o JULY 26-29

0 2014

Impact and Control of Respiratory
Diseases of Poultry

► AAAP Scientific Program includes 143 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.



Denver, CO July 26-29, 2014

# **AAAP 2014 Annual Meeting**

Colorado Convention Center Denver, Colorado, USA July 26-29, 2014

Saturday, July 26, 2014 (7:30AM – 12:30PM) AAAP Symposium

# Impact and Control of Respiratory Diseases of Poultry

Colorado Convention Center, Rooms 102/104/106

Saturday, July 26, 2014 (1:30PM – 5:30PM)

# **AAAP Committee Meetings**

Sheraton Denver Downtown Hotel

Saturday, July 26, 2014 (5:30PM – 6:30PM)

# **AAAP New Member Meet and Greet**

AAAP Members are invited to welcome new members

Sheraton Denver Downtown Hotel, Plaza Ballroom A

Sunday-Tuesday, July 27-29, 2014 (8:00AM – 5:30PM)

# **AAAP Scientific Program**

Colorado Convention Center Sessions A: Rooms 102/104/106 Sessions B: Rooms 108/110/112

Sunday, July 27, 2014 (11:30AM – 12:00PM)

Keynote Speaker: Long-term Perspective on the Current and Future State of the Safety of the US Food Supply (Particularly Poultry Products) and the Path Ahead for the Use of Modern Technology in Further Improvements.

Randall Singer University of Minnesota, St. Paul, MN. Colorado Convention Center, Rooms 102/104/106

Sunday, July 27, 2014 (12:30PM – 2:30PM)

# **AAAP Awards Luncheon**

Hyatt Regency Denver Hotel, Capital Ballroom 1-4

Monday, July 28, 2014 (10:00AM – 10:30AM)
Lasher-Eckroade History Lecture: **The Life and Times of Dr Benjamin (Ben) Sherwood Pomeroy** 

(1911-2004)

Jagdev M. Sharma
The Biodesign Institute, Arizona State University
Colorado Convention Center, Rooms 102/104/106

Monday, July 28, 2014 (10:30AM – 11:00AM)

Invited Speaker: Learnings on Very Virulent Infectious Bursal Disease Viruses (vvIBDV).

Nicolas Eterradossi, Agence Nationale de Securite Sanitaire (Anses), Ploufragan Laboratory, VIPAC Unit, France – OIE reference laboratory for infectious bursal disease

Colorado Convention Center, Rooms 102/104/106

Monday, July 28, 2014 (11:00AM – 12:00PM)

# **AAAP Business Meeting**

Colorado Convention Center, Rooms 102/104/106

Monday, July 28, 2014 (4:30PM - 5:30PM)

# **Wine & Cheese Social in Poster Room**

Poster Presenters will be present at their posters during this time. Outstanding Field Case/Diagnostic Report Award & A.S. "Rosy" Rosenwald Student Poster Award will be given at this time. Colorado Convention Center Rooms 107/109/111/113

The designated AAAP hotel is:

**Sheraton Denver Downtown Hotel** 

The 2014 AAAP/AVMA Annual Convention will be held at the:

**Colorado Convention Center** 

The 2014 AAAP Awards Luncheon will be held at: **Hyatt Regency Denver at Colorado Convention Center** 

# Please Thank Our 2014 AAAP Program Sponsors

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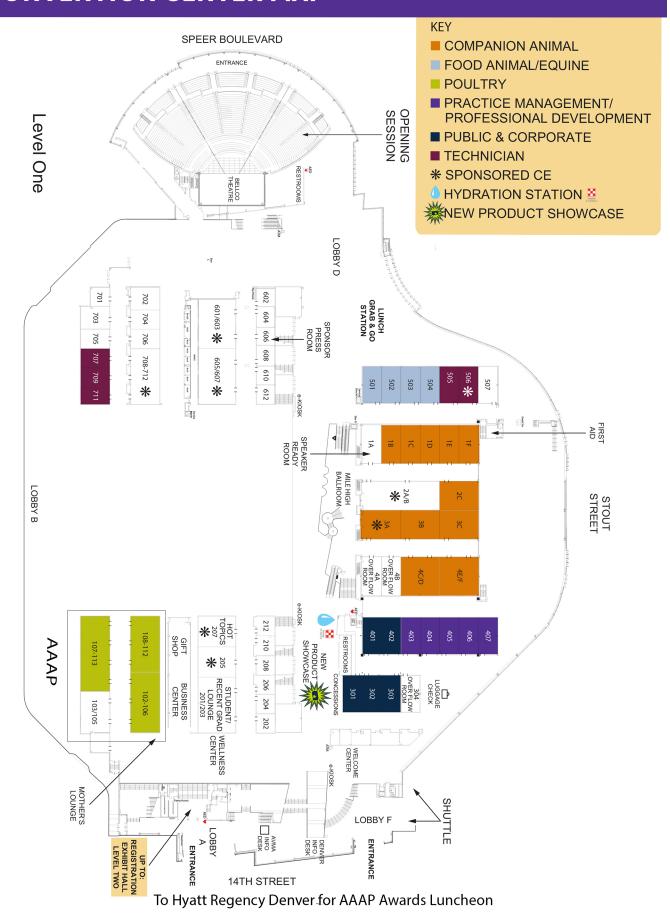
Colorado Quality Research, Inc. Mountaire Farms
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Association Donations Individual donations

Indiana State Poultry Association Gary Spina Midwest Poultry Federation

# **CONVENTION CENTER MAP**



# DOWNTOWN DENVER ACCOMMODATIONS



# **American Veterinary Medical Association**

2014 AVMA Annual Convention July 25-29, 2014

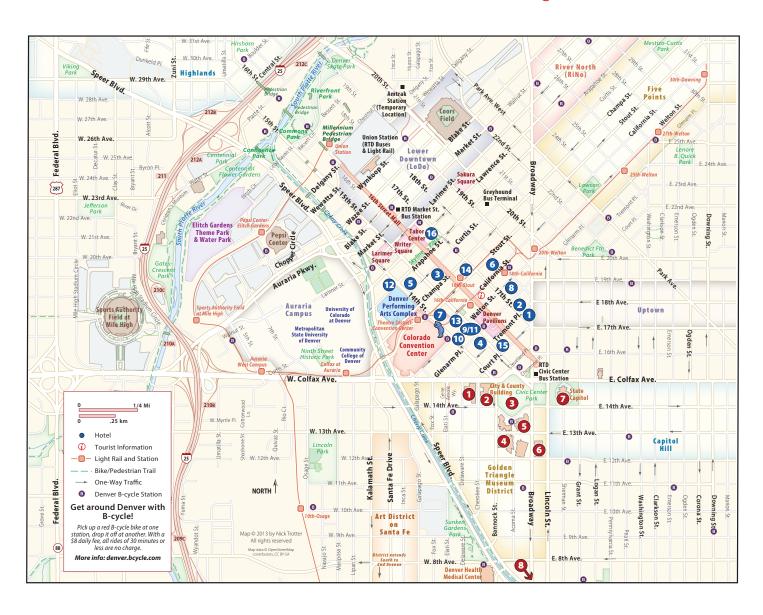
- 1 Brown Palace Hotel and Spa
- 2 Comfort Inn Downtown
- 3 Courtyard by Marriott Downtown
- 4 Crowne Plaza Denver Downtown
- **5** The Curtis, a Doubletree Hotel by Hilton
- 6 Denver Marriott City Center
- **7** Embassy Suites Denver Downtown at the Convention Center
- 8 Grand Hyatt Denver
- 9 Hampton Inn & Suites Convention Center

- 10 Hilton Garden Inn Downtown Denver
- 11 Homewood Suites Denver/Downtown
  - Convention Center
- **12** Hotel Teatro
- **13** Hyatt Regency at Colorado Convention Center
- 14 Magnolia Hotel Denver
- 15 Sheraton Denver Downtown Hotel
- 16 The Westin Denver Downtown

### MAJOR ATTRACTIONS

- 1 U.S. Mint
- 2 Denver City & County Building
- 3 Civic Center Park
- 4 Denver Art Museum
- 5 Denver Public Library
- 6 History Colorado Center
- 7 Colorado State Capitol Building
- 8 Cherry Creek Shopping

(i) VISIT DENVER Information Center



# 2013-2014 AAAP Foundation Board of Directors

www.aaap.info/foundation

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# **AVMA Animal Agriculture Liaison**

Sara T. Steinlage 2015 Karen Grogan 2015 (Alternate)

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**AVMA Clinical Practioners Advisory Committee**Hector M. Cervantes 2015

**AVMA Committee for Disaster and Emergency Issues**Jarra Jagne 2016

**AVMA Convention Management and Program Committee** 

John Smith 2015

AVMA Food Safety Advisory Committee

Suzanne Y. Dougherty 2015 Charles L. Hofacre 2016 (Alternate)

# **AVMA House of Delegates**

Y. M. Saif 2014 Gregg J. Cutler 2014 (Alternate)

**AVMA Legislative Advisory Committee**Gregg J. Cutler 2015

Bruce Stewart-Brown 2016 (Alternate)

AVMA Steering Committee on FDA Policy on Veterinary Oversight of Antimicrobials

Charles L. Hofacre 2014

# **AAAP Representatives to Allied Organizations**

Council for Agriculture Science and Technology (CAST)

Robert D. Evans 2016

Professional Animal Auditor Certification Organization (PAACO)

James T. Barton 2016 David Pyle 2015 David R. Hermes 2014 **United States Animal Health Association (USAHA)** 

Eric Gingerich 2016

Transmissible Diseases of Poultry and Other Avian Species

Dale C. Laurer, Chair

Animal Agriculture Coalition (AAC)

Gregg J. Cutler

# **AAAP Foundation Committee Chairs**

www.aaap.info/aaapawards

**Awards** 

Kate Barger 2017

**Poultry Scholarship**Frederic J. Hoerr

**Kenneth Eskelund Preceptorship** 

Francene S. Van Sambeek

# **AAAP Constitutional Committee Chairs**

www.aaap.info/committees

Auditing Nominating Resolutions
Karen Burns Grogan Jagdev Sharma Frederic J. Hoerr

# **AAAP Task Force Committee Chairs**

Animal Welfare and Management Practices

Michael P. Martin 2014

Diseases of Public Health Significance

Frank W. Pierson 2014

**Drugs and Therapeutics** 

Barry J. Kelly 2014

**Education** 

Gabriel Senties-Cue 2016 Pat Waknell 2016

**Electronic Information** 

Timothy J. Johnson 2013

**Enteric Diseases** 

Dan Karunakaran 2014

**Epidemiology** 

Randy Chick 2014

**Food Safety** 

James T. Barton 2016

**History of Avian Medicine** 

John R. Dunn 2016

**Legislative Advisory** 

Gregg J. Cutler 2014

Membership

lan Rubinoff 2014

**Program Advisory** 

John Smith 2016

**Respiratory Diseases** 

Maricarmen Garcia 2014

**Research Priorities** 

Danny Magee 2016

**Tumor Virus** 

Arun R. Pandiri 2014

Toxic, Infectious, Miscellaneous and Emerging Diseases

Hyatt Abbassi 2015

**AAAP Interest Group Chairs** 

Histopathology/Case Report

**Interest Group** 

H.L. Shivaprasad

2013-2014 AAAP

**Board of Directors** 

www.aaap.info/aaap-board-of-directors

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**Avian Diseases Advisory Board** 

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**Avian Diseases Editorial Board** 

Y. M. Saif

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Diseases of Poultry Editorial Board

David E. Swayne

Isolation of Avian Pathogens Manual Board

Manual Board

Susan Williams

# 2014 AAAP Events Schedule

Name of Group	<b>Meeting Date</b>	Bea. Time	End Time	Location	Room
AAAP Board of Directors Meetings					
AAAP Board of Directors	Thursday, July 24	7:00am	5:00pm	Sheraton Denver Downtown	Plaza Court 1
AAAP Board of Directors	Friday, July 25	7:00am	5:00pm	Sheraton Denver Downtown	Plaza Court 1
AAAP Past Presidents Luncheon	Monday, July 28	12:30pm	2:00pm	Hyatt Regency Denver Hotel	Mineral Hall B
AAAP Board of Directors	Tuesday, July 29	7:00am	12:00pm	Sheraton Denver Downtown	Governor's Square 15
		•			
Committee Meetings					
Histopathology/Case Report Interest Group	Friday, July 25	1:00pm	4:00pm	Sheraton Denver Downtown	Governor's Square 15
Awards Committee	Saturday, July 26	1:30pm	2:30pm	Sheraton Denver Downtown	Governor's Square 10
Avian Diseases Editorial Board	Saturday, July 26	1:30pm	2:30pm	Sheraton Denver Downtown	Governor's Square 12
Committee Review Committee	Saturday, July 26	1:30pm	2:30pm	Sheraton Denver Downtown	Director's Row E
Drugs and Therapeutics Committee	Saturday, July 26	1:30pm	2:30pm	Sheraton Denver Downtown	Plaza Court 5
Electronic Information Committee	Saturday, July 26	1:30pm	2:30pm	Sheraton Denver Downtown	Plaza Court 2
Food Safety Committee	Saturday, July 26	1:30pm	2:30pm	Sheraton Denver Downtown	Plaza Court 3
Avian Diseases Manual Editorial Board	Saturday, July 26	1:30pm	2:30pm	Sheraton Denver Downtown	Plaza Court 4
Membership Committee	Saturday, July 26	1:30pm	2:30pm	Sheraton Denver Downtown	Governor's Square 11
Toxic, Infectious, Miscellaneous & Emerging Diseases Committee	Saturday, July 26	1:30pm	3:00pm	Sheraton Denver Downtown	Governor's Square 15
Avian Diseases Advisory Board	Saturday, July 26	2:30pm	3:30pm	Sheraton Denver Downtown	Governor's Square 17
Isolation, Identification Manual Editorial Board	Saturday, July 26	-	3:30pm	Sheraton Denver Downtown	Plaza Court 7
Preceptorship Committee	Saturday, July 26	2:30pm	3:30pm	Sheraton Denver Downtown	Plaza Court 8
Tumor Virus Committee	Saturday, July 26	-	4:00pm	Sheraton Denver Downtown	Plaza Court 6
Animal Welfare Committee	Saturday, July 26		4:30pm	Sheraton Denver Downtown	Governor's Square 9
Education Committee	Saturday, July 26		4:30pm	Sheraton Denver Downtown	Plaza Court 1
Diseases of Public Health Significance	Saturday, July 26	<u> </u>	4:30pm	Sheraton Denver Downtown	Director's Row G
Research Priorities Committee	Saturday, July 26		4:30pm	Sheraton Denver Downtown	Director's Row F
Respiratory Diseases Committee	Saturday, July 26		5:30pm	Sheraton Denver Downtown	Governor's Square 14
Enteric Diseases Committee	Saturday, July 26		5:30pm	Sheraton Denver Downtown	Governor's Square 10
Epidemiology Committee	Saturday, July 26		5:30pm	Sheraton Denver Downtown	Governor's Square 11
History Committee	Saturday, July 26		5:30pm	Sheraton Denver Downtown	Governor's Square 15
IBVD Committee	Saturday, July 26	5:30pm	7:00pm	Sheraton Denver Downtown	Plaza Court 7
D					
Program Events	C	7.20	12.20	lc c .	D 102 /104 /106
AAAP Symposium	Saturday, July 26		12:30pm	Convention Center	Rooms 102 /104 /106
Meet and Greet New AAAP Members	Saturday, July 26		6:30pm	Sheraton Denver Downtown	Plaza Ballroom A
AAAP Rusings Mosting	Sunday, July 27	12:30pm	2:30pm	Hyatt Regency Denver Hotel Convention Center	Capital Ballroom 1-4
AAAP Wine and Chasse Social in Poster Poors	Monday, July 28	10:30am	12:00pm		Rooms 102 / 104 / 106 Rooms 107 / 109 / 111 / 113
AAAP Wine and Cheese Social in Poster Room	Monday, July 28	4:30pm	5:30pm	Convention Center	NOOIIIS 107/ 109/111/113
ACDV					
ACPV	Evidou July 25	7.000	0.00	Charatan Danier Decemb	Director Pour!!
ACPV Exam #1	Friday, July 25	7:00am	8:00pm	Sheraton Denver Downtown	Director Row H
ACPV Exam #2	Friday, July 25	7:00am	8:00pm	Sheraton Denver Downtown	Director Row I
ACPV Exam #3 Grading Room	Friday, July 25	7:00am	10:00pm	Sheraton Denver Downtown	Director Row J
ACPV Board of Governors Meeting	Sunday, July 27	6:30am	10:30am	Sheraton Denver Downtown	
ACPV Reception/Annual Meeting	Monday, July 28	7.00aff1	9:00am	Sheraton Denver Downtown	Governor's Square 15
Invitation Only					
Association of Veterinarians in Broiler Production Meeting	Friday, July 25	7:00am	5:00pm	Sheraton Denver Downtown	Governor's Square 17
Association of Veterinarians in Broiler Production Meeting  Association of Veterinarians in Broiler Production Breakfast	Friday, July 25	7:00am 7:00am	9:00am	Sheraton Denver Downtown	Governor's Square 16
Association of Veterinarians in Broiler Production Breaklast  Association of Veterinarians in Broiler Production Lunch	Friday, July 25	1:00am	2:00am	Sheraton Denver Downtown	Governor's Square 16
Association of Veterinarians in Broiler Production  Association of Veterinarians in Turkey Production	Friday, July 25	9:30am	5:00pm	Sheraton Denver Downtown	Governor's Square 11
University of Minnesota Center For Animal Health and Food Safety	Friday, July 25	5:00pm	6:00pm	Sheraton Denver Downtown	Governor's Square 14
Georgia MAM Alumni Breakfast		6:30am	7:30am	Sheraton Denver Downtown	Governor's Square 17
Association of Poultry Primary Breeder Veterinarians	Saturday, July 26		1:30pm	Sheraton Denver Downtown	Governor's Square 9
Association of Veterinarians in Egg Production	Sunday, July 27	6:00am	8:00am	Sheraton Denver Downtown	Governor's Square 14
NC State University Poultry Health Management	Monday, July 28	7:30pm	11:00pm	Sheraton Denver Downtown	Director's Row E
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# **AAAP Symposium**

# **Impact and Control of Respiratory Diseases of Poultry**

# Saturday, July 26, 2014 (7:30AM – 12:30PM) Rooms 102/104/106

**7:30- 7:40 AM** Introductions & Welcome

Moderator: Maricarmen Garcia, The University of Georgia, Athens, GA.

**Impact of Respiratory Diseases** 

7:40- 8:00 AM Respiratory Diseases of Global Consequence.

D. Swayne, Southeast Poultry Research Laborartory, Agricultural Research Service, U.S. Department of Agriculture,

Athens, GA.

8:00- 8:20 AM Economic Impact of Respiratory Diseases in US Broilers.

D. Ritter, Mountaire Farms Inc., PO Box 1320, Millsboro, DE.

8:20- 8:40 AM Economic Impact of Respiratory Diseases in US Commercial Layers.

I. Rubinoff, Hy-Line International, Dallas Center, IA.

8:40- 9:00 AM Current Respiratory Diseases of Turkeys.

S.R. Clark, Zoetis, Global Poultry, 1040 Swabia Ct, Durham, NC.

**9:00- 9:20 AM** Panel Q & A

**9:20- 9:30 AM** Break

Management Practices and Control of Respiratory Diseases.

9:30- 9:50 AM Environmental and Management Factors Affecting Respiratory Health.

G. Zavala, Avian Health International, LLC.

9:50- 10:10 AM Biosecurity and Surveillance in the Control of Respiratory Diseases.

L.D. Zavala, GA Poultry Laboratory Network, Oakwood, GA.

10:10- 10:30 AM Field Performance of Current Respiratory Vaccines.

M. Burleson, Wayne Farms LLC, Decatur, AL.

10:30-10:50 AM Impact of Immunosuppression in the Control of Respiratory Diseases.

J. Rosenberger, AviServe, LLC, Newark, DE.

**10:50-11:10 AM** Panel O & A

11:10- 11:25 AM Break

**Protection of the Avian Respiratory System.** 

11:25- 11:45 AM Protective Immunity to Respiratory Diseases of Poultry.

L. Vervelde, *The Roslin Institute and R(D)SVS, University of Edinburgh, U.K.* 

11:45- 12:05 PM Future Vaccines and Vaccination Strategies.

D. Kapczynski, Southeast Poultry Research Laboratory, USDA-ARS, Athens, GA.

**12:05- 12:30 PM** Panel Q& A and concluding remarks

12:30 PM Adjourn



# AAAP Scientific Program Sunday, July 27, 2014



	Rooms 102/104/106	Rooms 108/110/112
Topic	Coccidiosis	Newcastle Disease Virus
Moderator	Hector Cervantes	Enrique Montiel
8:00 AM	Control Charting of Broiler Lesions Based on Health Tracking System (HTS) Database. Francene Van Sambeek, Elanco Animal Health, Cullman, AL.	Improving Newcastle Disease Vaccination with Homologous Vaccines. Stivalis Cardenas-Garcia, Patti J. Miller, Corrie C. Brown and Claudio L. Afonso, <i>The University of Georgia, Athens, GA</i> .
8:15 AM	Evaluation and Interpretation of Coccidiosis Lesion Prevalence and Severity Based on Posting Session Data Collected from 2006 - 2013. Francene Van Sambeek, Elanco Animal Health, Cullman, AL.	Studies on the Quantification of Virus from an rHVT/ND Vaccine Simultaneously Applied with a Killed Oil-Adjuvanted Vaccine at One Day of Age. Rios-Cambre, JF; Montesinos-García, L; Alonso-Morales, R; Ledezma-Martínez, N; Aguirre-Esponda, J; López, H., MSD Salud Animal México, Santiago Tianguistenco, México.
8:30 AM	The Impact of Various Day of Age Spray Volumes on Chick Core Temperature. John E. McCarty, Merial, Inc. Gainesville, GA.	Efficacy of Concomitant Day-Old Subcutaneous Vector HVT-IBDV and Killed + Live ND Vaccination: Comparison with Vector HVT-ND Vaccines in Commercial Broilers. Francisco Perozo, Rosmar Marcano, Sergio Canizales, Maria Trujillo, Francisco Rojo and Rafael Fernández, University of Zulia Veterinary College, Maracaibo, Zulia, Venezuela.
8:45 AM	The Effect of Spray Volume on Body Temperature and 7 Day Mortality. A.T. Garritty, Merial Select, Bryant, AL.	Immunoresponse Induced by Newcastle Disease Virus (NDV) Vaccine Vectors in Commercial Chicks in the Presence of NDV Maternal Antibody. Qingzhong Yu, Wei Zhao, Zhenyu Zhang, Guoyuan Wen, and Laszlo Zsak, Southeast Poultry Research Laboratory, Agricultural Research Service, United States Department of Agriculture, 934 College Station Road, Athens, GA.
9:00 AM	Recommendations for Effective Coccidiosis Vaccination: An Update on Pullet and Cockerel Management in the United States. Blayne Mozisek, Mark Burleson, Ivan Alvarado, Linnea Newman, John Radu, Steve Fitz-Coy, Merck Animal Health, Summit, NJ.	<b>Emergence of New Sub-Genotypes of Virulent Newcastle Disease Virus with Panzootic Features.</b> P. J. Miller, T. Bubu, R. Haddas, T. A Khan, N. Mukhar, S. F. Rehmani, S. Setiyaningsih, A. Wajid, T. Yaqub, M. N. Zahid, C. L. Afonso, <i>Southeast Poultry Research Laboratory, Athens, GA</i> .
9:15 AM	Impact of Late vs Early Subclinical Coccidiosis on Economic Parameters in Broiler Production. Linnea J. Newman, Jose Arce, Robert Teeter, Luis Etcharren, Jorge Arceo, Merck Animal Health, Summit, NJ.	<b>Biological and Molecular Characterization of Newcastle Disease Virus from Peruvian Isolates.</b> Ana Chumbe, Ray Izquierdo, Luis Tataje, Francesca Falconi, Manolo Fernández, Eliana Eicochea, <i>FARVET S.A.C. Carretera Panamericana Sur Nº 766 Km 198.5, Chincha Alta. Ica – Peru.</i>
9:30 AM	Bro	eak
Topic	Coccidiosis (continued)	Virology
Moderator	Blayne Mozisek	Daral Jackwood
9:45 AM	The Effects of Two Environmental Temperatures on the Performance Responses of Nicarbazin. K. W. Bafundo, M. J. DaCosta, H. M. Cervantes, and G. M. Pesti, <i>Phibro Animal Health Corporation, Teaneck, NJ.</i>	Investigation of Vectors and Reservoirs of Turkey Coronavirus. Kabel Robbins, Butterball, LLC, Ozark, AR.
10:00 AM		
	Oocysts Shedding Patterns Influenced by Anticoccidial Program. Greg F. Mathis, Southern Poultry Research, Inc., Athens, GA.	<b>Investigations on Adenovirus Infections of Turkeys.</b> Hafez, H.M., Kleine A., Lüschow D., <i>Free University Berlin, Berlin, Germany.</i>
10:15 AM		
10:15 AM 10:30AM	Greg F. Mathis, Southern Poultry Research, Inc., Athens, GA.  How Effective is Anticoccidial Sensitivity Testing (AST)? Steve Fitz-	ine A., Lüschow D., Free University Berlin, Berlin, Germany.  Classification of Fowl Adenovirus (FAdV) Species Based on Conserved Genes (52K, DNA POLIMERASA, IV2a, pllla) in Genomes.  David Requena, Manuel Ramirez, David R., Hugo V., Carlos B., Mirko Z.,
	Greg F. Mathis, Southern Poultry Research, Inc., Athens, GA.  How Effective is Anticoccidial Sensitivity Testing (AST)? Steve Fitz-Coy, Merck Animal Health, Summit, NJ.  Development of an in Vitro Assay for Monensin and Salinomycin Sensitivity in Eimeria tenella. M.C. Jenkins, C.N. O'Brien, and R. Fetterer, Animal Parasitic Diseases Laboratory, ARS, USDA, Building 1040/Room 100	ine A., Lüschow D., Free University Berlin, Berlin, Germany.  Classification of Fowl Adenovirus (FAdV) Species Based on Conserved Genes (52K, DNA POLIMERASA, IV2a, pllla) in Genomes.  David Requena, Manuel Ramirez, David R., Hugo V., Carlos B., Mirko Z., Manolo F., FARVET S.A.C. Chincha Alta, Lima, Peru.  A Hexon-Fiber Recombinant Dual Protein Vaccine Fully Protects Against Challenge with a Virulent Strain of Fowl Adenovirus Serotype 4. Luis E. Saravia, Milagros Zavaleta, Francesca Falconi, Carla Perinango, Eliana Icochea, Manolo Fernández-Sánchez and Manolo Fernández-Díaz.,
10:30AM	Greg F. Mathis, Southern Poultry Research, Inc., Athens, GA.  How Effective is Anticoccidial Sensitivity Testing (AST)? Steve Fitz-Coy, Merck Animal Health, Summit, NJ.  Development of an in Vitro Assay for Monensin and Salinomycin Sensitivity in Eimeria tenella. M.C. Jenkins, C.N. O'Brien, and R. Fetterer, Animal Parasitic Diseases Laboratory, ARS, USDA, Building 1040/Room 100 Beltsville, MD.  Gut Integrity and Response to Non-Antibiotic Feed Additives. Daniel	ine A., Lüschow D., Free University Berlin, Berlin, Germany.  Classification of Fowl Adenovirus (FAdV) Species Based on Conserved Genes (52K, DNA POLIMERASA, IV2a, pllla) in Genomes.  David Requena, Manuel Ramirez, David R., Hugo V., Carlos B., Mirko Z., Manolo F., FARVET S.A.C. Chincha Alta, Lima, Peru.  A Hexon-Fiber Recombinant Dual Protein Vaccine Fully Protects Against Challenge with a Virulent Strain of Fowl Adenovirus Serotype 4. Luis E. Saravia, Milagros Zavaleta, Francesca Falconi, Carla Perinango, Eliana Icochea, Manolo Fernández-Sánchez and Manolo Fernández-Díaz., Farmacológicos Veterinarios S.A.C., FARVET S.A.C., Chincha, Ica, Perú.  Virus Isolation and Reproduction of Transmissible Viral Proventriculitis of Chickens from Naturally Occurring Cases of Venezuela. Luz Garcia, Valera Antonio, Medina Luisa, Peroza Luzmila,

# Sunday, July 27, 2014 (continued)

Moderator	John	Smith	
11:30 AM	Keynote Speaker: Long-term Perspective on the Current and Future State of the Safety of the US Food Supply (Particularly Poultry Products) and the Path Ahead for the Use of Modern Technology in Further Improvements.		
12:00 PM	Randall Singer, <i>University of Minnesota, St. Paul, MN.</i> Rooms 102/104/106  Adjourn for lunch		
	Adjourn for funch  AAAP Awards Luncheon		
12:30 PM	Hyatt Regency Denver Hotel, Capital Ballroom 1-4		
	Rooms 102/104/106	Rooms 108/110/112	
Topic	Infectious Bronchitis Virus	Virology/Immunology	
Moderator	Holly Sellers	Erica Spackman	
2:45 PM	Pathogenicity of a Novel Infectious Bronchitis Virus from Clinical Cases in North Georgia. Elizabeth Dale, Monique S. Franca, Holly Sellers, Erich Linnemann, PDRC, Department of Population Health, College of Veterinary Medicine, University of Georgia, Athens, GA.	<b>Avipoxvirus Diversity in Houbara Bustard in Captivity.</b> Guillaume Le Loc'h, Christelle Camus-Bouclainville, Mariette Ducatez, Stéphane Bertagnoli, <i>INRA</i> , <i>UMR 1225</i> , <i>F-31076 Toulouse</i> , <i>France</i> .	
3:00PM	Variant Infectious Bronchitis Virus in Southern Georgia: GA 08. Erin G. Riley, Philip A. Stayer, J. David French, Sanderson Farms Inc., Laurel, MS.	<b>Detection of Enteric Viruses from Broilers with Enteritis in Brazil.</b> C. Carranza, L.F.N. Nuñez, S. Parra, C.S. Astoli-Ferreira, A.J. Piantino Ferreira, <i>Laboratoy of Avian Diseases, Department of Preventive Veterinary Medicine and Animal Health, University of São Paulo, Brazil.</i>	
3:15 PM	Infectious Bronchitis Virus in Canada (2000-2013). Emily Martin, Marina Brash, Sarah Hoyland, Jane Coventry, Christian Sandrock, Michele T. Guerin and Davor Ojkic, Animal Health Laboratory, University of Guelph, Guelph, Ontario.	Enhancement of the Immunoprotective Ability of Oligodeoxynucleotides Containing CpG Motifs by Multiple Administrations in Neonatal Broiler Chickens. Kalhari Bandara, Azita Taghavi, Shelly Popowich, Suresh K Tikoo, Philip Willson and Susantha Gomis, Department of Veterinary Pathology, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Canada.	
3:30 PM	<b>Evaluating Protection Against Infectious Bronchitis Virus; Clinical Signs, Virus Detection, Histopathology and Ciliostasis.</b> Mark W. Jackwood, Brian Jordan, Ha-Jung Roh, Deborah Hilt, Julia McElreath, and Susan Williams, <i>University of Georgia, Athens, GA</i> .	Safety and Efficacy of Oligodeoxynucleotides Containing CpG Motifs Formulated with Carbon Nanotubes or Lipid Surfactants in Broiler Chickens. Thushari Gunawardana, Marianna Foldvari, Shelly Popowich, Suresh K. Tikoo, Shanika Kurukulasuriya, Philip Willson, and Susantha Gomis, Department of Veterinary Pathology, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Canada.	
3:45 PM	Morphological Differences Between Infectious Bronchitis Virus Ark-DPI Vaccine and Challenge Virus Observed with an Electron Microscope. Brian J. Jordan, HaJung Roh, Mark W. Jackwood, The University of Georgia, Athens, GA.	In Silico Peptide-Binding Predictions of Chicken MHC Class I Reveals Different Levels of Allele Promiscuity Suggesting a Differential Adaptative Immune Response. David Requena, Hugo Valdivia-Olarte, Carlos Bueno, Manuel Ramirez, Ray Izquierdo-Lara1, Manolo Fernández-Díaz and Mirko Zimic, FARVET S.A.C. Chincha Alta, Lima, Peru.	
4:00 PM	Bro	eak	
Topic	Infectious Bronchitis Virus (continued)	Immunology/ Marek's Disease	
Moderator	Mark Burleson	Ton Schat	
4:15 PM	Differential Binding of Spike Proteins of ArkDPI IBV Vaccine Subpopulations to Chicken Tissues. Vicky L. van Santen, I.N. Ambepitiya Wickramsinghe, E.A.W.S. Weerts, N. Wandee, G. de Vrieze, A. Gröne, M. H. Verheije, Department of Pathobiology, College of Veterinary Medicine, Auburn University, Aurburn, AL.	<b>Development and Characterization of Mouse Monoclonal Antibodies Reactive with Chicken IL1β.</b> Hyun Soon Lillehoj, Sung Hyen Lee, Misun Jeong, Animal Biosciences and Biotechnology Laboratory, Beltsville Agricultural Research Center, Agricultural Research Service, U.S. Department of Agriculture, Beltsville, MD.	
4:30 PM	Understanding Variability of California Infectious Bronchitis Virus Strains. R.A. Gallardo, M. Pitesky, B. Crossley, Department of Population Health and Reproduction, School of Veterinary Medicine, University of California, Davis, CA.	Role of Endogenous Avian Leukosis Virus and Serotype 2 Marek's Disease Virus in Enhancement of Spontaneous Lymphoid-Leukosis-Like Tumors in Chickens. Aly Fadly, Jody Mays, Huanmin Zhang, and Henry Hunt, USDA-ARS, Avian Disease and Oncology Laboratory, East Lansing, MI.	
4:45 PM	IBV S2 Expressed from Recombinant Virus Protects Against Heterologous Challenge. Haroldo Toro, Qingzhong Yu, Vicky van Santen, Kellye Joiner, Aly Ghetas, Auburn University Department of Pathobiology, 264 Greene Hall, Auburn, AL.	Impact of Gentamycin on Marek's Disease Vaccine Titers Using Diluent pH Adjustment Enrique Montiel, Sandy Koehne, Nikki Pritchard, David Smith, Merial Select, Inc., Gainesville, GA.	
5:00 PM	Development of a Microsphere-Based Assay for Simultaneous Identification of Multiple IBV Genotypes. Viviana Valastro, Isabella Monne, Alessia Schivo, Valentina Mozzo, Maria Cristina Dalla Pozza, Richard J. W. Currie, Giovanni Cattoli, Istituto Zooprofilattico Sperimentale delle Venezie, Research & Innovation Department, Viale dell'Università 10, 35020, Legnaro, Padova, Italy.	Protection Against Marek's Disease (MD) by Various Commercial Serotype 1 MD Vaccines. Gabriela Beltran, Charles Hofacre, Sunny Cheng, Virginia Baxter, Guillermo Zavala, Poultry Diagnostic and Research Center, University of Georgia, Athens, GA.	
5:15 PM	Molecular Tool for Monitoring the Efficiency of Infectious Bronchitis Vaccine Application Under Field Conditions. Vilmos Palya, Balázs Felföldi, Timea Tatar-Kis, Zalan Homonnay, Tamas Mato, Yannick Gardin, Scientific Support and Investigation Unit, Ceva Animal Health, Szállás utca 5, Budapest, Hungary.	Use of BAC Clones as Standardized Reagents for Marek's Disease Virus Research. John R. Dunn and Hans H. Cheng, USDA-ARS-Avian Disease and Oncology Laboratory, East Lansing, MI.	
5:30 PM	Adj	ourn	



# Monday, July 28, 2014



	Rooms 102/104/106	Rooms 108/110/112	
Topic	Case Reports	Avian Influenza	
Moderator	Alexandra Reilley	Kenton Kreager	
8:00 AM	Hepatitis And Necrotic Enteritis in a Commercial Layer Flock. Patricia S. Wakenell and Yuko Sato, <i>Purdue University, ADDL, West Lafayette, IN.</i>	A Novel Avian Influenza Antiviral Technology for Poultry: Proof-of-Principle in an Avian Model. Lyndsey Linke, Kristy Pabilonia, Jeffrey Wilusz, Johannes Fruehauf, Roberta Magnuson, Sushan Han, Francisco Olea-Popelka, Mo Salman, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, CO.	
8:15 AM	Successive Outbreaks of Marek's Disease in Brown Commercial Layer Chickens on the Same Farm. Shivaprasad, H. L., M. Bland, A. Fadly, J. Dunn and C. Buscaglia., CAHFS-Tulare, University of California, Davis, CA.	Reduction of Avian Influenza Virus Shedding by Administration of Toll-Like Receptor Ligands in Chickens. Neda Barjesteh, Bahram Shojadoost, Jennifer T Brisbin, Evan Mallette, Éva Nagy, Shayan Sharif, Department of Pathobiology, Ontario Veterinary College, University of Guelph, Guelph, Ontario, Canada.	
8:30 AM	Investigation of Clinical Disease in Free Range Organic Egg Layers. Chad M. Malinak, Guillermo Zavala, Stephen R. Collett, Thomas Gaydos, Sarah Tilley, Elise Myers, Yun-Ting Wang, Department of Population Health, Poultry Diagnostic and Research Center, The University of Georgia, Athens, GA.	Host Antiviral Defenses Induced by a Mesogenic Strain of Newcastle Disease Virus Prevents Infection with a Highly Pathogenic Avian Influenza Virus in Chickens. Mar Costa-Hurtado, Claudio L. Afonso, Patti Miller, Eric Shepherd, Diane Smith and Mary Pantin-Jackwood, Exotic and Emerging Avian Viral Diseases Unit, SEPRL-ARS-USDA, Athens, GA.	
8:45 AM	Swine Influenza in Broiler Breeders: Be Careful What You Test For. Victoria Bowes, Lindsay Kehler, Tomy Joseph, Nancy DeWith, Bill Cox, BC Ministry of Agriculture, Animal Health Centre, Abbotsford, BC, Canada.	Impact of Vaccination on Infection with Vietnam H5N1 High Pathogenicity Avian Influenza Virus in Hens and the Eggs They Lay. Kateri Bertran, David E. Swayne, Southeast Poultry Research Laboratory, USDA-ARS, 934 College Station Rd., Athens, GA.	
9:00 AM	An Enteric Coronavirus Associated with Runting Stunting Syndrome in Brown Broiler Chickens. H. L. Shivaprasad, S. Carnaccini, B. Crossley and R. Gallardo, CAHFS-Tulare, University of California, Davis, CA.	Efficacy of Inactivated Influenza Vaccines for Protection of Poultry Against the H7N9 Low Pathogenic Avian Influenza Virus Isolated in China during 2013. Darrell R. Kapczynski, Mary J. Pantin-Jackwood, Erica Spackman, Southeast Poultry Research Laboratory, USDA-ARS, Athens, GA.	
9:15 AM	<b>Tri Basic Copper Chloride Toxicosis in Commercial Broiler Chicks.</b> Monique Franca, Chad M. Malinak, Stephen R. Collett, H. L. Shivaprasad, Susan M. Williams, Holly S. Sellers, Elise Myers, Yun-ting Wang, Charles L. Hofacre, <i>Poultry Diagnostic and Research Center, College of Veterinary Medicine, University of Georgia, Athens, GA.</i>	Experimental Infection of Mallard Ducks with Different Subtype H5 and H7 Highly Pathogenic Avian Influenza Viruses. Mary Pantin-Jackwood, Mar Costa-Hurtado, Eric Shepherd, Diane Smith, Erica Spackman, Darrell Kapczynski, David Suarez, David Swayne, Southeast Poultry Research Laboratory, Exotic and Emerging Avian Viral Diseases Unit, USDA-Agricultural Research Service, Athens, GA.	
9:30 AM	Atypical Colisepticemia in a North Carolina Broiler Flock. Tak Niino, Oscar Fletcher, Mike Martin, Jennifer Strickland, Jocelyn Romano, John Barnes, North Carolina State University - College of Veterinary Medicine, Raleigh, NC.	Pathogenesis and Transmission of Novel 2013 H7N9 LPAIV from China in Chickens. Erica Spackman, Darrell R. Kapczynski and Mary J. Pantin-Jackwood, Southeast Poultry Research Laboratory, USDA-ARS, Athens, GA.	
9:45 AM	Bro	eak	
Moderator	John	Smith	
10:00 AM	Lasher-Eckroade History Lecture: Pioneers of Avian Medicine: The Life and Times of Dr Benjamin (Ben) Sherwood Pomeroy (1911-2004)  Jagdev M. Sharma, The Biodesign Institute, Arizona State University  Rooms 102/104/106		
10:30 AM	Learnings on Very Virulent Infectious Bursal Disease Viruses (vvIBDV).  Nicolas Eterradossi, Agence Nationale de Securite Sanitaire (Anses), Ploufragan Laboratory, VIPAC Unit, France  – OIE reference laboratory for infectious bursal disease  Rooms 102/104/106		
11:00 AM		iness Meeting 2/104/106	
12:00 PM	Lunch Break		
Topic	Case Reports (continued)	Avian Influenza (continued)	
Moderator	Bob Owen	Darrell Kapczynski	
1:00 PM	<b>Knockdown Syndrome in 10 Day Old Turkey Poults.</b> Jenny Fricke, Poultry Extension Veterinarian, Department of Veterinary Pathology, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, SK, Canada.	Comparison of Common Genotypes of Chinese H7 Avian Influenza Viruses for Replication and Transmission in Chickens. David L. Suarez and Marisela Rodriguez, Southeast Poultry Research Laboratory, USDA, Athens, GA.	
1:15 PM	Fowl Pox Vectored Reticuloendotheliosis Virus Infection in Commercial Turkeys. Yuko Sato, Pat Wakenell, Purdue University, Animal Disease Diagnostic Laboratory, West Lafayette, IN.	<b>Low Pathogenic Avian Influenza and Public Health.</b> Trock, Susan C., Centers for Disease Control, Atlanta, GA.	
1:30PM	Fowl Cholera Outbreak in Ring-Necked Pheasant Chicks, ( <i>Phasianus colchicus</i> ). Jocelyn A. Romano, Michael P. Martin, Jennifer D. Strickland, and H.J. Barnes, North Carolina State University College of Veterinary Medicine, Raleigh, NC.	Evolutionary Changes in the Receptor-Binding Site of the Hemagglutinin Protein in the Avian Influenza H6N1 Virus May Contribute to Interspecies Transmission. Hui-Wen Chen, Ju-Yi Peng, Hsin-Chun Lee, Jie-Long He, Yuan-Pin Huang, Ching-Ho Wang, Department of Veterinary Medicine, National Taiwan University, Taiwan.	

# Monday, July 28, 2014 (continued)

	Rooms 102/104/106	Rooms 108/110/112
1:45PM	Hypovitaminosis A Related Cannibalism in Raised-for-Release Northern Bobwhite Quail. Douglas Anderson and Oscar Fletcher, Georgia Poultry Laboratory, Oakwood, GA.	The Secure Broiler Supply Plan: Risk Based Decision Making to Support Business Continuity Planning in the Event of an Outbreak of Highly Pathogenic Avian Influenza in the Broiler Industry. David A Halvorson, Sasidhar Malladi, J. Todd Weaver, Minden Buswell, Jamie Slingluff, Catherine Alexander, Timothy Goldsmith, Center for Epidemiology and Animal Health, University of Minnesota, St. Paul, MN.
2:00 PM	<b>Black Spots on Processed Ducklings Legs.</b> Richard M. Fulton, <i>Diagnostic Center for Population and Animal Health, College of Veterinary Medicine, Michigan State University, East Lansing, Michigan.</i>	A Risk Assessment to Evaluate Control Measures Intended to Reduce the Spread of Highly Pathogenic Avian Influenza Due to the Movement of Broilers to Processing. Sasidhar Malladi, J. Todd Weaver, Minden Buswell, Jamie Slingluff, Catherine Alexander, Timothy Goldsmith, Dave Halvorson, <i>University of Minnesota, St. Pauls, MN</i> .
2:15 PM	Haemproteus sp. in a Flock of Red-Breasted Geese (Branta ruficollis). Richard M. Fulton, Diagnostic Center for Population and Animal Health, College of Veterinary Medicine, Michigan State University, East Lansing, Michigan.	Leveraging the Logistical Advantages of Flock-side Testing to Reduce the Risk of Spread of Highly Pathogenic Avian Influenza Through the Movement of Broilers to Slaughter. J. Todd Weaver, Sasidhar Malladi, David A, Halvorson, USDA Animal and Plant Health Inspection Service, St. Paul, MN.
2:30 PM	Bro	eak
Topic	Gut Health	Bacteria
Moderator	Gregorio Rosales	Michael Martin
2:45 PM	Use of Four-week Gastrointestinal Exam and Five-week Body Weights as Predictors of Flock Performance in Commercial Turkeys. D.V. Rives and D.K. Carver, <i>Prestage Farms, Inc., Clinton, NC.</i>	Intestinal Co-Infection and Flock Management Risk Factors for Enterococcus cecorum-Associated Disease. Michael P. Martin, Luke B. Borst, and H. John Barnes, NC State University, College of Veterinary Medicine, 1060 William Moore Dr., Raleigh, NC.
3:00 PM	Dietary Supplementation of Young Broiler Chickens with Capsicum and Turmeric Oleoresin Increases Resistance to Necrotic Enteritis. Hyun S Lillehoj, Sung Hyen Lee, Seung Ik Jang, Erik P. Lillehoj, Wongi Min, and David M. Bravo, Animal Biosciences and Biotechnology Laboratory, Beltsville Agricultural Research Center, USDA-ARS, Beltsville, MD.	Performance of Broilers Challenged with Avian Pathogenic E. coli at Different Levels and Routes. Taylor Barbosa, Kalen Cookson, Ken Macklin, John Dickson and Tarsicio Villalobos, Zoetis, Global Poultry, 1040 Swabia Ct, Durham, NC.
3:15PM	The Diversity of the Fecal Microbiota and its Relationship with the Performance Efficiency Factors of Broilers. Yeon-ji Bae, Seung-baek Lee, Kyeong-cheol Min, Moo-sung Han, Bon-sang Koo, Hae-rim Lee, Eunok Jeon, Jong-nyeo Kim, In-pil Mo, Avian Disease Laboratory, College of Veterinary Medicine, Chungbuk National University, Seoul, Korea.	Development of a Horizontal Transmission Model in Broiler Chickens to Study the Efficacy of Bacteriophages to Prevent Colibacillosis. W. E. Huff, F. A. El-Gohary, G. R. Huff, N. C. Rath, Z. Y. Zhou, and A. M. Donoghue, USDA/ARS, Poultry Production and Product Safety Research Unit, University of Arkansas, Fayetteville, AR.
3:30 PM	The Succession of the Gastrointestinal Bacterial Microbiome During Turkey Development. Timothy J. Johnson, Jessica L. Danzeisen, Sally L. Noll, and Brian McComb, <i>University of Minnesota, St Paul, MN</i> .	SEROVAR B - Avibacterium paragallinarum, the True Pathogen. Alejandro García and Dolores Fuentes, Laboratorios Avilab. Porcicultores 80 Tepatitlán Jal. Mex. C.P., Mexico.
3:45 PM	The Environmental Impact of Broiler Production as Influenced by Virginiamycin and a Feed Enzyme. J. Ruiz, H. Cervantes, K. Bafundo, C. C. Brown, M. Landrum and G.M. Pesti, <i>Phibro Animal Health Corp. Teaneck, NJ.</i>	Environmental Biofilm Bacteria and Antimicrobial Resistance in Poultry Production and Processing Facilities in Alberta. Karen Liljebjelke, Paras Thapa, Thomas Inglis, Nick Allen, and Merle Olsen, Department of Ecosystem and Public Health, Faculty of Veterinary Medicine, University of Calgary, 3330 Hospital Dr. NW, Calgary, Albert, Canada.
4:00 PM	Evaluation of Lincomycin, Virginiamycin and Bacitracin on Necrotic Enteritis Scores, Mortality and Performance in Broilers Using a Clostridium perfringens Challenge Model. Kalen Cookson, Steve Davis, Tim Cummings, John Dickson, and Jon Schaeffer, Zoetis, 1040 Swabia Court, Durham, NC.	Wild Birds as Source of Ornithobacterium Rhinotracheale Infections? Hafez H. M., S. Gutzer, and D. Lüschow, Free University Berlin, Berlin, Germany.
4:15 PM	Natural Growth Promotion in Broiler Production without Antibiotic Growth Promoters: a Likely Reality in 2016 for the US Poultry Industry Alexis Kiers, Alltech, Washington, DC.	Characterization of Irregular Hemolytic Isolates Compared to Non-Hemolytic Isolates of <i>Ornithobacterium rhinotracheale</i> by the Use of in vitro Studies and a Turkey Embryo Model. F. W. Pierson, J. Walters, R. Evans, T. LeRoith, N. Sriranganathan, A. McElroy, <i>Virginia-Maryland Regional College of Veterinary Medicine, Department of Population Health Sciences, Blacksburg, VA</i> .
4:30 PM	Wine & Cheese Social Poster Rooms 107/109/111/113	
5:30 PM	Adjo	ourn



# Tuesday, July 29, 2014



	Rooms 102/104/106	Rooms 108/110/112
Topic	Salmonella	Mycoplasma/ Processing
Moderator	Karen Burns Grogan	David Rives
8:00 AM	Monitoring Salmonella and Campylobacter in Two North Carolina Turkey Flocks. Christina Lindsey, Tak Niino, Jennifer Strickland, Lisa Nolan, Sophia Kathariou, Michael Martin, John Barnes, Department of Population Health and Pathobiology, College of Veterinary Medicine, North Carolina State University, Raleigh, NC.	Diagnostic Investigation of Field Case Reports of Mycoplasma synoviae in Georgia Poultry Farms. Vijay Durairaj, Ruth Wooten, Patrick Black, Len Chapel, Naola Ferguson-Noel, Poultry Diagnostic and Research Center, College of Veterinary Medicine, University of Georgia, Athens, GA.
8:15 AM	Serotyping of Salmonella Isolates from Broiler Vertical Integrations in Colombia. Martha Pulido-Landínez, Catalina Torres, Roxana Sánchez-Ingunza, Jean Guard, and Vladimir. P. do Nascimento, Avian Pathology Laboratory, College of Veterinary Medicine, National University of Colombia, Bogotá – Colombia.	<b>Evaluation of the Egg Transmission of ts-11 and ts-11-like Mycoplasma</b> gallisepticum Isolates. Natalie K. Armour and Naola Ferguson-Noel, Department of Population Health, Poultry Diagnostic and Research Center, College of Veterinary Medicine, University of Georgia, Athens, GA.
8:30 AM	<b>Salmonella Status of Backyard and Hobby Poultry Flocks in North Georgia.</b> Kevin Smith and Doug Waltman, <i>Georgia Poultry Laboratory Network, Oakwood, GA</i> .	The Safety of Live Mycoplasma gallisepticum Vaccines in Turkeys.  Naola Ferguson-Noel and Victoria Laibinis, Department of Population Health, University of Georgia, Athens GA.
8:45 AM	Effect of Salmonella Control Programs on Salmonella Trends Over Time. Selena York and Doug Waltman, Georgia Poultry Laboratory Network, Oakwood, GA.	Bactotype® Mg/Ms Real Time PCR Reagent Trial in Three US laboratories. Nevena Djuranovic, Mary Jones Dukes, Mark Guilliano, Diana Kadner, and Christine Gaunitz, QIAGEN, Inc., Germantown, MD.
9:00 AM	Salmonella Enteritidis Organ Invasion and Egg Contamination in Experimentally Infected Laying Hens Housed in Conventional or Enriched Cages. Richard K. Gast, Rupa Guraya, Deana R. Jones, and Kenneth E. Anderson, USDA-ARS, Egg Safety and Quality Research Unit, Athens, GA.	Multi-Locus Sequence Typing of Mycoplasma synoviae. Mohamed M. El-Gazzar, Kristina McDonald, Ziv Raviv and Richard D. Slemons, Department of Veterinary Preventive Medicine, College of Veterinary Medicine, The Ohio State University, Columbus, OH.
9:15 AM	<b>Decision Tree Approach to Reducing Salmonella in Ground Turkey.</b> Randall Singer, Brian Wooming, Casey Weber, Oscar Esquivel, Bob Evans and Scott Eilert, <i>University of Minnesota</i> , St. Paul, MN.	<b>Condemnation of Tom Turkey Carcasses.</b> Samuel P. Copeland, H. John Barnes, and David V. Rives, <i>North Carolina State University, Raleigh, NC</i> .
9:30 AM	Challenges in Recovering Salmonella from Feed and Ingredients. Kurt Richardson and Rick Phillips, Anitox Corp, 1055 Progress Circle, Lawrenceville, GA.	Osteomyelitis and Leg Atrophy in Turkeys with Green Discolored Livers at Processing. M.R. Slater, A.L. Hoffman, D. Rives, D. Carver, and H. John Barnes, Department of Population Health and Pathobiology, College of Veterinary Medicine, NC State University, Raleigh, NC.
9:45 AM	Bro	eak
Topic	Salmonella/Infectious Bursal Disease	Reovirus/ Welfare
Moderator	Chip Garritty	Fred Hoerr
10:00 AM	Comparison of Commercially Available Mycoplasma ELISA Kits. Andrea Zedek, Kimberly Sprout, Elizabeth Turpin, Matthew Krecic and Dan Domingo, Zoetis, 1040 Swabia Court, Durham, NC.	Pathogenicity and Genotypic Comparisons of Several Single-Serotype Viral Arthritis Reovirus Isolates. Milos Markis, John K. Rosenberger, Sandra C. Rosenberger, and John Elattrache, AviServe LLC, Delaware Technology Park, 1 Innovation Way, Suite 100, Newark, DE.
10:15 AM	Comparison of 7 Chromogenic Plating Media for the Isolation of Salmonella. Doug Waltman, Jimma Blackwell, and Jeanelle Morgan, Georgia Poultry Laboratory Network, Oakwood, GA,	<b>Molecular Characterization of the Newly Emerging PA Avian Reovirus Variants.</b> Huaguang Lu, Yi Tang, Patty Dunn, Eva Wallner-Pendleton, Animal Diagnostic Laboratory, Department of Veterinary and Biomedical Sciences, Pennsylvania State University, University Park, PA.
10:30 AM	Next Generation Sequencing of Salmonella heidelberg Under Different Processing Plant Conditions. Maurice Pitesky, Rodrigo Gallardo, Kristen Clothier, and Huaijun Zhou, UC Cooperative Extension, University of California, UC Davis School of Veterinary Medicine, Davis, CA.	Assessment of Vaccination with Autogenous Reovirus Vaccines on Persistence of Clinical Signs and Live Performance on Broilers. Alexandra M. Mendoza-Reilley, Marshall Putnam, John El Attrache, Milos Markis, Jack Rosenberger and Sandra Rosenberger, Ceva Animal Health, Lenexa, KS.
10:45 AM	The Use of a Live Salmonella Vaccine in Turkeys. Brian Wooming, Cargill Turkey Production, Minneapolis, MN.	Evaluation of Broiler Protection by a Plaque-Purified Tissue Culture Reovirus Vaccine Against a Novel Reovirus Strain. Ivan Alvarado, Phil Stayer, David French, Erin Riley and Holly Sellers, Merck Animal Health, Summit, NJ.

# Tuesday, July 29, 2014(continued)

	Rooms 102/104/106	Rooms 108/110/112
11:00 AM	Phenotypic and Genotypic Analysis of Salmonella heidelberg Isolated from Poultry in the US. Melissa Madsen, Roxana Sanchez-Ingunza, Jean Guard, and John El-Attrache, Ceva Biomune, Lenexa, KS.	Pathogenesis of Turkey Arthritis Reovirus (TARV). Tamer A. Sharafeldin, Sunil K. Mor, Harsha Verma, Sagar M. Goyal and Robert E. Porter, Veterinary Population Medicine Department, College of Veterinary Medicine, University of Minnesota, St. Paul, MN.
11:15 AM	Pathogenicity and Assessment of Immunogenicity Against Salmonella heidelberg Isolated from Poultry and Poultry Products in the US. Roxana Sanchez-Ingunza, Melissa Madsen, Jean Guard, and John El-Attrache, Ceva Biomune, Lenexa, KS.	Complete M and S Gene Sequences of a Newly Isolated Turkey Arthritis Reoviruses. Sunil K. Mor, Harsha Verma, Tamer A. Sharafeldin, Robert E. Porter, Andre Ziegler and Sagar M. Goyal, Minnesota Veterinary Diagnostic Laboratory and Department of Veterinary Population Medicine, University of Minnesota, St. Paul, MN.
11:30 AM	The Effect of Dietary Bacillus subtilis C-3102 (Calsporin®) and a Yeast Cell Wall Preparation (IMW50TM) to Reduce Salmonella heidelberg Colonization and Shedding in Broilers. J. Schleifer, T. Lohrmann, M. Kato, T. Marubashi, C.L. Hofacre, G.F. Mathis and B. Lumpkins, Quality Technology International, Inc., Elgin, IL.	<b>Evaluation of Low Atmospheric Pressure Stunning in Turkey Toms.</b> Molly Parker; Alice Johnson, North Carolina State University, Raleigh, NC.
11:45 AM	Immunoprotective Effects of "Variant" Infectious Bursal Disease Viruses as Vaccine Antigens in Broiler Breeders Against "Variant" IBDV Infection in Their Progeny. Shanika Kurukulasuriya, Davor Ojkic, Shelly Popowich, Thushari Gunawardena, Kalhari Bandara, Suresh K. Tikoo, Philip Willson and Susantha Gomis, Department of Veterinary Pathology, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, SK, Canada.	Common Problems Seen During Poultry Welfare Audits. Molly Parker; Eric Gonder, North Carolina State University, Raleigh, NC.
12:00 PM	Lu	nch
Topic	Wealth of Knowledge	Antibiotics/ Laryngotracheitis
Moderator	Francene Van Sambeek	Haroldo Toro
1:00 PM	Is It Clean Enough to Disinfect? Eric Gonder, Butterball LLC, Goldsboro, NC.	A Poultry Veterinarian's Perspective on Antimicrobial Resistance: Revisiting NARMS Data. Hector M. Cervantes, Phibro Animal Health, Teaneck, NJ.
1:15 PM	Chitosan's Effect on Darkling Beetle and Bedbug Infestations in Commercial Poultry Houses. Kevin Maschek, Kelli Jones, Sue Ann Hubbard, Jerome Goddard, College of Veterinary Medicine, Poultry Research and Diagnostic Laboratory, Mississippi State University, Pearl, MS.	National Antibiotic Resistance Monitoring System (NARMS) on the Farm for Poultry- Mid-project Update. Thomas Gaydos, Randall Singer, Roy Berghaus, Sarah Tilley, Elizabeth Dale, Virginia Baxter, Charles Hofacre, Poultry Diagnostic and Research Center, College of Veterinary Medicine, University of Georgia, , Athens GA.
1:30 PM	A Canine Topical Insecticide Against Poultry Parasites. Kevin Maschek, Kelli Jones, Jerome Goddard, College of Veterinary Medicine, Poultry Research and Diagnostic Laboratory, Mississippi State University, Pearl, MS.	Farm-level Prevalence of Enteric Pathogens (E. coli, Salmonella and Campylobacter) in Canadian Broiler Farms: Results of the CIPARS Broiler Farm Surveillance, 2013. Agnes Agunos, David Leger, Sheryl Gow, and Anne Deckert, Laboratory for Foodborne Zoonoses, Public Health Agency of Canada, Guelph, Canada.
1:45 PM	Investigation of Potential Inciting Causes of Hen Diuresis Syndrome. Bradley Turner, Kelli Jones, Thomas Tully, João Brandão, Robert Wills, Sue Ann Hubbard and Danny Magee, DSM Nutritional Products, Atlanta, GA.	Poly (Acetyl, Arginyl) Glucosamine as a Marek's Disease Virus Vaccine Preservative. Sarah Tilley, Shenda Baker, Holly Sellers, Doug Waltman, Susan Williams, Thomas Gaydos, Guillermo Zavala, University of Georgia Poultry Diagnostic and Research Center, 953 College Station Rd., Athens, GA.
2:00 PM	Utilizing Urinalysis Post-Colostomy for Investigating Potential Inciting Causes of Hen Diuresis Syndrome. Kelli Jones, Bradley Turner, Thomas Tully, João Brandão, Robert Wills, Sue Ann Hubbard and Danny Magee, CEVA Biomune, Lenexa, KS.	<b>Practical Use of a Commercial ILT ELISA Test Kit.</b> Rafael Monleon, Gwen Slacum and Bart Van Leerdam, <i>Biochek B.V., The Netherlands</i> .
2:15 PM	<b>Update: Studies of Cyanotic Broiler Breeder Males.</b> Danny L. Magee, Kelli H. Jones, Floyd D. Wilson, Erica Baravik-Munsell, Timothy S. Cummings, Robert W. Wills, <i>College of Veterinary Medicine, Mississippi State University, Pearl, MS</i> .	Characterizing Chicken-Embryo-Origin (CEO) Strains of Infectious Laryngotracheitis Virus Exhibiting Reduced Pathogenicity. Calvin L. Keeler. Jr., Cynthia M. Boettger, Department of Animal and Food Sciences, University of Delaware, Newark, DE.
2:30 PM	Periocular Inflammatory Disease in Upper Midwest Turkey Breeder Hens. Rosemary A. Marusak, Oscar J. Fletcher, H. John Barnes, Cindy Bell, Trevor Zurn, Brian Sharpley, and Brian Kjosa, Jennie-O Turkey Store,	Improved Infectious Laryngotracheitis Virus Vaccines Using Newcastle Disease Virus Vector. Mallikarjuna Kanabagatte Basavarajappa, Sachin Kumar, Sunil K. Khattar, Girmay T. Gebreluul, Anandan Paldurai, and Siba K. Samal, Virginia-Maryland Regional College
	34 N 7th St, Barron, WI.	of Veterinary Medicine, University of Maryland, College Park, MD.



# Tuesday, July 29, 2014 (continued)



	Rooms 102/104/106	Rooms 108/110/112
Topic	Wealth of Knowledge (continued)	Laryngotracheitis/ Diagnostics
Moderator	Gabriel Senties-Cue	Eric Jensen
3:00 PM	Application of Water Based Foam in Depopulation of Poultry Operations is Best Left to an Experienced and Well Practiced Depopulation Team. Len Chappell, Zach Baker, Georgia Poultry Laboratory, Oakwood, GA.	Experimental Infection of Chickens with the Infectious Laryngotracheitis Virus (ILTV): Dynamic of the Virus Replication in Different Tissues and Transcriptional Status of Immune Related Genes. Ariel Vagnozzi, Sylva Riblet, Natasha Gallo, Guillermo Zavala, Sayan Sharif, and Maricarmen García, Instituto de Virología, Centro de Investigaciones de Ciencias Veterinarias y Agronómicas. Instituto Nacional de Tecnología. Agropecuaria, Castelar, Buenos Aires, Argentina.
3:15 PM	Assessment of Broiler Breeder Mortality Comparing Slat Height and Musculoskeletal Lesions. Callie S. Pierce, H. John Barnes, and Michael P. Martin, College of Veterinary Medicine, Poultry Health Management, North Carolina State University, Raleigh, NC.	The Importance of a Database for Documenting Equipment Maintenance and Tracking Reagents. Rocio Crespo, Avian Health and Food Safety Laboratory, Washington Disease Diagnostic Laboratory (WSU), Pullman, WA.
3:30 PM	Correlation of Brooding Management Practices, Field Evaluation of Foot Pad Lesions in Broilers, and Plant Yield of Grade A Paws. David French, P. A. Stayer, E. G. Riley, R. W. Wills, and E. Oviedo, Sanderson Farms, Inc., Laurel, MS.	Effect of Age, Sex and Nutrition on Selected Biochemical Parameters in Broilers and Broiler Breeders as Measured on Farm with Two Portable Biochemical Analysers. Daniel Venne, Couvoir Scott Itée, Quebec, Canada.
3:45 PM	Footpad Dermatitis Incidence Could be Affected by Incubation Conditions. E. O. Oviedo-Rondón, M. J. Da Costa, A. Sarsour, J.C. Rios-Alva, M.J. Wineland, Prestage Department of Poultry Science, North Carolina State University, Raleigh, NC.	Comparison of Three USDA Licensed Chicken Infectious Anemia Virus ELISA Kits. Brenda Glidewell, Drew Carter, and Louise Dufour-Zavala, Georgia Poultry Laboratory Network, Oakwood, GA.
4:00 PM	The Role of L Carnitine in Reducing Stress in Poultry. Daniel Karunakaran and Jim Stockam, Lohmann Animal Health International, Cary, NC.	An Innovative Molecular Screening Assay for Avian Respiratory Pathogens and its Application in Turkeys. Jean-Luc Guérin, Alexis Senet, Guillaume Croville, Charlotte Foret, Mathilde Paul, Mohammed Mouahid, Mariette Ducatez and Faouzi Kichou, <i>Université de Toulouse, INP, ENVT and INRA, UMR 1225, 31076 Toulouse, FRANCE.</i>
4:15 PM	ACPV/AAAP 2013 Salary Survey. Timothy S. Cummings, Zoetis, Durham, NC.	Baculovirus Expression of the Avian Paramyxovirus 3 HN Gene for Diagnostic Applications. Jongseo Mo, Kangseuk Choi, Hyukmoo Kwon, Haanwoo Sung, College of Veterinary Medicine, Kangwon National University, Gangwon-do, Korea.
4:30 PM	National Poultry Improvement Plan Update. Denise L. Brinson, National Poultry Improvement Plan, USDA-APHIS-VS-NPIP, Conyers, GA.	<b>Virus Isolation Experiences Across the Chicken Belt.</b> Philip A. Stayer, Erin G. Riley, J. David French, Pamela J. Ferro, Alejandro Banda, Holly S. Sellers, Richard E. Mock, <i>Sanderson Farms, Inc., Laurel, MS</i> .
4:45 PM	The AVMA Congressional Fellowship: a Perfect Opportunity to Learn Public Policy and Render Public Service on Behalf of the Poultry Industry and the Veterinary Profession. Nathaniel L. Tablante, VA-MD Regional College of Veterinary Medicine, University of Maryland College Park, MD.	
5:00 PM	Adj	iourn

# **AAAP Poster Session**

Rooms 107/109/111/113

### **Antibiotics**

Antimicrobial Use Practices in Canadian Broilers, Disease Challenges and Reasons for Drug Use. Agnes Agunos, David Leger, Sheryl Gow, Anne Deckert, Laboratory for Foodborne Zoonoses, Public Health Agency of Canada, Ontario, Canada.

### **Avian Influenza**

A Survey of Hemagglutinating Viruses from Rufus – Bellied Thrush in the Province of Buenos Aires, Argentina. Celina Buscaglia, Francisco Javier Crosetti Buscaglia, Comision de Investigaciones Cientificas de la Provincia de Buenos Aires, Argentina Club de Observadores de Aves "Divisadero" partidos de General Madariaga y Pinamar, Buenos Aires, Argentina.

Chimeric HPAI H5N1 Virus-like Particle Vaccine Induces Broadly Neutralizing Antibodies. Jae-Keun Park, Dong-Hun Lee, Seong-Su Yuk, Erdene-Ochir TO, Jung-Hoon Kwon, Jin-Yong Noh, Byoung-Yoon Kim, Soo-Won Choi, Sang-Moo Kang, Joong-Bok Lee, Seung-Yong Park, In-Soo Choi, Sang-Won Lee, Chang-Seon Song, Avian Disease Laboratory, College of Veterinary Medicine, Konkuk University.

**Co-Infection of Mallards with Low Virulence Newcastle Disease Virus and Low Pathogenic Avian Influenza Virus.** M. Franca, E. W. Howerth, D. Carter, A. Byas, R. Poulson, C. L. Afonso, and D. E. Stallknecht, *Poultry Diagnostic and Research Center, Department of Population Health, College of Veterinary Medicine, The University of Georgia, Athens, GA.* 

Comparative Efficacy Study to Evaluate Four Different Vaccination Programs Against HPAI H5N1 2011 and 2012 Egyptian Viruses in Commercial Broiler Chickens Reared Under Laboratory Conditions. Fernando Lozano, Walid Hamdy Kilany, Abbas El-Husseiny, Alaa Fatouh, Vilmos Palya, Bertrand Le Tallec, Paola Cruz, Yannick Gardin, Marcelo Paniago, Central Laboratory of Quality Products, Egypt.

Comparison of Real-Time Reverse Transcription-PCR and Virus Isolation with Embryonated Chicken Eggs for the Detection of Influenza A Virus from Wild Waterfowl. Elise Gerken, Jacqueline M. Nolting, Andrew S. Bowman, Richard D. Slemons, The Ohio State University, College of Veterinary Medicine, Department of Veterinary Preventive Medicine, Columbus, Ohio.

Evaluation of the Protective Immunity of a Chimeric Virus-like Particle (VLP) Vaccine Against Lethal HPAIV and NDV Infection in Chicken with DIVA Strategy. Jin-Yong Noh, Jae-Keun Park, Dong-Hun Lee, Seong-Su Yuk, Erdene-Ochir TO. Jung-Hoon Kwon, Byoung-Yoon Kim, Soo-Won Choi, Sang-Won Lee, Joong-Bok Lee, Seung-Yong Park, In-Soo Choi, Chang-Seon Song, Avian Disease Laboratory, College of Veterinary Medicine, Konkuk University, Seoul, Korea.

Immunogenicity Studies on Nanoparticle Vaccine Constructs for Avian Influenza Virus. Mazhar I. Khan , Jianping Li, Sharareh Emadi, Anmin Tan, Peter Burkhard, Brian S. Ladman, Jack Gelb, Jr., Department of Pathobiology and Veterinary Science and Department of Molecular Cell Biology, University of Connecticut, Storrs, CT.

Isolation and Characterization of North America Lineage and Eurasia Lineage Low-Pathogenic H9N2 Influenza Viruses from Wild Birds in Korea. JH Kwon, DH Lee, JK Park, SS Yuk, TO Erdene-Ochir, JY Noh, BY Kim, SW Choi, JB Lee, SY Park, IS Choi, CS Song, Avian Disease Laboratory, College of Veterinary Medicine, Konkuk University, Seoul, Republic of Korea.

Pathogenicity Evaluation of Low Pathogenic Avian Influenza Viruses (H9N2) by Measurement of Pro-inflammatory Cytokine mRNA Level. Kyeong-Cheol Min, Jong-Nyeo Kim, Eun-Ok Jeon, Hae-Rim Lee, Bon-Sang Koo, Moo-Sung Han, Seung-Baek Lee, Yeon-Ji Bae, In-Pil Mo, Avian Disease Laboratory, College of Veterinary Medicine, Chungbuk National University, Cheongju, Korea.

## **Avian Leukosis Virus**

Osteopetrosis Induced by Exogenous Avian Leukosis Virus in a Colony of Brabanter Chickens. Sunny Cheng, Guillermo Zavala, Susan M. Williams and Oscar Fletcher, *University of Georgia*, *Athens*, *GA*.

# **Bacteriology**

Complete Genome Sequence and Comparative Genomic Analysis of Avian Pathogenic *Escherichia coli* Strain LPO2 Associated with Egg Peritonitis in Laying Hens. S. Kariyawasam, K. H. E. M.Karunathilake, and D. S. S. Wijetunge, *Department of Veterinary and Biomedical Sciences, Pennsylvania State University, University Park, PA.* 

**Genome Sequence and Comparative Analysis of Avibacterium paragallinarum.** David Requena, Ana Chumbe, Michael Torres, Ofelia Alzamora, Manuel Ramirez, Hugo Valdivia-Olarte, Manolo Fernández-Sánchez, Eliana Icochea, Mirko Zimic, Manolo Fernández-Díaz, and FARVET Research Group, FARVET S.A.C. Chincha Alta, Lima, Peru.

Genotype and Phenotype Analysis of Drug Resistant Avian Pathogenic Escherichia coli (APEC). Catherine M. Logue, Yvonne Wannemuehler, Capricia Thompson and Lisa K. Nolan, Department of Veterinary Microbiology and Preventive Medicine, College of Veterinary Medicine, Iowa State University, Ames, IA.

Histopathological Findings in Chickens Experimentally Infected with Serovar C-1 Strains of Avibacterium paragallinarum. E. Soriano-Vargas, H. H. Trujillo-Ruíz, V. Morales-Erasto, M. Talavera-Rojas, and P. J. Blackall, Centro de Investigación y Estudios Avanzados en Salud Animal, Facultad de Medicina Veterinaria y Zootecnia, Universidad Autónoma del Estado de México, Toluca, 50200, México.

# **Case Report**

Case Report: Ionophore Toxicity in Commercial Turkeys. Rosa González, Eliana Icochea, Pablo Reyna, Rosa Perales, Nelly Cribillero, Viviana San Martin, College of Veterinary School, San Marcos University, Lima, Peru.

**High Broiler Mortality Associated with Immune Supression.** M. Tamayo, M.A. Casillas, J. Hernandez, *Zoetis, Mexico*.

Intranuclear Inclusions in Kidneys and Livers from 25-day-old Broiler Chickens Infected with Fowl Adenovirus Type 7. James F. Davis, Oscar Fletcher, and Arun Kulkarni, Departments of Diagnostics and Virology, Georgia Poultry Laboratory Network, Oakwood GA.

### Coccidiosis

Artemisinin-β-cyclodextrin Inclusion as an Effective Drug for Mixed *E. tenella, E. acervulina and E. maxima* in Chickens. Boxian Huang\*, Chunyan Jiang, Qingfeng Fan, Jianhua Huang, *Department of Life Science and Technology, China Pharmaceutical University, Nanjing* 210038, China.

**Coccidiostat Activity of Terpenes Against Eight** *Eimeria spp.* **in Chicken.** Elie K. Barbour and Taha Kumosani, *Department of Animal and Veterinary Sciences, Faculty of Agricultural and Food Sciences, American University of Beirut (AUB), P.O. Box 11-0236, Beirut, Lebanon.* 

Comparison of Two Infection Dosage of *Eimeria tenella* in Broiler Chickens for Anticoccidials Efficacy Trials. N. Cribillero, D. Molina, P. Reyna, V. Salgado, R. Gonzalez, V. San Martin and E. Icochea, *School of Veterinary Medicine, Universidad Nacional Mayor de San Marcos, Lima, Peru.* 

### Diagnostics

Diagnostic Findings in Backyard Poultry Flocks in the Central Valley of California: 2001 - 2013. C. Gabriel Sentíes-Cué, Bruce R. Charlton, Silvia Carnaccini, R. P. Chin, and H. L. Shivaprasad., California Animal Health & Food Safety Laboratory System, Turlock Branch1, 1550 N. Soderquist Road, Turlock, CA.

Serological Investigation for Five Important Diseases in Commercial Chickens in Grenada. Ravindra Sharma, Kehaw Tiwari, Alfred Chikweto, Derek Thomas, Claude DeAllie, Graeme Stratton and Muhhamed Iqbal Bhaiyat, School of Veterinary Medicine, St. George's University, Grenada, West Indies.

# **Food Safety**

Prevalence of Campylobacter spp in Wild Birds in South Korea. Yong-Kuk Kwon, Avian Disease Division, Animal and Plant Quarantine Agency, Anyang, Gyeonggi, Korea.

### **Gut Health**

**A Method for the Integration of Histopathology with Gut Health Monitoring.** Frederic J. Hoerr, *Veterinary Diagnostic Pathology, LLC, Aurburn, AL.* 

Aberrations of Thyroid Hormone Levels in Broiler Chickens with Runting-Stunting Syndrome. James F. Davis and Adam Davis, *Georgia Poultry Laboratory Network, Oakwood, GA*.

Comparison of Two Methods for Determination of Intestinal Villus/Crypt Ratios and Documentation of Early Age-Associated Ratio Changes in Broiler Chickens. F. D. Wilson, T. S. Cummings, T. M. Barbosa, C. J. Williams, J. Dickson and E. D. Peebles, MVRDL, Mississippi State University, Mississippi State, MS.

Efficacy of a novel prebiotic and a commercial probiotic in reducing mortality and production losses due to cold stress/Escherichia coli challenge. G.R. Huff, W.E. Huff, N.C. Rath, F.A. El-Gohary and Z.Y. Zhou, USDA/ARS Poultry Production and Product Safety Research Unit, Fayetteville, AR.

**The Role of Gut Integrity in Clostridial Dermatitis of Turkeys.** Kakambi V. Nagaraja and Anil J. Thachil, *Department of Veterinary and Biomedical Sciences, University of Minnesota, 1971 Commonwealth Ave, St. Paul, MN.* 

### **Immunology**

Efficacy of Milbond against the Mycotoxin's Effect on the Cellular Immunity Response Vaccine of Broiler. Igor Santos, Laboratorio Zoetis, São Paulo, SP, Brazil

The Impact of Silver Powder Nanoparticles on Bursa of Fabricius Pathological and Immune System Indices of Broiler Chickens During Starter Stage. Farhad Ahmadi and Mehran Mohammadi Khah, Sanandaj Branch, Islamic Azad University, Sanandaj, Kurdistan, Iran.

### **Infectious Bronchitis Virus**

A Protectotype Trial for the Control of the Q1 Infectious Bronchitis Virus (IBV) Variant Strain in South America. Luiz Sesti, Héctor Ramón Sanguinetti, Carlo R. Zenobi, María Victoria Terrera, Mariana Jauregui, Jorge Chacón, Lucas Sara, Pascal Paulet, *Ceva Animal Health – Argentina, Brazil, France.* 

Age-Related Changes to Induced Antibody Responses and Immune Protection After Ocular Live Attenuated IBV Vaccination. Justin Padgett, Stephen L. Gulley, Kellye Joiner, Russell C. Cattley, Frederik W. van Ginkel, Auburn University, College of Veterinary Medicine, Auburn, AL.

Characteristics of Recent Infectious Bronchitis Virus Isolates from Georgia Arun B. Kulkarni, *Georgia Poultry Laboratory Network, Oakwood, GA*.

**How Does Middle East Area Control Different IBV Variant Strains?** Husam Bakri, *Technical Manager at MSD-AH.* 

Infectious Bronchitis Virus Isolate DMV/2392/12 from Delmarva Broiler Chickens-Epidemiology and Protection Afforded by the Delaware 072 and Georgia 98 Commercial Vaccines. Brian Ladman , Lauren Preskenis, Marcy Murphy, Miguel Ruano, Daniel Bautista & Jack Gelb, Jr, Avian Biosciences Center, University of Delaware, C. C. Allen Laboratory, Newark, DE.

Molecular Characterization and Epidemiology of Avian Coronavirus in Quail. C. A. Torres, P. O. Tonietti, L. Y. Villarreal, P. E. Brandão, FMVZ / USP, Department of Preventive Veterinary Medicine and Animal Health, School of Veterinary Medicine, University of São Paulo, Brazil.

**Pathogenicity of Infectious Bronchitis Isolates Belonging to Brazilian BR-I Genotype.** Jorge Chacón, Pilar Vejarano, Bianca Bianchi, Antonio Piantino Ferreira, Zoltan Penzes, *Ceva Animal Health, Campinas, Brazil.* 

**Understanding Ark-DPI Vaccination Failure When Applied By Hatchery Spray Cabinet.** Giselle Raxera Rossa Ayres, Julia S. McElreath, Brian J. Jordan, Mark W. Jackwood, *The University of Georgia, Athens, GA*.

# **Infectious Bursal Disease Virus**

Field Performance of Different Vaccination Programs Against Infectious Bursal Disease (IBD) Using Conventional Live and Different rHVT-IBD Vector Vaccines in Commercial Layers in Brazil. Luiz Sesti, Fernando Resende, Moacir Oizumi, Carlos Kneipp, Rick van Oort, Fernando Lozano, Marcelo Paniago Christophe Cazaban, Ceva Animal Health, Brazil.

Field Safety and Efficacy of Vector Marek's/Infectious Bursal Disease Vaccines (rHVT – IBD) as Assessed by Clinical and Productive Performance in Commercial Layers in Argentina. Luiz Sesti, Lucas Sara, Rick van Oort, Fernando Lozano, Marcelo Paniago, Christophe Cazaban, Ceva Animal Health, Brazil

Pathogenesis of Newly Emerging Genome-Reassorted Infectious Bursal Disease Viruses. Daral J. Jackwood, Beate Crossley, and Maurice Pitesky, Food Animal Health Research Program, The Ohio State University/OARDC,1680 Madison Ave., Wooster, Ohio.

Sensing Infectious Bursal Disease Virus Infection and Triggering MDA5-Related Innate Immunity by Chicken MDA5. Ching Ching Wu, Chih-Chun Lee, Tsang Long Lin, Department of Comparative Pathobiology, Purdue University, West Lafayette, IN.

Sensitivity of a Penside IBDV Antigen Test Kit for a Wide Range of IBDV Isolates. Vilmos Palya, Edit Walkó-Kovács, Timea Tatar-Kis, Yannick Gardin, Scientific Support and Investigation Unit, Ceva Animal Health, 5 Szállás utca, Budapest, Hungary.

**Studies on the Efficacy of Recombinant HVT-IBD Vaccines-Vaxxitek Trial.**Jack Gelb, Jr., Daral J. Jackwood, Brian S. Ladman, and Erin M. Brannick, *Avian Biosciences Center, University of Delaware, Newark, DE.* 

Studies on the Efficacy of Recombinant HVT-IBD Vaccines-Vectormune Trial. Daral J. Jackwood , Jack Gelb, Jr., Brian S. Ladman, and Erin Brannic, Ohio Agricultural Research & Development Center ,The Ohio State University, Wooster, OH.

# Laryngotracheitis

Antibody Detection in Commercial Broilers Vaccinated with Vector Vaccines Carrying the Glyoprotein B of Infectious Laryngotracheitis Virus. Alecia Godoy, Maricarmen Garcia, John El-Attrache and Yannick Gardin, CEVA Biomune, Lenexa, KS.

**Detection, Isolation, and Characterization of Infectious Laryngotracheitis Virus on a Broiler Farm after a Disease Outbreak.** Teresa V. Dormitorio, Joseph J. Giambrone, Kenneth S. Macklin, *Poultry Science Department, Auburn University, Aurburn, Al.* 

Development of a High Throughput TaqMan Assay for the Detection of Infectious Laryngotracheitis Virus in Vector Vaccinated Chickens. Stephen Spatz, Maricarmen Garcia, Qingzhong Yu and Laszlo Zsak, USDA, ARS, SAA, SEPRL, Athens, GA.

Induction of bacterial lipoteichoic acid (LTA) mediated antiviral innate immune responses against infectious laryngotracheitis virus (ILTV). Mohamed F. Abdul-Careem, Siamak Haddadi, Jasmine Hui, Amber Kameka, and Simrika Thapa, Department of Ecosystem and Public Health, Faculty of Veterinary Medicine, University of Calgary, Calgary, Alberta, Canada.

### Miscellaneous

Anti Mycotoxin Effects of MILBOND TX® in the Broiler Feed Added with Aflatoxins and Fumonisin. Eduardo Muniz, Laboratorio Zoetis, São Paulo, SP, Brazil.

**Role of Poultry Veterinarians in the Urban Poultry Farming Industry.** Elena L. Behnke, *NPIP, USDA, Conyers, GA*.

**Web Based Learning for Avian Pathology.** Oscar J Fletcher, *Poultry Health Management Team, PHP Department, College of Veterinary Medicine, NC State University, Raleigh, NC.* 

### Mycoplasma

**An Outbreak of Mycoplasma synoviae in Northeast Georgia.** Patrick Black, Vijay Durairaj, Naola Ferguson-Noela, and Len Chapel, *Poultry Diagnostic and Research Center, The University of Georgia, Athens, GA*.

**Determining the Genetic Basis of Attenuation in Mycoplasma gallisepticum Vaccine Strains.**Camir Ricketts, Naola Ferguson-Noel, Saravanaraj Ayyampalayam, John Maurer, *The University of Georgia*.

Development of ELISA and Serum Plate Agglutination for detecting Antibodies of *Mycoplasma gallisepticum* Using Field Strain of Thai Isolate. Chansiripornchai, N., Chaichote, S., Akkanivas, S. and Wanasawaeng, W., *Avian Health Research Unit, Faculty of Veterinary Science, Chulalongkorn University, Thailand.* 

**Evaluation of Egg Shell Apex Abnormalities in the Layers with Decreased Egg Production.** In-pil Mo, Bon-sang Ku, Hae-lim Lee, Moo-sung Han, Kyung-chul Min, Seung-Baek Lee, Jong-nyeo Kim, Eun-ok Jeon, *College of Veterinary Medicine, Chungbuk National University, 48 Gaeshin-dong Heungduk-ku Cheongju Chungbuk, Korea.* 

Femoral Head Necrosis Induced by Mycoplasma synoviae in an Experimental Trial in Broilers. Vijay Durairaj, Patrick Black, Ruth Wooten, Naola Ferguson-Noel, Poultry Diagnostic and Research Center, The University of Georgia, Athens, GA.

Finding the Moment of Vaccination with *Mycoplasma gallisepticum* F-Strain in Broiler Breeders Before Field Infection in a Tight Vaccination Schedule with other Vaccines in Venezuela. Dayana Perez , Viamney Yanes, Luis Gomez, *Protinal-Proagro C.A, Venezuela*.

Molecular and Serological Evaluation of Spreading Pattern of *Mycoplasma synoviae* Vaccine (MS-H) Strains in the Commercial Layer Farms. Seung-Baek Lee, Chungbuk National University, Cheongju, Chungbuk, Korea.

Serum Neutralization Assay to Detect Neutralizing Antibodies Against *Mycoplasma synoviae.* Vijay Durairaj, Ruth Wooten, Patrick Black, Naola Ferguson-Noel, *Poultry Diagnostic and Research Center, The University of Georgia, Athens, GA.* 

**The Pathogenicity of** *Mycoplasma gallopavonis* in **Wild and Commercial Turkeys.** Rachel Jude, Patrick Black, Naola Ferguson-Noel, Department of Population Health, Poultry Diagnostic and Research Center, College of Veterinary Medicine, University of Georgia, Athens, GA.

### **Newcastle Disease Virus**

A Novel Approach for Expression of a Foreign Gene by Newcastle Disease Virus. Zhenyu Zhang, Southeast Poultry Research Laboratory, USDA-ARS, Athens, GA

A Novel Thermostable Newcastle Disease Virus Vaccine Vector for Expression of a Heterologous Gene. Guoyuan Wen, Southeast Poultry Research Laboratory USDA-ARS, Athens, GA.

Terpenes in Modulation of Vaccine Response and Production Improvement in Chicken Challenged with Velogenic Newcastle Disease Virus. Elie K. Barbour, Houssam Shaib, Esam Azhar, Taha Kumosani, Archana Iyer, Steve Harakeh, and Robert R. Bragg, Department of Animal and Veterinary Sciences, Faculty of Agricultural and Food Sciences, American University of Beirut (AUB), P.O. Box 11-0236, Beirut, Lebanon.

Very Virulent Newcastle Disease Virus Replication in Feathers of Infected Chicken, Dong-Hun Lee, Byuong-Yoon Kim, Jung-Hoon Kwon, Soo-Won Choi, Sang-Won Lee, Joong-Bok Lee, Seung-Yong Park, In-Soo Choi, Chang-Seon Song, Avian Diseases Laboratory, College of Veterinary Medicine, Konkuk University, Seoul, Korea.

## **Reovirus**

**Multi-Gene Characterization of Two Variant Avian Reoviruses Associated with Tenosynovitis.** Holly S. Sellers, Vanessa Gauthiersloan, Vijay Durairaj, and Erich Linnemann, *Poultry Diagnostic and Research Center, Department of Population Health, College of Veterinary Medicine, University of Georgia, Athens, GA.* 

Rapid Characterization of Recent Variant Serotype Reoviruses Currently Causing Viral Arthritis in Broilers and Turkeys Using a New Molecular Test. Joseph J. Giambrone, Teresa V. Dormitorio, and Kejun Guo, Poultry Science Department, Auburn University, Auburn AL.

### Salmonella

Assessment of Killed Salmonella Vaccine Efficacy in Broiler Breeders and Progeny. Virginia Baxter, John El Attrache, Alexandra Mendoza-Reilley, Charles Hofacre, Poultry Diagnostic and Research Center, University of Georgia, Athens, GA.

**Biosecurity Assessment Based On Salmonella Status.** Dave Fernandez, Willmar Poultry Company-AgForte, Willmar, MN.

Evidence-Based Approach to Identifying Risk Factors for Salmonella enteritidis Contamination in Layer Poultry and Egg. Thomas N. Denagamage, Bhushan M. Jayarao, and Subhashinie Kariyawasam, Department of Veterinary and Biomedical Sciences, Pennsylvania State University, University Park, PA.

Molecular Characterization of Salmonella spp Isolated From Layer Farms in Korea. Jong-Nyeo Kim, Eun-Ok Jeon, Hae-Rim Lee, Bon-Sang Koo, Moo-Sung Han, Kyeong-Cheol Min, Seung-Baek Lee, Yeon-Ji Bae, In-Pil Mo, Avian Disease Lab., College of Veterinary Medicine, Chungbuk National University, Cheongju, Korea

Prevalence and Characterization of Salmonella Species in Entire Steps of a Single Integrated Broiler Supply Chain in Korea. Soo-Won Choi, Byung-Yoon Kim, Dong-Hun Lee, Jae-Keun Park, Seong-Su Yuk, Tseren-Ochir Erdene-Ochir, Jung-Hoon Kwon, Jin-Yong Noh, Seung-Yong Park, Joong-Bok Lee, In-Soo Choi and Chang-Seon Song, Avian Disease Laboratory, College of Veterinary Medicine, Konkuk University, Hwayang-dong, Gwangjin-gu, Seoul 143-701, Republic of Korea.

Surveillance of Salmonella Contamination in Environment of Duck Slaughterhouses in Korea. Wootack Hong, Avian Disease Laboratory, College of Veterinary Medicine, Konkuk University.

### Virology

Antibody Response to Chicken Parvovirus (ChPV) Following Inoculation with Inactivated Virus and Recombinant Viruses Expressing ChPV-VP2 Protein. Laszlo Zsak, Qingzhong Yu, Southeast Poultry Research Laboratory, Agricultural Research Service, United States Department of Agriculture, Athens, GA.

Comparative Metagenomic Analysis of the Enteric Viromes from Specific-Pathogen Free (SPF) Chickens Placed on Broiler Farms with Enteric Disease Signs. Michael Day, L. Zsak, USDA/ARS, Southeast Poultry Research Laboratory, 934 College Station Road, Athens, GA.

Evaluation of a New Live Avian Pox Virus Vaccine Containing Both Fowl Pox and Pigeon Pox Viruses in a Single Preparation. Girish Sarma, Barry A. Kersting and Gary Spina, *Hygieia Biological Laboratories, Woodland, CA*.

**Neutralizing Epitope Based DNA Vaccination Against Infectious Challenge by Turkey Coronavirus.** Tsang Long Lin, Yi-Ning Chen, Peisheng Xu, Yoon Yeo, Ching Ching Wu, *Department of Comparative Pathobiology, Purdue University, West Lafayette, IN.* 

Occurrence of Group F Rotavirus in Broilers from Brazilian Poultry Farms. L. A. R. Beserra, N. T. G. C. Bernades, P. Brandão, F. Gregori, Department of Preventive Veterinary Medicine and Animal Health, College of Veterinary Medicine, University of São Paulo, Brazil.

Pathogenesis and Replication Using an Infectious cDNA Clone of Avian Hepatitis E Virus in Adult Broiler Chickens. Hyuk Moo Kwon, Soo Jeong Park, Haan Woo Sung, Byung Il Yoon, College of Veterinary Medicine, Kangwon National University, Chuncheon, Gangwon, Republic of Korea.

Review of Virological Cases Submitted to the Poultry Research and Diagnostic Laboratory from 2008 to 2013. Alejandro Banda, Rebecca Mackey, Scott Baughman, Lifang Yan, Yi Zhang, Poultry Research and Diagnostic Laboratory, College of Veterinary Medicine, Mississippi State University, Mississippi State, MS.

# AAAP/AVMA Future Annual Convention dates and locations

# **Future Convention Cities**

2015	July 10-14	Boston, MA
2016	August 5-9	San Antonio, TX
2017	July 21-25	Indianapolis, IN
2018	July 13-17	Denver, CO
2019	July 19-23	Washington, D.C.
2020	July 30-August 4	San Diego, CA



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