr	Conference Room 1 - 4	Marriott
Invitation Only						
Association of Veterinarians in Broiler Production Meeting	Friday, Aug 5	7:00am	5:00pm	Deirdre I Johnson	Conference Room 17&18	Marriott
Association of Veterinarians in Broiler Production Breakfast	Friday, Aug 5	7:00am	9:00am	Deirdre I Johnson	Conference Room 16	Marriott
Association of Veterinarians in Broiler Production Lunch	Friday, Aug 5	1:00pm	2:00pm	Deirdre I Johnson	Conference Room 16	Marriott
Association of Veterinarians in Turkey Production	Friday, Aug 5	9:00am	5:00pm	Duane Murphy	Salon A	Marriott
Georgia MAM Alumni Breakfast	Saturday, Aug 6 7:00am	7:00am	7:30am	Karen Grogan	Conference Room 1-3	Marriott
Association of Poultry Primary Breeder Veterinarians	Saturday, Aug 6 11:30am	11:30am	1:30pm	Travis Schaal	Conference Room 5	Marriott
Association of Veterinarians in Egg Production	Sunday, Aug 7	6:00am	8:00am	Eric Gingerich	Conference Room 17&18	Marriott
AAAP Past Presidents Luncheon	Sunday, Aug 7	12:15pm	1:45pm	Janece Bevans-Kerr	Conference Room 4	Marriott
NC State University Poultry Health Management	Monday, Aug 8	7:30pm	11:00pm	11:00pm Michael Martin	Conference Room 17	Marriott

2015-2016 AAAP Foundation Board of Directors

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US Stakeholder Forum on Antimicrobial Resistances(S-FAR) Randy Singer

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Toxic, Infectious, Miscellaneous and Emerging Diseases Sunil Mor 2019

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Isolation of Avian Pathogens Manual Board Susan Williams

AAAP Symposium

Emerging and Re-emerging Zoonotic Diseases

Saturday, August 6, 2016 (7:30AM – 12:30PM) Room 221AB

7:30- 7:40 AM	Introduction & Welcome Frank (Bill) Pierson
Moderators	Nathaniel Tablante
7:40- 8:30 AM	Consumer Perspectives on the Safety of Poultry Products Robert O-Connor, Foster Farms, Livingston, CA
8:30- 9:00 AM	Practical Methods of AI Prevention and Control to Protect Poultry and Humans Jack Shere, USDA-APHIS, Riverdale, MD
9:00- 9:30 AM	The Interface Between Public Health and Commercial Poultry Production: A View of Things to Come Frank (Bill) Pierson, <i>Virginia Tech, Check, VA</i>
9:30- 10:00 AM	Recent Avian Influenza Outbreaks in Poultry and Humans: An Epidemiologic Perspective David Swayne, USDA/ARS/SEPRL, Athens, GA
10:00- 10:15 AM	Questions and Answers for the First Four Talks
10:15- 10:30 AM	Break
Moderators	Frank (Bill) Pierson
10:30- 11:10 AM	How Epidemiology is Used in Investigating Poultry Disease Outbreaks Jean-Pierre Vaillancourt, University of Montreal, St. Hyacinthe, Canada
11:10 AM - 11:30 AM	Communicating Science-Based Information to Non-Scientists Nathaniel Tablante, University of Maryland, College Park, MD
11:30 AM - 12:10 PM	How Poultry Veterinarians can be More Involved in the "One Health Initiative" Cheryl Stroud, Executive Director, One Health Commission, Apex, NC
12:10- 12:30 PM	Questions and Answers, Session Wrap Up
12:30 PM	Adjourn



AAAP Scientific Program Sunday, August 7, 2016



	Room 221 AB	Room 221 CD
Topic	Case Reports	Avian Influenza
Moderator	Travis Cigainero	Louis Dufour-Zavala
8:00 AM	Investigation of Egg Production Drops in Commercial Brown Layers: Part 1 Kelli Jones, CEVA Animal Health, Yazoo City, MS.	A Microfluidic Device Integrated with an Advanced Nanostructured Material for Rapid Avian Influenza Virus Capture and Detection Yin- Ting Yeh, The Pennsylvania State University, University Park, PA.
8:15 AM	Egg Production Drops in Commercial Brown Layers Investigated: Part 2 Eva Wallner-Pendleton, <i>Pennsylvania State University, University Park, PA</i> .	Transmission of Recent H5 Highly Pathogenic Avian Influenza Viruses in Chickens David Suarez, Southeast Poultry Research Laboratory, Agricultural Research Service, U.S. Department of Agriculture, Athens, GA.
8:30 AM	Investigation of Egg Production Drops in Commercial Brown Layers: Part 3 Milos Markis, AviServe LLC, Newark, DE.	Characterization of H9N2 Low Pathogenic Avian Influenza Viruses from Pakistan (2012-2015) Dong-Hun Lee, Southeast Poultry Research Laboratory, Agricultural Research Service, U.S. Department of Agriculture, Athens, GA.
8:45 AM	A Unique Case of Ulcerative Dermatitis in a Flock of Cage Free, Commercial Brown Layers Geoffrey Lossie, Indiana ADDL, Lafayette, IN.	The Multigenic Nature of the Differences in Pathogenicity of H5N1 Highly Pathogenic Avian Influenza Viruses in Domestic Ducks Mary Pantin-Jackwood, Southeast Poultry Research Laboratory, Agricultural Research Service, U.S. Department of Agriculture, Athens, GA.
9:00 AM	Bone Deformities in Roller Pigeon Squab due to Improper Diet. Susan Williams, <i>University of Georgia, PDRC, Athens, GA</i> .	Update on Avian Influenza in the US. Mia Torchetti, USDA APHIS, Ames, IA.
9:15 AM	Bro	eak
Торіс	Case Reports (continued)	Avian Influenza (continued)
Moderator	Enrique Montiel	Natalie Armour
9:30 AM	Calcium Tetany in Flocks of Commercial Male Turkeys? H Shivaprasad, University of California, Davis, Tulare, CA.	Reed Rumsey Award Winner Correlation between Interferon Response and Protective Efficacy of NS1-Truncated Mutants as Influenza Vaccine Candidates in Chickens Hyesun Jang, The Ohio State University, Wooster, OH.
9:45 AM	Leucocytozoon sp. in a Flock of 4-Week-Old Ducklings Richard Fulton, Michigan State University, Lansing, MI.	Peptide Nanoparticle-based Vaccine Protects Chickens against High Pathogenicity Avian Influenza Virus Mazhar Khan, University of Connecticut, Storrs, CT.
10:00 AM	Impact of Astrovirus Challenge on a Commercial Broiler Breeder Flock and Subsequent Progeny David French, Sanderson Farms, Laurel, MS.	Development and Application of a Vaccination Planning Tool for Avian Influenza David Castellan, FAO (past), Consultant, Niagara Falls, Canada.
10:15AM	Incursion and Recursion of "White Chicks" in U.S. Commercial Broiler Production Philip Stayer, Sanderson Farms, Laurel, MS.	Inactivated Vaccine Protects Layer Hens from Clade 2.3.4.4 H5 High Pathogenicity Avian Influenza Virus Kateri Bertran Dols, Southeast Poultry Research Laboratory, USDA-ARS, Athens, GA.
10:30 AM	Eimeria mivati: Field Clinical Case Andres Montoya, Merck Animal Health, Roswell, GA.	Higher Quantity of H5N2 Clade 2.3.4.4 High Pathogenicity Aviar Influenza Virus Required to Infect Broilers than Leghorns but No Difference in Age Susceptibility David Swayne, USDA/ARS/SEPRL Athens, GA.
10:45 AM	Bro	eak
Moderator	Danny	Magee
11:00 AM		Poultry Diseases: An International Perspective Bernational, LLC, Flowery Branch, GA Room 221AB
11:30 AM	AAAP Busir	ness Meeting Room 221AB
12:30 PM	Adjourn	for Lunch
Topic	Case Reports (continued)	Avian Influenza (continued)
Moderator	Chad Malinak	Mary Pantin-Jackwood
1:30 PM	Nasal Gland Chlamydiosis in Commercial Organic Turkeys in California: Association with Pigeons and Chlamydia psittaci Strain Characterization. Gabriel Sentíes-Cué, CAHFS-Turlock/UC Davis, Turlock, CA.	Network Modeling to Predict Avian Influenza Immunity Distribution in the Poultry Industry in Vietnam and Bangladesh Fernando Lozano, CIRAD- AGIRs, Libourne, France.

Sunday, August 7, 2016 (continued)

2:00PM	Sep-Tox: Condemnation Without Representation Armando Mirandé, Supervet, Inc., Montgomery, TX.	A Simulation Based Evaluation of the Time to Detect EA/NA H5N2 HPAI Virus Infection in Commercial Turkey Flocks under Various Active Surveillance Testing Protocols. Carol Cardona,
2:00PM		· · · · · · · · · · · · · · · · · · ·
7.15PM	Ochroconosis and Rickets in Commercial Broiler Chicks Natalie Armour, Mississippi State University, CVM, DPPM, Pearl, MS.	Avian Influenza Outbreak Data Management System (British Columbia) Victoria Bowes, Animal Health Centre, BC Ministry of Agriculture, Abbotsford, Canada.
2.1511	Nutrition-Induced Respiratory Disease in Turkeys Kabel M. Robbins, <i>Butterball, LLC, Ozark, AR</i> .	Pathogenicity of 2015 North American H5N2 Highly Pathogenic Avian Influenza Poultry Isolates in Chickens and Mallards Eric DeJesus, Southeast Poultry Research Laboratory, Agricultural Research Service, U.S. Department of Agriculture, Athens, GA.
	Histopathology of Nutrition-Induced Respiratory Lesions in Turkeys Oscar Fletcher, North Carolina State University, Raleigh, NC.	Investigation on the Possible Application of a Serological DIVA Monitoring Strategy when a rHVT-H5 Vaccine is used to Control Avian Influenza. Yannick Gardin, CEVA Santé Animale, Libourne, France.
2:45 PM	Variation in Gross and Histologic Lesions in Two Field Cases of Clade 2.3.4.4 H5 HPAI in British Columbia, Canada Victoria Bowes, Animal Health Centre, BC Ministry of Agriculture, Abbotsford, Canada.	Heterosubtypic Immunity to Low Pathogenic Avian Influenza Viruses in Mallard Ducks Karen Segovia, The University of Georgia, Athens, GA.
3:00 PM	Pathology Associated with Highly Pathogenic H5N8 Avian Influenza in Commercial Chickens and Turkeys in California Simone Stoute, UC Davis, Turlock, CA.	Preventing Outbreaks of Avian Influenza Through Timely Dissemination of Practical Science-Based Information Nathaniel Tablante, University of Maryland College Park, College Park, MD.
3:15 PM		
Торіс	Case Reports (continued)	Avian Influenza (continued)
Moderator	Don Ritter	Mohamed El-Gazzar
3.30 51/1	Predation of a Flock of Mallard Cross Ducklings Richard Fulton, <i>Michigan State University, Lansing, Ml.</i>	Inactivation of Avian Influenza Virus In Chicken Feed Haroldo Toro, Auburn University, Auburn, AL.
3:45 PM	Investigation on the use of a Serological DIVA Monitoring Strategy when a rHVT-F Vaccine is used to Control Newcastle Disease. Yannick Gardin, CEVA Santé Animale, Libourne, France	Inactivation of Avian Influenza Virus in Chicken Litter as a Potential Method to Decontaminate Poultry Houses Christopher Stephens, SEPRL-USDA-ARS, Athens, GA.
Торіс	Enteric Health	Virology
Moderator	Don Ritter	Mohamed El-Gazzar
	A New Enteric Disease in Minnesota Turkeys caused by Picorna- and Picobirnaviruses? Sunil Kumar, University of Minnesota, Saint Paul, MN.	Mutation of Avian Encephalomyelitis Virus during Embryo Adaption Rüdiger Hauck, University of California, Davis, Davis, CA.
4:15 PM	Phylogenetic Analyses of Diverse, Novel Enteric Picornaviruses Detected in Turkeys and Chickens in the United States. Michael Day, USDA/ARS, Athens, GA.	Virological and Molecular Characterization of Chicken Astrovirus Associated with Reduction in Hatchability, Poor Chick Quality and "White Chick Disease." Alejandro Banda, Mississippi State University, Pearl, MS.
4·30 PM	Prevalence of Parvovirus in Minnesota Turkeys Tamer Sharafeldin, <i>University of Minnesota, Saint Paul, MN</i> .	White Chick Syndrome in Ontario: Clinical Features, Pathology and Viral Etiology Emily Martin, University of Guelpha, Breslau, Canada.
Торіс	Enteric Health (continued)	Infectious Bursal Disease
4:45 PM	Does Early Exposure to Clostridium perfringens Provide some Immunity to a Severe Clostridium perfringens Oral Challenge at 17 Days in a Necrotic Enteritis Challenge Model? Stephen Davis, <i>Colorado</i> <i>Quality Research, Inc., Wellington, CO.</i>	Determination of Baseline for Bursa: Body Weight Ratio in Broilers in Relation to Sex & Breed over Age by using HTSi Data Package Manjunatha Mahabalarao, Elanco Animal Health, Waxhaw, NC.
5:00 PM	Necrotic Enteritis in Turkeys in California and Characterization of C. perfringens Isolates for Toxins H Shivaprasad, <i>University of California,</i> <i>Davis, Tulare, CA.</i>	Evaluation of Efficacy of a Live HVT-vectored IBD Vaccine in a Controlled Study with SPF Chicken against Virulent Challenges with Classic IBDV, vvIBV or IBDV Variant E Type – Clinical Protection, Bursa Health, Viral Shedding Andreas Herrmann, <i>Merial SAS, Lyon, France.</i>
	Necrotic enteritis: The Struggles Understanding This Syndrome Steve Fitz-Coy, <i>Merck Animal Health, Salisbury, MD</i> .	A Retrospective Study of IBDV Surveys Comparing Infection Dynamics using Different Broiler Vaccination Strategies Kalen Cookson, Zoetis, Lawrenceville, GA.



Monday, August 8, 2016



	Room 221 AB	Room 221 CD
Topic	Blackhead	Bacteria
Moderator	Becky Tilley	Kevin Maschek
8:00 AM	Future of Blackhead Disease in Poultry Steven R Clark, <i>Devenish, West Jefferson, NC</i> .	Attempts to Determine the Source of Escherichia coli in Day-old Turkey Poults Sara Reichelt, NCSU-CVM Student and Prestage Farms, Inc. Raleigh, NC.
8:15 AM	Histomoniasis in Turkey Flocks Before and After the Ban of Nitarsone Rüdiger Hauck, University of California, Davis, CA.	Avian Pathogenic E. coli in Hens and Day-of Hatch Broilers Danie Karunakaran, Agro BioSciences, Cary, NC.
8:30 AM	A Recurrence of Blackhead in Young Turkey Breeder Toms in a House that had Experienced Blackhead Many Years Previously Eric Gonder, Butterball LLC, Goldsboro, NC.	Bacterial Respiratory Diseases of Turkeys: Diagnosis and Contro Hafez Mohamed Hafez, Insitute of Poultry Diseases, Free University Berlin Germany.
8:45 AM	Experiences Treating Histomoniasis in Turkeys Brian Wooming, <i>Cargill</i> <i>Turkey & Cooked Meats, Springdale, AR.</i>	Genotypic and Phenotypic Assessment of Gallibacterium anati Isolated from Poultry in the United States Roxana Sanchez Ingunza CEVA Animal Health , Lenexa, KS.
9:00 AM	Field Experiences Controlling Histomoniasis- Blackhead Disease in Turkeys at a Large Multiage Commercial Growout Facility Arun K. Bahl, Bahl Farms Inc/Consulting, Cornelius, NC.	Fatty Liver Disease and Osteoporosis (Cage Layer Fatigue Predisposing Factors or Consequence of Salmonella Gallinarum i Commercial Laying Hens? Martha Pulido-Landinez, <i>Mississippi Stat</i> University, Pearl, MS.
9:15 AM	Effects of Feed Additives on the Progression of Blackhead Disease in Turkeys Robert Beckstead, <i>The University of Georgia, Athens GA</i> .	Prevalence and Antimicrobial Resistance of Campylobacter Specie Isolated from Backyard Chickens in Grenada, West Indies Keshav Tiwari, St. George's University, St. Georges, Grenada.
9:30 AM	Bre	ak
Topic	Blackhead (continued)	Bacteria (continued)
Moderator	Kabel Robbins	Kristen Roza
9:45 AM	Geospatial Mapping of Histomoniasis Outbreaks in Commercial Poultry in the Southeast United States Rebecca Jones, North Carolina State University, Raleigh, NC.	
9:45 AM 10:00AM	Poultry in the Southeast United States Rebecca Jones, North Carolina	of Different Poultry Production Types Mattias Delpont, Université a Toulouse, INP, ENVT and INRA, Toulouse, France. A Two-Year Retrospective Study of Bacterial Enumerations from
	Poultry in the Southeast United States Rebecca Jones, North Carolina State University, Raleigh, NC. Blackhead in Pullets- Clinical and Economical Impacts Deirdre	A Two-Year Retrospective Study of Bacterial Enumerations from Commercial Broiler Breeder Fecal Samples John Schleifer, QTI, Inc
10:00AM	Poultry in the Southeast United States Rebecca Jones, North Carolina State University, Raleigh, NC. Blackhead in Pullets- Clinical and Economical Impacts Deirdre Johnson, Mountaire Farms, Hebron, MD. Investigating the Prevalence of Histomonas meleagridis Shedding by Captive Raised Ring-Necked Pheasants (Phasianus colchicus) in	of Different Poultry Production Types Mattias Delpont, Université a Toulouse, INP, ENVT and INRA, Toulouse, France. A Two-Year Retrospective Study of Bacterial Enumerations from Commercial Broiler Breeder Fecal Samples John Schleifer, QTI, Inc Gillsville, GA. Cross-Protective Bacterins for E. coli and Salmonella Margie Lee
10:00AM 10:15AM	Poultry in the Southeast United States Rebecca Jones, North Carolina State University, Raleigh, NC. Blackhead in Pullets- Clinical and Economical Impacts Deirdre Johnson, Mountaire Farms, Hebron, MD. Investigating the Prevalence of Histomonas meleagridis Shedding by Captive Raised Ring-Necked Pheasants (Phasianus colchicus) in Pennsylvania Richard Gerhold, University of Tennessee, Knoxville, TN.	of Different Poultry Production Types Mattias Delpont, Université a Toulouse, INP, ENVT and INRA, Toulouse, France. A Two-Year Retrospective Study of Bacterial Enumerations from Commercial Broiler Breeder Fecal Samples John Schleifer, QTI, Inc Gillsville, GA. Cross-Protective Bacterins for E. coli and Salmonella Margie Lee UGA, Watkinsville, GA. Antibiotics
10:00AM 10:15AM <u>Topic</u>	Poultry in the Southeast United States Rebecca Jones, North Carolina State University, Raleigh, NC. Blackhead in Pullets- Clinical and Economical Impacts Deirdre Johnson, Mountaire Farms, Hebron, MD. Investigating the Prevalence of Histomonas meleagridis Shedding by Captive Raised Ring-Necked Pheasants (Phasianus colchicus) in Pennsylvania Richard Gerhold, University of Tennessee, Knoxville, TN. Blackhead (continued) Overview of Field and Experimental Experiences with Paromomycin as Treatment for Histomonosis in Turkeys Koen De Gussem,	of Different Poultry Production Types Mattias Delpont, Université a Toulouse, INP, ENVT and INRA, Toulouse, France. A Two-Year Retrospective Study of Bacterial Enumerations from Commercial Broiler Breeder Fecal Samples John Schleifer, QTI, Inc Gillsville, GA. Cross-Protective Bacterins for E. coli and Salmonella Margie Lee UGA, Watkinsville, GA. Antibiotics Quantifying Antimicrobial use in Poultry Production Randall Single

Monday, August 8, 2016 (continued)

Moderator	Bruce 0	Calnek
	Lasher-Eckroade History Lecture: The History of the First Genera	ation Marek's Disease Vaccines: The Science and Little Known
11:15 AM	Facts Karel Schat, Cornell University, Ithaca, NY. Rooms 221AB	
	AAAP Awards Luncheon	
12:00 PM	MAAP Award Marriot River Center Hote	
	Room 221 AB	Room 221 CD
Торіс	Coccidiosis	Food Safety
Moderator	Charles Broussard	Denise Brinson
2:00 PM	Coccidiosis Vaccination Revealed: A Peek Behind the Curtain G. Donald Ritter, <i>Mountaire Farms Inc., Salisbury, MD</i> .	Examination of the Environmental Reservoir of Resistance Genes for Foodborne Pathogens in Poultry Production. Karen Liljebjelke, University of Calgary, Calgary, Canada.
2:15 PM	Comparison of Breeder/Layer Coccidiosis Vaccines Linnea Newman, Merck Animal Health, North Creek, NY.	Are Salmonella from Poultry Distinct from Those Present in the Environment? John Maurer, University of Georgia, Athens, GA.
2:30PM	Evaluation of Gel Application of a Coccidia Vaccine Grace Ashby, University of Georgia, Athens, GA.	Colonization of Internal Organs by Salmonella Enteritidis in Experimentally Infected Laying Hens Housed in Enriched Colony Cages at Different Stocking Densities Richard Gast, U.S.National Poultry Research Center, USDA-ARS, Athens, GA.
2:45 PM	Application of a Coccidia Vaccine and the Evaluation of Field Scoring Methods Seiche Genger, North Carolina State University, Raleigh, NC.	The Impact on Intestinal Colonization with Salmonella enterica serovar Typhimurium with Partial Replacement of NaHCO3 in Diet Dulmelis Sandu, University of Georgia, PDRC, Athens, GA.
3:00 PM	Rate of Ingestion/Uptake of Eimeria oocysts from Live Coccidia Vaccines via Different Application Methods of Inoculation Sue Hubbard, Merck Animal Health, Mt. Olive, MS.	Using Bioluminescent Salmonella to Identify Infection Sites that Might Contribute to Contamination of Ground Chicken Meat Monique Franca, UGA, Athens, GA.
3:15 PM	Bre	kak
Торіс	Coccidiosis (continued)	Food Safety (contiued)
Moderator	Sara Steinlage	Elena Behnke
3:30PM	Comparative Evaluation of Different Anticoccidial programs in Broilers with Specific Attention to Avatec 20 (Lasalocid Sodium) Babak Sanei, Zoetis Canada Inc., Canada	The Importance of Data in Salmonella Risk Mitigation: Development of a Cloud-based Technical Platform for Food Safety Management in Poultry Production Robert O'Connor, Foster Farms, Livingston, CA.
3:45 PM	Dynamics of Eimeria Oocyst Concentrations and Species Composition in Commercial Broiler Houses During Anticoccidial Drug or Vaccine Programs Mark Jenkins, ARS-USDA, Beltsville, MD.	Utilization of Next Generation Sequencing to Evaluate Vaccination against Salmonella Typhimurium in an US Broiler Integrator John ElAttrache, CEVA Animal Health, Lenexa, KS.
Торіс	Coccidiosis (continued)	Welfare
4:00 PM	Evaluation of the Efficacy of Different Coccidiosis Bioshuttle Programs and Dietary Capsicum-turmeric Oleoresins on Broiler Performance Yun-Ting Wang, <i>Huvepharma, Dallas, TX.</i>	Application of Six Sigma Principles and Methodology to Improve Animal Welfare: Reduction in Wing Damage Kenneth Opengart, Keystone Foods, Signal Mountain, TN.
4:15 PM	What are Some Potential Alternatives to AGPs and lonophores in an Antibiotic Free Program? Tina Yun-Ting Wang, Huvepharma, Atlanta, GA	Development and Implementation of a Progressive Welfare Index (PWI) as a Real-time Indicator of Overall Welfare Performance Kenneth Opengart, <i>Keystone Foods, Signal Mountain, TN.</i>
	Wine & Cheese Social Poster Room 220	
4:30 PM		



Tuesday, August 9, 2016



	Room 221 AB	Room 221 CD
Topic	Marek's Disease Virus	Diagnostics
Moderator	Pedro Villegas	Kalen Cookson
8:00 AM	Effect of Probiotics on Marek's Disease Vaccination John Dunn, USDA-ARS-ADOL, East Lansing, MI.	Database Mining of Normal Water Biochemical Paramaters of Water in Poultry Barns in the Province of Québec and the Effect of Different Water Additives and Antibiotics on these Parameters. Jean Pierre Vaillancourt, University of Montreal, St. Hyacinthe, Canada.
8:15 AM	Rimler Award Winner * Evaluation of Viral and Host Mechanisms Involved in Permanent Marek'S Disease Virus Induced Immunosuppression Faiz Nik Mohd Azmi, North Carolina State University, Raleigh, NC.	Investigating Respiratory Physiology and Thermoregulation in Poultry using Non-Invasive Point-of-Care Methods Marie Souvestre, Université de Toulouse, Toulouse, France.
8:30 AM	In Ovo Vaccination of Commercial Meat Type Chickens with Herpesvirus of Turkey: Vaccine Replication and Effect on the Chicken Immune System Isabel Gimeno, North Carolina State University, Raleigh, NC.	Monitoring Cleaning and Disinfection Protocols with the use of AccuPoint as Hygiene Screening Tool in Hatcheries Ricardo Munoz, Neogen, Lexington, KY.
8:45 AM	Assessment of the Signaling Synergism of Bivalent HVT/SB1 Vaccine Components on Innate Sensing and Acquired Immune Patterning Sabarinath Neerukonda, University of Delaware, Newark, DE.	Pathology of Wooden Breast Disease in Modern Broiler Chickens: A Histologic and Ultrastructural study Michael Babak, University of Delaware, Newark, DE.
Topic	Рох	Enteric Health
9:00 AM	Co-infection with Fowlpox Virus Strains Carrying Variable Sequences of Reticuloendotheliosis Virus Deoki Tripathy, <i>University of</i> <i>Illinois, Urbana, IL.</i>	HTS: A Unique, Global Surveillance System for Monitoring and Benchmarking Enteric Health Alexandre Zocche, Elanco Animal Health, Greenfield, IN.
9:15 AM	Nucleotide Sequence Analysis of Selected Genes of Avianpox Viruses Deoki Tripathy, University of Illinois, Urbana, IL.	Intestinal Parasitic Worms are a Common Problem in the Poultry Industry. Blayne Mozisek, Merck Animal Health, Austin, TX.
9:30 AM	Outbreaks of Acute Respiratory Fowlpox in Layers in France Jean- Luc Guerin, Université de Toulouse, INP, ENVT and INRA, Toulouse, France	Comparison of Specific Intestinal Wet Mount and Histological Findings Stephen Collett, University of Georgia, Athens, GA.
9:45 AM	Br	reak
Торіс	Virology/Newcastle Disease Virus	Enteric Health (continued)
Moderator	Armando Mirande	Nathaniel Tablante
10:00 AM	Application of Next-Generation Sequencing (NGS) in Diagnostic Avian Virology Huaguang Lu, The Pennsylvania State University, University Park, PA.	Development of Real-Time PCR Reagents to Identify Salmonella DNA in Enriched Cultures Kristin Mesires, IDEXX Laboratories Inc., Westbrook, ME.
10:15 AM	Time as Critical Parameter for Vaccination of Turkeys against Newcastle Disease Christian Grund, <i>FLI, Federal Research Institute for</i> <i>Animal Health, Greifswald, Germany.</i>	Immunohistochemical Characterization of Jejunal Epithelial Cell Populations in Young Turkeys with Depressed Growth Rebecca Jones, North Carolina State University, Raleigh, NC.
10:30 AM	Evaluation of in Vivo Replication of a Newcastle Disease Live Attenuated Vaccine Strain in Commercial Broiler Chicks: A Comparison of Drinking-Water, Spray and Eye Drop Vaccination Methods Andrea Delvecchio, <i>MERIAL SAS, Lyon, France.</i>	Review of Intestinal Wet Mount Examination Stephen Collett, University of Georgia, Athens, GA.
Topic	Newcastle Disease Virus	Clostridia
10:45 AM	Effect of Live or Live & Inactivated Newcastle Vaccination Programs against Virulent Newcastle Disease Virus Genotype VII Challenge in Controlled Studies with SPF Chicken or Commercial Layer – Clinical Protection, Viral Shedding Andreas Herrmann, Merial SAS, Lyon, France.	Gangrenous Dermatitis in Turkeys Associated with Used Litter in Extended Dormancy Sam Hendrix, Colorado Quality Research, Wellington, CO.
11:00 AM	Productivity, Clinical Performance and Seroconversion of Broilers Vaccinated with a Vector rHVT-F Protein Newcastle Disease (ND) Vaccine and Reared in Non-Vaccinating and Velogenic ND Virus (vNDV)- Free Poultry Companies. Luiz Sesti, CEVA Animal Health, Rio Claro, Brazil.	Comparison of the Proteins Produced by Severe Necrotic Enteritis (NE) Producing Strains of C. perfringens (netB positive) to those of a NetB Positive non NE Producing Strain Joan Smyth, University of Connecticut, Storrs, CT.

Tuesday, August 9, 2016 (continued)

Торіс	Newcastle Disease Virus (continued)	Clostridia (continued)
Moderator	Armando Mirande	Nathaniel Tablante
	Room 221 AB	Room 221 CD
11:15 AM	Repeated Challenge does not Decrease the Efficacy of NDV Vaccines Patti Miller, Southeast Poultry Research Laboratory, Athens, GA.	Feeding Tributyrin or Organic Acid Blend with Essential Oils Administered in the Drinking Water to Broilers to Reduce Clostridium perfringens Induced Necrotic Enteritis Greg Mathis, Southern Poultry Research, Inc., Athens, GA.
11:30 AM	Characterization of NDV Field Isolates and Evaluation of Protection against an NDV Isolate by a Recombinant HVT-ND and a Live Attenuated (C2) Vaccines in Commercial Broilers Ivan Alvarado, Merck Animal Health, Athens, GA.	Impact of Controlling Bacteria in Feed on Broiler Performance during a Clostridial Challenge Kurt Richardson, Anitox Corp, Lawrenceville, GA.
11:45 AM	The use of Next Generation Sequencing in the Diagnosis and Typing of NDV Isolates from Commercial Poultry Flocks Salman Latif Butt, University of Georgia, Athens, GA.	2015 Bacterial Enteritis Global Impact Assessment Alexandre Zocche, <i>Elanco Animal Health, Fishers, IN</i> .
12:00 PM	Lu	inch

Topic	Wealth of Knowledge	Mycoplasma
Moderator	Brian Jordan	Vijay Durairaj
1:15 PM	National Poultry Improvement Plan Denise Brinson, USDA-APHIS, Conyers, GA.	Reed Rumsey Award Winner * Study on the Prevalence and Association of a Novel Mycoplasma sp. with Reproductive Disease in Commercial Goose Breeders. Silvia Carnaccini, CAHFS-UCDavis, Turlock, CA.
1:30 PM	The Commercial Duck Industry in the United States. Current Disease Challenges and Contributions to the US Poultry Industry Jaime Ruiz, <i>Elanco Animal Health, McKinney, TX.</i>	Mycoplasma synoviae Antimicrobial Susceptibility Testing Naola Ferguson-Noel, <i>University of Georgia, Athens, GA</i> .
1:45 PM	Tools for the Poultry Professional: How to Increase Personal and Professional Wellness Andrea Zedek, <i>Zedek Poultry Consulting, LLC, Simpsonville, SC.</i>	Evaluation of Infectious Laryngotracheitis CEO Vaccine in Mycoplasma synoviae Positive Broilers Victoria Drouet, University of Georgia, PDRC, Athens, GA.
Topic	Infectious Bronchitis Virus	Laryngotracheitis
2:00 PM	Emerging IBV Variants: The Genotypes, Serotypes and Pathotypes Hui-Wen Chen, <i>National Taiwan University, Taipei, Taiwan</i> .	Cytokine expression patterns in conjunctiva, Harderian gland and trachea after ocular or oral inoculation with a virulent strain of infectious laryngotracheitis virus (ILTV) Gabriela Beltrán, University of Georgia, Athens, GA.
2:15 PM	Use of Infectious Bronchitis Serotype Specific Probes for Egg Layers and Broiler Breeders Louise Dufour-Zavala, GPLN, Gainesville, GA.	Serologic Monitoring (Vaccine Take) after Innovax ILT (rHVT-ILT) Vaccination using Conventional Type of ILT Elisa Kits and an ILT gl Specific Protein Elisa Kit. Rik Koopman, MSD AH, Boxmeer, Netherlands.
Topic	Infectious Bronchitis Virus (continued)	Reovirus
2:30 PM	Beyond Diagnosis: Molecular Epidemiological Analysis of Infectious Bronchitis Virus Mark Jackwood, UGA, Athens, GA.	Pathogenicity of Two Variant Reovirus Isolates from Clinical Cases of Viral Arthritis in Arkansas and North Carolina Tyler Gamble, <i>The University of Georgia</i> , <i>PDRC</i> , <i>Athens</i> , <i>GA</i> .
2:45 PM	Molecular Characterization of Infectious Bronchitis Viruses from Broiler Chicken Farms in Peru Eliana Icochea, University of San Marcos, Lima, Peru.	Turkey Arthritis Reovirus; Pathogenesis and Immune Response Tamer Sharafeldin, <i>University of Minnesota, Saint Paul, MN</i> .





3:00 PM	Break	
	Room 221 AB	Room 221CD
Торіс	Infectious Bronchitis Virus (continued)	Management
Moderator	Andres Montoya	Susan Trock
3:15 PM	Role of Spike S2 Ectodomain in Attachment and Selection of ArkDPI IBV Vaccine Subpopulations in Chickens Vicky van Santen, Auburn University, Auburn, AL.	Chick Quality and First Week Field Evaluations and their Relationship to Incubation and Brooding Conditions Donna Hill, Donna Hill Consulting, Mountain Home, AR.
3:30 PM	Characterization of Kidney Cell-Adapted IBV ArkDPI Vaccine during Back-Passages in Embryonated Eggs Haroldo Toro, Auburn Unversity, Auburn, AL.	Effects of an Automated Egg Sanitizing Machine using both Hydrogen Peroxide with UV Light to Reduce Bacterial Contamination and Improve Hatchability in Older Hen Flocks Myles Hill, <i>Elanco Animal</i> <i>Health, Bentonville, AR</i> .
3:45 PM	Evaluation of the Changes in IBV Subpopulation Composition using Next Generation Sequencing Ha-Jung Roh, <i>CEVA biomune, Leawood,</i> <i>KS.</i>	Incubation Temperature and its Effect on Chick Development and Avian Pathology Danuta Furmanek, Poultry Performance Plus, Niemcz, Poland.
4:00 PM	Major Histocompatibility Complex and Innate Immunity as Factors Providing Genetic Resistance to Infectious Bronchitis Virus Rodrigo Gallardo, University of California, Davis, Davis, CA.	The Georgia Avian Influenza Hotline- Design, Creation, and Implementation Len Chappell, <i>The Georgia Avian Influenza (AI) Hotline, Gainesville, GA</i> .
4:15 PM	Is Infectious Bronchitis Vaccination with Mass and QX Genotypes Protective Against Q1 Strain? Corrado Longoni, Merck Animal Health, Milano, Italy.	Use of a Highly Pathogenic Avian Influenza (HPAI) Hot Line to Improve Early Detection of Possible HPAI Infection in Small (Backyard) Flocks in Georgia. Douglas Anderson, <i>GPLN, Forsyth, GA</i> .
4:30 PM	Control of Severe Respiratory Problems Caused by Arkansas-Related Strains of the Infectious Bronchitis Virus Using a Combination of Two Heterologous IB Vaccine Strains in Broilers In Mexico Francisco Rios-Cambre, <i>BSc., Santiago Tianguistenco, Mexico.</i>	Evaluation of Toe-Trimming Strategies in Commercial Turkey Hens Michael Martin, North Carolina State University, CVM, Morrisville, NC.
4:45 PM	Evaluating Infectious Bronchitis Virus Vaccination by Gel Administration Brian Jordan, <i>The University of Georgia, Athens, GA</i> .	Mortality Surveys, An Important Tool to Evaluate Broiler Breeder Health Jose Bruzual, Aviagen, Inc., Dacula, GA.
5:00 PM	Adjourn	

AAAP Poster Session

Room 220

Antibiotic Resistance/Susceptibility

Antibiotic Susceptibility of Escherichia coli Isolated from Vertebral Osteomyelitis of Broilers in Brazil Roselene Ecco, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil. (#1)

Impact of Ceftiofur Withdrawal from a Canadian Hatchery on Cephalosporin Resistance in Extra-Intestinal Pathogenic Escherichia coli Luc Verrette, Université de Montréal, St-Hyacinthe, Canada. (#3)

Mobility of Antimicrobial Resistance in Avian Pathogenic Escherichia coli (APEC). Catherine Logue, *Iowa State University, Ames, IA. (#4)*

Trends in Antibiotic Resistance to Salmonella Enteritidis Phage Types Isolated from Poultry from 2007 to 2015 Thomas Denagamage, *The Pennsylvania State University, University Park, PA. (#6)*

Avian Influenza

A Preliminary Survey of Hemagglutinating Viruses from Ducks in the Province of Buenos Aires, Argentina. Celina Buscaglia, Comision de Investigaciones Científicas de la Provincia de Buenos Aires, MB Gonnet, Argentina. (#7)

A Synthetic Vaccine of Biodegradable Microspheres for Controlled Release of Adjuvant and Femtomole-Dosed Peptide Antigens Protects against Infectious Bursal Disease Virus. Joseph Giambrone, Auburn University, Auburn, AL. (#8)

Cost-Effectiveness of Avian Influenza Vaccination Strategies In Bangladesh: Added Value to Day Old Chick Vaccination Fernando Lozano, *CIRAD- AGIRs, Libourne, France. (#10)*

Litter Composting Procedures for Inactivation of Avian Influenza Virus in Eggs Teresa Dormitorio, Auburn University, Auburn, AL. (#11)

Network Modeling of Poultry Production and Immunity Levels: Analysis and Perspectives for Vaccination Strategy and Control of Highly Pathogenic Avian Influenza in Vietnam Fernando Lozano, CEVA Animal Health, Libourne, France. (#12)

Surveillance of Amino Acid Substitutions in Avian Influenza Viruses Isolated from Wild Birds from South Korea, 2010-2015 Kwang-Hyun Oh, Chungbuk National University, CVM, Cheongju, South Korea. (#13)

The Pathobiology of Highly Pathogenic H5N2 Avian Influenza Virus in Ruddy Ducks and Lesser Scaup Erica Spackman, SEPRL-USDA-ARS, Athens, GA. (#14)

Understanding New Highly Pathogenic Avian Influenza (AI) Viruses Affecting the U.S. Poultry Industry and their Persistence Rodrigo Gallardo, University of California, Davis, Davis, CA. (#15)

Biosecurity

Biosecurity Risk Survey for Grandparent farms in Latin America Jose Bruzual, *Aviagen, Inc., Dacula, GA. (#16)*

Blackhead

Clinical and Pathological Characteristics of a Histomoniasis (Blackhead) in Backyard Poultry in Vietnam Jong-Suk Mo, Chungbuk National University, CVM, Cheongju, South Korea. (#17)

Increased Concerns for the Lack of Therapeutic Interventions against Histomoniasis (Blackhead Disease) in Turkeys Prajwal R. Regmi, U.S. Food and Drug Administration, Rockville, MD. (#18)

Regulatory Considerations for Approval of Drugs against Histomoniasis in Turkeys and Gamebirds Prajwal R. Regmi, U.S. Food and Drug Administration, Rockville, MD. (#19) The Efficacy of Three Hydroxyquinolones Against Histomonas meleagridis Growth in an In-Vitro Assay. Lorraine Fuller, University of Georgia, PDRC, Athens, GA. (#20)

Case Reports

An Outbreak of Adenoviral Tracheitis in Commercial Goslings in France Mattias Delpont, *Arzacq-Arraziguet, France. (#21)*

Chondronecrosis with Osteomyelitis Caused by Enterococcus cecorum in Broiler, Korea You-Chan Bae, Avian Disease Division, Animal and Plant Quarantine Agency, Anyang, Republic of Korea. (#22)

Fowl Tick (Argas persicus) Infestation in a Backyard Chicken Flock Jarra Jagne, Cornell University, Ithaca, NY. (#23)

HPAI H5N8 Outbreak in Commercial Pekin Ducks in California H Shivaprasad, University of California, Davis, Tulare, CA. (#25)

Tetratrichomoniasis-associated Mortality in Four Ducks and One Pheasant at an Avian Conservation Park in Louisiana Nobuko Wakamatsu, Louisiana State University, SVM, DPS, Baton Rouge, LA. (#26)

The Fowl Pox Cases with Co-infection of Infectious Laryngotracheitis Virus in Chicken Van Dam Lai, Chungbuk National University, CVM, Cheongju, South Korea. (#27)

Diagnostics

A Universal One-Step Real-Time RT-PCR for Detection of all Avian Orthoreovirus Genotypes Lin Lin, Penn State University, University Park, PA. (#28)

Correlation between the 1 Day Chick Quality Determined by the Cervantes Test with the First-Week Mortality in the Broilers Farms in the Period September 2014 - February 2015 Laura Milano, Diagnostic Laboratory, Protinal - Proagro, Valencia, Venezuela. (#29)

Effect of Water Electrolyte Balance or Strong Ion Difference (SID) on Acidbase Balance of Broiler Chickens Daniel Venne, Couvoir Scott Itée, St-Lambert de Lauzon, Canada. (#30)

Frequency of Swollen Head Syndrome in Broilers from Peru Nelly Cribillero, San Marcos University, Lima, Peru. (#31)

Gross and Histologic Diagnosis of Retrograde Yolk Inhalation in Poultry John Roberts, *Thompson Bishop Sparks State Lab, Auburn, AL. (#32)*

Specificity Study of ELISA Kits Brenda Glidewell, GA Poultry Lab, Gainesville, GA. (#33)

The Use of Vaccinated Sentinel Chickens for Isolation of Anitgenic Variants of Infectious Bronchitis Virus (IBV) and Infectious Bursal Disease Virus (IBDV) from Delmarva Broilers John Rosenberger, AviServe LLC, Newark, DE. (#34)

Enteric Health

A Comparison of Fungal and Bacterial Populations in Broilers from High and Low Producing Farms. J. Allen Byrd, USDA, ARS, College Station, TX. (#35)

Chicken Astrovirus is Associated with Enteric Disease in Experimentally Infected Chickens Luis Nuñez, FMVZ-USP, Sao Paulo, Brazil. (#36)

Effect of Dietary Vitamin E on Eimeria tenella-induced Oxidative Stress in Broiler Chickens Rezvan Kiani, Mehr Specialized Poultry Center, Amol, Iran. (#37)

Gut Health in Poultry 2016 Maarten De Gussem, Vetworks, Aalter, Belgium (#38)

Non-Salmonella Associated Cecal Cores In Turkey Poults Dave Fernandez, AgForte (#39) Characterizing Outer Membrane Proteins of Salmonella Enteritidis Expressed in Egg yolk Dona Saumya Wijetunge, *Pennsylvania State University, State College, PA. (#41)*

Effectiveness Assessment of a Genetically Modified Live Vaccine in Broilers Challenged with Salmonella Heidelberg Eduardo Muniz, Zoetis, Jaragua do Sul, Brazil. (#42)

Evaluation of the Effectiveness of Various Doses of Bacillus subtilis Probiotic with or without Mannan in Prevention of Salmonella Heidelberg Colonization. Charles Hofacre, *University of Georgia, Athens, GA. (#43)*

Identification of Extended-Spectrum Beta-Lactamases (ESBL) in E. coli Strains Isolated from Chicken Carcasses Obtained from Processing Plant, Public Markets and Supermarkets in Mexico Patrick Dominguez, Bachoco SA de CV, Mexico City, Mexico. (#44)

Microbiological Profile of Carcasses in Differents Points of the Production Line of a Birds Processing Plant Viamney Yanes, Diagnostic Laboratory, Protinal - Proagro, Valencia, Venezuela. (#45)

MLST Genotype of Campylobacter spp. Isolated from Indigenous Chickens in Grenada, West Indies Ravindra Sharma, St George's University, St. George, Grenada. (#46)

Molecular Epidemiology of Salmonella Heidelberg Isolated from Chickens and Turkeys Kakambi Nagaraja, University of Minnesota, Saint Paul, MN. (#47)

Salmonella Enteritidis in Shell Eggs Produced by Backyard and Other Small Layer Flocks Subhashinie Kariyawasam, *Pennsylvania State University, University Park, PA. (#48)*

The Quebec SE Committee, a Successful Industry - Governmental Agencies - **Academia Collaboration** Martine Boulianne, *Université de Montréal, St. Hyacinthe, Canada. (#49)*

Immunology

An Educational Tool to get References of Healthy Bursa of Fabricius in Commercial Broilers. Christophe Cazaban, CEVA Animal Health, Libourne, France. (#50)

Assessment of *in-ovo* Broiler Substrate Deposition Site at Different Embryo Developmental Stages from Three Breeder Flock Ages using a Differentiated Injection System Fernando Lozano, CEVA Animal Health, Libourne, France. (#51)

Evaluation of Gimax[®] Solution as an Immunostimulant Agent in Broiler Chickens Rezvan Kiani, *Mehr Specialized Poultry Center, Amol, Iran. (#52)*

Infectious Bronchitis Virus

Can Three Strains of Infectious Bronchitis Virus Given Simultaneously Induce Protection in Chickens? Brian Ladman, University of Delaware, Newark, DE. (#53)

Comparison of Protection Induced by Three Different Types of 793/B like Commercial Infectious Bronchitis Virus (IBV) Vaccines against Challenge with IS-1494/06 Like IBV Genotype Arash Ghalyanchilangeroudi, University of Tehran, Tehran, Iran. (#54)

Efficacy Studies of a Variant Infectious Bronchitis Virus Vaccine Brianna Ford, CEVA Animal Health, Lawrence, KS (#55)

Homologous and Heterologous Protection against Brazilian BR-I Viruses of Infectious Bronchitis Jorge Chacón, CEVA Animal Health, Campinas, Brazil. (#56)

Infectious Bronchitis Viruses Isolated during 2005-2014 from Broiler Chicken Farms in Peru Rosa Gonzalez, San Marcos University, Lima, Peru. (#57)

Insertions in the S1 Spike Glycoprotein of GA13-Type Infectious Bronchitis Virus (IBV) Affect Binding to Chicken Tissues Emily Aston, University of Georgia, PDRC, Athens, GA. (#58) Multi-Strain Infection by Infectious Bronchitis Variant Viruses in Broiler and Breeder Flocks in Latin America Luiz Sesti, CEVA Animal Health, Rio Claro, Brazil. (#59)

Pathogen Associated Molecular Pattern (PAMP) Receptor Expression in Chickens Before and After IBV Challenge Isabelle Kallenberg, Auburn University, Auburn, AL. (#60)

Pathogenicity Study of a New Emerging Iranian Infectious Bronchitis Virus Variant (IR-1) in Experimentally Infected SPF Chickens Arash Ghalyanchilangeroudi, University of Tehran, Tehran, Iran. (#61)

Peptide Nanoparticle-based Vaccine for Infectious Bronchitis Virus Jlanping Li, University of Connecticut, Storrs, CT. (#62)

Rapid and Specific Identification of Infectious Bronchitis Virus (IBV) by Real Time Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR) with an Internal Positive Control Jongseo Mo, University of Georgia, PDRC, Athens, GA. (#63)

Use of 9CFR Part 107.1 (b) to Control a Variant Strain of Nephropathogenic Infectious Bronchitis Virus in Delmarva Broiler Chickens Jack Gelb, Jr., University of Delaware, Newark, DE. (#64)

Assessment of an Immune-Complex Infectious Bursal Disease Vaccine in "Low" Maternally-Immune Commercial Broiler Chicks. Christophe Cazaban, CEVA Animal Health, Libourne, France (#65)

Chicken Melanoma Differentiation-Associated Gene 5-Dependent Innate Immunity Bridging Adaptive Immunity in Infectious Bursal Disease Virus Infection Tsang Long Lin, Purdue University, CVM, West Lafayette, IN. (#66)

Molecular Epidemiologic Study of Infectious Bursal Disease Viruses in Brazilian Poultry Farms under Different Vaccination Programs Eduardo Muniz, Zoetis, Jaragua do Sul, Brazil (#67)

Laryngotracheitis

Quantitation of Infectious Laryngotracheitis Virus by a Combination of Virus Propagation in Cell Culture and Quantitative Real-Time PCR Girish Sarma, Hygieia Bio. Lab, Woodland, CA. (#70)

Management

The Effects of Setting Hatching Eggs Upside Down on Embryonic Development and Hatchability Myles Hill, *Elanco Animal Health, Bentonville, AR.* (#71)

Marek's Disease Virus

Characterization of BACrMd5-REV-LTR Virus as MD Vaccine in Commercial Meat Type Chickens: Protection and Immunosuppression Aneg Lucia Cortes, North Carolina State University, CVM, Raleigh, NC. (#72)

Effect of Marek's Disease Vaccines on the Immune Responses on Chicken Embryos Ayanna Glaize, North Carolina State University, Raeford, NC. (#73)

Induction of Unfolded Protein Response (UPR) by Marek's Disease Virus (MDV). Sabarinath Neerukonda, University of Delaware, Newark, DE. (#74)

Pathogenesis of Marek's Disease Vaccine in Turkey Embryos William Shaw, North Carolina State University, Raleigh, NC. (#75)

Mycoplasma

Current Status of Mycoplasma gallisepticum after Starting an Eradication Plan in a Grandparent Breeder Flock in Venezuela. Dayana Perez, Protinal Proagro, Valencia, Venezuela. (#76)

Increasing Virulence of a Mycoplasma synoviae Outbreak Strain from Northeast Georgia Amanda Olivier, University of Georgia, Athens, GA. (#77)

Newcastle Disease Virus

Effect of Field Conditions on the Serological Response to Vaccination against Newcastle Disease Virus. Francisco Perozo, University of Zulia, Venezuela (#78)

Vaccine/Challenge Assessment of Current Newcastle Disease Vaccination Protocols in Endemic Countries. Rosmar Marcano Martí, University Central of Venezuela (#79)

Virology: Other

Onsite Surgical Procedures for Backyard Poultry Annika McKillop, UMcKillop Poultry Medicine, Frederick, MD. (#80)

Detection and Characterization of Two Co-infection Variant Strains of Avian Orthoreovirus (ARV) in Young Layer Chickens using Next-Generation Sequencing (NGS) Yi Tang, *The Pennsylvania State University, University Park, PA.* (#81)

Evaluation of the Safety and Efficacy of a Chicken Embryo Origin Fowl Pox Virus Vaccine in One-Day-Old Broiler Chicks Girish Sarma, Hygieia Bio. Lab, Woodland, CA. (#82)

Expression of Hexon Protein of Fowl Adenovirus Type 4 by Utilizing Yeast Vector Jong-Suk Mo, Chungbuk National University, CVM, Cheongju, South Korea. (#83)

Unusual Lesions Associated with Outbreaks of Avian Encephalomyelitis in Young Brown Chickens Carmen Jerry, University of Georgia, PDRC, Athens, GA. (#84)

Wealth of Knowledge

Histomorphometric Evaluations of Hearts from Mature Normal and Cyanotic Roosters with Comparisons to Normal Market-Age Broilers Floyd Wilson, MS Veterinary Research and Diagnostic Laboratory, Pearl MS. (#85)

Poultry Respiratory Disease Coordinated Agricultural Project (PRD-CAP) Chang Lee, *The Ohio State University, Wooster, OH. (#86)*

The Development of a Sustainable Commercial Poultry Operation Business in Rwanda Bret Rings, Cobb-Vantress, Inc., Springdale, AR. (#87)

Veterinary Care and Treatment of Urban Poultry Rocio Crespo, AHFSL (WADDL, WSU), Puyallup, WA. (#88)

Welfare

Revisiting Animal Welfare Related Production Terms – When to Apply Average, Maximum and Minimum James Barton, *Pacific Vet Group, Fayetteville, AR. (#89)*

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2017	July 21-25	Indianapolis, IN
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2019	July 19-23	Washington, D.C.
2020	July 30-August 4	San Diego, CA



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