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Seattle, WA
July 12-15, 2009

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AAAP Vision

The American Association of Avian Pathologists strives to prevent and eliminate the suffering and loss of poultry due to disease, to assure a safe poultry-associated food supply and to develop and use cutting edge, science-based techniques to meet these goals through the education of current and future scientists.

Mission

The American Association of Avian Pathologists (AAAP) assures prevention and elimination of suffering and loss of poultry due to disease and the provision of a safe poultry-associated food supply through providing an open exchange of scientific and practical information. Veterinary and non-veterinary researchers, public, private and industry veterinarians, technicians, poultry company owners, industries supporting poultry production representatives, and flock managers are provided cutting edge science concerning the diagnosis, treatment and prevention of poultry disease as well as food safety and animal welfare through national and regional scientific meetings, text books, manuals, and pamphlets developed and authored by the AAAP membership. It is through this effort that the AAAP has received and continues to seek global recognition for this expertise.

Founded in 1957, The American Association of Avian Pathologist (AAAP) is a not-for-profit 501c (6) organization that is allied with the American Veterinary Medical Association. DUNS# 830848508

AAAP, Inc.
12627 San Jose Blvd., Suite 202
Jacksonville, Florida 32223-8638
www.aaap.info



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200 -20 Board of Directors

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The AAAP Foundation is a 501c (3) public foundation to support the philanthropic goals of AAAP, Inc.

AAAP Foundation Mission

The mission of the AAAP Foundation Board is to administer charitable donations to the AAAP and to advise the AAAP Board regarding qualified charitable expenditures.

AAAP Foundation Objectives

To secure the AAAP Board's approval for the actions of the Foundation Board.

To conduct the annual meeting of the AAAP Charitable Foundation, Inc.

To communicate the actions of the AAAP Foundation to the AAAP Board and to the AAAP membership.

To facilitate efforts to encourage charitable giving to qualified AAAP programs such as scholarships, preceptorships, award endowments, scientific publications and scientific meeting support.

To administer fund raising for special projects that qualify as charitable functions such as hosting international scientific meetings or aiding in funding of archival efforts.

To evaluate proposed new charitable functions and advise the AAAP Board of the results of said evaluation.

AAAP Foundation, Inc.
12627 San Jose Blvd., Suite 202
Jacksonville, Florida 32223-8638

Table of Contents

AAAP Awards Luncheon information and Map	6
Convention Center Floor Plan	7
Special Presentations	8
Schedule of Events- AAAP/AVMA Meeting	9
AAAP Symposium Program	10
AAAP Scientific Program	11
AAAP Poster Program	19

AAAP Awards Luncheon

Monday July 12, 2009 12:15-2:45PM

Sheraton Seattle Hotel

Sheraton Grand Ballroom (2nd Floor)
1400 6th Ave
202-621-9000



Monday, July 13, 2009 8:00AM- 8:30AM

Keynote Speaker, Dr. Richard K. Gast

Strategies for Preharvest Control of Food-born Salmonella in Poultry

Washington State Convention Center, Room 6B

Monday, July 13, 2009 3:00PM

Richard B. Rimler Memorial Paper: Jennifer M. Pfeiffer

Effects of Specific Amino Acid Changes on the Antigenicity of Hemagglutinin Molecules of Avian Influenza Isolates from Mexico

Washington State Convention Center, Room 6B

Monday, July 13, 2009 3:00PM

AAAP Awards Luncheon

Sheraton Seattle Hotel, Grand Ball Room C

Tuesday, July 14, 2009 8:00AM

Reed Rumsey Award Winner: Taylor Barbosa

Expression of Viral Immunogenic Proteins in Stable Cell Culture Using a Retroviral-Based Gene Delivery System

Washington State Convention Center, Room 6C

Tuesday, July 14, 2009 10:00AM- 10:30AM

Lasher History Lecture, Dr. Ray Williams

A History of Coccidiosis to 1950

Washington State Convention Center, Room 6B

Tuesday, July 14, 2009 10:30AM- 12:00PM

AAAP Business Meeting

Washington State Convention Center, Room 6B

Wednesday, July 15, 2009 8:00PM

Richard B. Rimler Memorial Paper: Enid T. McKinley

Evidence of multiple recombination events in an Avian Coronavirus Infectious Bronchitis virus

Westin Hotel, Room Cascade II

Wednesday, July 15, 2009 10:30AM

Reed Rumsey Award Winner: Deirdre I. Johnson

Evaluation of Recombinant Vector-Vaccines against Infectious Laryngotracheitis (ILT) under Experimental Conditions

Washington State Convention Center, Room 6C

Westin Hotel, Room Cascade II



AVMA Annual Convention
July 11-15, 2009
AAAP Schedule of Events

The Westin Seattle Hotel

Time	Meeting Name	Contact Person	Room
Friday, July 10, 2009			
7:00am – 5:00pm	AAAP Board of Directors Meeting	Janece Bevans-Kerr	Elliott Bay
Saturday, July 11, 2009			
7:00am – 10:30pm	AAAP Foundation Board Meeting	Janece Bevans-Kerr	Elliott Bay
10:00pm – 5:00pm	AAAP Board of Directors Meeting	Janece Bevans-Kerr	Elliott Bay
7:00am – 8:00 pm	ACPV Exam	Janece Bevans-Kerr	Cascade Ballroom 1
7:00am – 8:00 pm	ACPV Exam # 2	Janece Bevans-Kerr	St. Helens
7:00am – 10:00 pm	ACPV Exam # 3 – (Exam Grading Room)	Janece Bevans-Kerr	Adams
8:00am – 4:00pm	Association of Veterinarians in Broiler Production	Scott Westall	Vashon II
7:00am- 9:00am	AVBP Breakfast c/o Merial Select	Anita Strange	Whidby Room
12:00pm-1:00pm	AVBP Lunch c/o Fort Dodge		Whidby Room
12:00pm – 5:00pm	Association of Veterinarians in Turkey Production Lunch Sponsored by Alpha	Steven Clark	Olympic
2:00pm – 5:00pm	AAAP Histopathology/ Case Report Interest Group	H.L. Shivaprasad	Cascade Ballroom 2
4:00pm – 5:00pm	AAAP Biotechnology Committee	Shane Burgess	Baker
Sunday, July 12, 2009			
6:00am - 8:00am	AAAP Animal Welfare Committee	Kristi Scott	Elliot Bay
6:00am – 7:30am	Georgia MAM Alumni Breakfast	Karen Grogan	Cascade Ballroom 1
6:30am – 7:30am	AAAP Drugs & Therapeutic Committee	Bret Rings	Adams
6:30am – 7:30am	AAAP Awards Committee	Darrell Kapczynski	Baker
11:30am – 1:30pm	Association of Primary Poultry Breeder Veterinarians	Kate Barger	Adams
12:00pm – 1:30pm	California Poultry Med Alumni Luncheon	Rich Chin	Olympic
2:00pm – 6:00pm	ACPV Board Meeting	Janece Bevans-Kerr	St. Helens
4:00pm – 5:00pm	AAAP Biologics Committee	Charles Broussard	Adams
4:00pm – 5:00pm	AAAP AVMA Liaison Committee	Y.M. Saif	Baker
4:00pm – 5:00pm	AAAP Food Safety Committee	Marty Ewing	Stuart
4:00pm-6:00pm	AAAP Respiratory Diseases Committee	Maricarmen Garcia	Cascade Ballroom 1B
4:00pm – 6:00pm	AAAP Diseases of Poultry Committee	David Swayne	Orcas
4:00pm-5:30pm	AAAP Tumor Virus Committee	Guillermo Zavala	Olympic
4:30pm- 6:00	Education Committee	Isabel Gimeno	Whidby
6:00pm-7:00pm	Univ. of Minnesota Center For Animal Health and Food Safety	Brendan Lee	Cascade Ballroom 1A
Monday, July 13, 2009			
6:30am – 7:30am	AAAP Enteric Diseases of Poultry Committee	Eric Jensen	Elliott Bay
7:00am – 8:00am	AAAP Avian Diseases Editorial Board Meeting	Jagdev Sharma	Cascade Ballroom 2
6:30am – 7:30am	AAAP History Committee	John Dunn	Baker
6:30am – 7:30am	AAAP Toxic, Infectious, Miscellaneous & Emerging Diseases (TIME) Committee	Scott Fitzgerald	Glacier Peak
7:00am -8:00am	AAAP Epidemiology Committee	Suzanne Young	Adams
7:00am – 9:00am	Association of Veterinarians in Egg Production	Eric Gingerich	Vashon
12:15pm- 2:45 pm	AAAP Awards Luncheon	Janece Bevan-Kerr	Sheraton Grand Ballroom D
7:30pm-11:00 pm	NC State University Poultry Health Management	David Ley	Cascade Ballroom 1C
Tuesday, July 14, 2009			
7:00am – 9:00am	ACPV Reception / Annual Meeting	Janece Bevans-Kerr	Cascade Ballroom 1 & 2
10:30 am – Noon	AAAP Business Meeting (Convention Center)	Janece Bevans-Kerr	Convention Center
4:00pm-5:00pm	AAAP Isolation and Identification Committee	Louise Dufour-Zavala	Glacier Peak
Wednesday, July 15, 2009			
7:00am – Noon	AAAP Board of Directors Meeting	Janece Bevans-Kerr	Elliott Bay



2009 AAAP Symposium

North American Broiler Welfare Symposium Sunday, July 12, 2009

Washington State Convention Center

Ball Room 6B

Start Time	Title	Speaker
	Welcome and Overview	
7:30-8:00 AM	Welcome/ Housekeeping	Dr. Gail Golab
8:00-8:45 AM	A Scientific Approach to Broiler Welfare	Dr. Suzanne Millman
Moderator: James Barton		
	Genetics & Hatchery	
8:45-9:15 AM	Broiler Breeder Welfare; Genetics and Management	Dr. Michael Martin
9:15-9:45 AM	Animal Welfare from a Hatchery Perspective	Dr. Donna Hill
9:45-10:00 AM	Break	
Moderator: Linnea Newman		
	Broiler Rearing and Harvesting	
10:00-11:00 AM	Broiler Welfare at the Farm	Dr. Tim Cummings
11:00-11:45 PM	Market Age Broiler Harvesting	Dr. Robin Gilbert
11:45- 1:00 PM	Lunch	
Moderator: Robert Williams		
	Slaughter	
1:00-2:00 PM	Poultry Welfare: Farm to Plant	Dr. Ken Opengart
2:00-2:30 PM	Technical and Financial Considerations Relating to the Stunning of Broilers in the U.S.	Dr. Simon M. Shane
2:30-3:00 PM	Processing Plant Factors Related to Broiler Welfare	Dr. Sarge Bilgili
3:00-3:15 PM	Break	
Moderator: Mark Bland		
	Auditing	
3:15-4:00 PM	Welfare Auditing in a Conventional Broiler Farming System	Dr. James T. Barton
	Summary	
4:00-4:30 PM	Summary and Future	Dr. Suzanne Millman



AAAP 2009 Scientific Program
American Association of Avian Pathologists
 July 12-15, 2009
 Washington State Convention Center
 Seattle, Washington

Monday, July 13, 2009		
	Moderator: Gregorio Rosales	
8:00 AM	Keynote Speaker: Dr. Richard K. Gast Room: 6B Strategies for Preharvest Control of Food-borne Salmonella in Poultry	
	Session I (Room 6B)	Session II (Room 6C)
	Moderator: Danny Magee	Moderator: Erika Spackman
8:30 AM	Evaluation of Paw Lesions through Broiler Grow Out: A Field Study Suzanne D. Young, Anel Atencio, and Ken N. Opengart	Astrovirus associated with Turkey Viral Hepatitis Shivaprasad H. L. and Mary J. Pantin-Jackwood
8:45 AM	Spinal Abscesses Due to Enterococcus Cecorum in Broiler Chickens - An Emerging Disease? Eric N. Gingerich, John H. Barnes, Robert L. Owen, Shelley C. Rankin	Inclusion Body hepatitis as a vertically transmitted disease in Broiler chickens Susantha Gomis, Samantha Ekanayake, Davor Ojkic, Suresh Tikoo, Bob Goodhope, Philip Willson
9:00 AM	Case Report: A Control Strategy for Histomoniasis on a Replacement Broiler Breeder Farm Mark A. Burleson	Development of a recombinant vaccine against runting and stunting syndrome in chicken Egbert Mundt, Holly Sellers, Guillermo Zavala
9:15 AM	Histomoniasis in Commercial Tom Turkeys Exacerbated by a Faulty Nipple Drinker System David V. Rives	Changes in pituitary gland, primary and secondary immune organs associated with runting and stunting syndrome Mohamed El-Gazzar, Holly Sellers, Egbert Mundt, Stephen Collett.
9:30 AM	Epidemiology of an Unique Gangrenous Dermatitis Outbreak Philip A Stayer, Jackson L McReynolds, Mark A Burleson	Enteric disease in broiler chickens following experimental infection with chicken parvovirus Laszlo Zsak, Michael J. Day, Keith O. Strother,
	Break 9:45-10:00AM	
	Moderator: John Smith	Moderator: Mary Pantin-Jackwood
10:00 AM	Review of Virulent Newcastle Disease in Cormorants A Case Report Sherrill Davison, Eric N. Gingerich and Lynn E. Stephens	Development of an ELISA assay to detect chicken parvovirus antibodies Keith O Strother, Laszlo Zsak
10:15 AM	Performance Problems in Free-Range Layers due to the IBV-QX Strain: Diagnosis and Prevention Franz Sommer, Verena Seger	Assessment of Reovirus Vaccination on Blackleg Trims in Commercial Broilers Timothy S. Cummings, Phil Stayer, Jason Cater
10:30 AM	Pathology and economic impact of a severe outbreak of infectious coryza in non-vaccinated broiler breeders. Guillermo Zavala, Louise Dufour-Zavala, Martin Smeltzer, Mark W. Jackwood and Sunny Cheng	Genetic characterization of avian pox viruses using DNA isolated from formalin fixed tissue sections Deoki N. Tripathy and Bahaa A. Fadl-Alla
10:45 AM	Case Report: Septicemic Erysipelas in Chukar Partridge Scott D. Fitzgerald, DVM, PhD	Determination of the Prevalence of Pigeon Circovirus in California Squab Simone T. Stoute, Carol J. Cardona, Cathryn R. Bauer, Daphne A. Cooper, and Bruce R. Charlton

	Session I (Room 6B)	Session II (Room 6C)
11:00 AM	An unusual case of hepatitis in ring-necked pheasants (case report) Eva Wallner-Pendleton, Patricia Dunn, Greg Ning, Huaguang Lu, Benjamin Lucio, Joan Smyth, Elizabeth Buckles	Testing of a New Disinfectant Process for Poultry Viruses Lauren Appleby Gay and Egbert Mundt
11:15 AM	Oropharyngitis with Intralesional Dermatophilus-like Bacteria in a Breeder Chicken. Frederic J. Hoerr, Haroldo Toro, Heather Busby, Sandra Ewald	On the effectivity of a vaccination schedule against aMPV in Brazilian commercial layers as measured by RT-PCR, DNA sequencing, ELISA and clinical symptoms Laura YB Villarreal, Delair A Bolis and Paulo E Brando
11:30 AM	Water management of Pseudomonas cepacia in brown-egg layer pullets D.A.Anderson and D.Pennock	Onset of Immunity in Birds with Newcastle Disease Virus (NDV) Maternal Antibodies(Mabs) Vaccinated with the Recombinant HVF/F(NDV),INNOVAX-ND-SB Rudolf G. Hein ,Gwen F. Slacum and Phyllis A. Lynch
11:45 AM	Cyanotic Broiler Breeder Males: Why Are Those Heads Purple? Danny L. Magee, Jason Cater, Erica Baravik, Sua Ann Hubbard	Transmission of virulent Newcastle disease virus (NDV) between unvaccinated, sub-optimally vaccinated, and well-vaccinated SPF chickens Patti J. Miller, Claudio L. Afonso
12:15-2:45PM	AAAP Awards Luncheon Lunch served at 12:30PM	
	Moderator: Dave Suarez	Moderator: Lisa Nolan
3:00 PM	Richard B. Rimler Memorial Paper*: Effects of Specific Amino Acid Changes on the Antigenicity of Hemagglutinin Molecules of Avian Influenza Isolates from Mexico J. Pfeiffer*, C. W. Lee, S. Jadhao, and D. L. Suarez	E. coli survey in a broiler complex using serotyping and pathotyping techniques Kalen C. Cookson, Lisa K. Nolan and Chobi DebRoy
3:15 PM	Recombinant RCA-free Adenovirus-Vectored Vaccine for Immunization of Chickens and Pigs against Avian Influenza Haroldo Toro, De-chu C. Tang, Bettina Schemera, Soren Rodning, Joseph C. Newton	E. coli serogroup O18: Emerging isolates that are highly pathogenic in poultry Kelly A. Tivendale, Yvonne Wannemuehler, Kathy T. Mou, Catherine M. Logue, Ganwu Li, Subhashinie Kariyawasam, Ashraf Hussein, and Lisa K. Nolan
3:30 PM	Pathogenicity of reverse genetics based reassortant H5N1 avian influenza viruses with truncated NS1 gene in chickens Samadhan J. Jadhao, David Swayne, Chang-Won Lee and David Suarez	Avian Pathogenic E coli (APEC) reduction in Commercial Poultry Daniel Karunakaran, Tom Rehberger, Greg Siragusa, Chris Kromm
3:45 PM	Differences between Pekin and Muscovy ducks in response to vaccination against HPAI H5N1 virus Mary J. Pantin-Jackwood, David E. Swayne, and David L. Suarez	A Novel Autotransporter Contributing to Adherence Is Necessary for the Full Virulence of Avian Pathogenic E. coli Ganwu Li, Subhashinie Kariyawasam, Yvonne Wannemuehler, Kelly Tivendale and Lisa K. Nolan
4:00 PM	Analysis of H7 Avian Influenza Viruses by Antigenic Cartography and Correlation to Protection by Vaccination Erica Spackman, Ron Fouchier, David Swayne, Ahmed Abbas and Luciana Sarmento	Egg Yolk Inhibits the Acute Phase Inflammatory Response to E. coli in Egg Yolk Peritonitis Ingrid Cornax Edwards, Kirk C. Klasing

	Session I (Room 6B)	Session II (Room 6C)
4:15 PM	<p>Passage of low pathogenic avian influenza virus in chickens results in mutations and better transmissibility between birds</p> <p>Daniel Dlugolenski, Ralph A. Tripp, Mark. S. Tompkins, Egbert Mundt</p>	<p>Real-time PCR in Avian Mycoplasma Diagnostics</p> <p>Ziv Raviv and Stanley H Kleven</p>
4:30 PM	<p>Development of DIVA Vaccines for the Control of Triple Reassortant H3N2 Influenza in Turkeys</p> <p>Leyi Wang, Hadi M. Yassine, Smitha Pillai, Yehia M. Saif, Chang-Won Lee</p>	<p>The Displacement of Mycoplasma gallisepticum Strains by Live Vaccines</p> <p>Naola Ferguson-Noel, Victoria Laibinis, Ziv Raviv, Stanley H. Kleven</p>
4:45 PM	<p>Summary of type A influenza virus investigations for waterfowl in Ohio and on Delmarva: 2001-2008</p> <p>R.D. Slemons, D.D. Swayne, C. Driscoll, L. Hindman, V. Stotts, L. Alexander, M. Shieldcastle, D. Sherman, D. Senne</p>	<p>Serology results for TS-11 vaccinated and non vaccinated breeder flocks in Georgia</p> <p>Len Chappell and Dorene Seabolt</p>
5:00 PM	<p>Large death loss in captive/release Mallard ducks due to Pasteurella multocida</p> <p>Richard M. Fulton</p>	<p>Comparative Testing of Samples from a Broiler Breeder Flock for Mycoplasma synoviae</p> <p>David H. Ley, Ziv Raviv, Naola Ferguson-Noel</p>
5:15 PM	<p>Survey of backyard/hobby/small production flocks within a high density poultry area</p> <p>Benjamin C. Johnson, Louise Dufour-Zavala, and Martin A. Smeltzer</p>	<p>Role of Mycoplasma anatis and Interactions with other Infectious Agents in the Tenosynovitis and Arthritis syndromes in commercial ducks.</p> <p>Jaime Ruiz, Naola Ferguson-Noel, Benjamin Lucio-Martinez, Victoria Laibinis</p>
5:30 PM	Adjourn	

Tuesday, July 14, 2009		
	Session I (Room 6B)	Session II (Room 6C)
	Moderator: H. L. Shivaprasad	Moderator: Alejandro Bando
8:00 AM	Detection of Salmonella enterica serovar Enteritidis (SE) Antibodies in Serum Using A Polystyrene Bead/SE Flagella Agglutination Assay Peter S. Holt, Kyle D. Swayne, Lara E. Vaughn, Richard K. Gast	Reed Rumsey Award Winner*: Expression of Viral Immunogenic Proteins in Stable Cell Culture Using a Retroviral-Based Gene Delivery System Taylor Barbosa*, Guillermo Zavala and Sunny Cheng
8:15 AM	Use of CFSE dye and fluorescent imaging to visualize lymphoid tissues in chickens challenged with Salmonella Enteritidis (SE) Lara E. Vaughn, Peter S. Holt, Richard K. Gast	Detection of chicken birnavirus R11/3 in proventriculi and feces of experimentally infected chickens using a reverse transcriptase-polymerase chain reaction procedure James S. Guy, Frederick J. Fuller, H. John Barnes, Melissa West
8:30 AM	European Union (EU) Salmonella Enteritidis Control with the Use of an Inactivated Salmonella Vaccine. Rik Koopman, Rick v Oort, Ruud Hein	Antigenic Characterization and VP2 analysis of Delmarva IBD Field Viruses J. Gelb, Jr., D. J. Jackwood, E. Mundt, J. M. Harris, B. S. Ladman, D. Bautista, M. Ruano, M. M. Troeber, and C. R. Pope
8:45 AM	A Long-Term Survey of Salmonella sp. and Campylobacter sp. in a Meat-type Poultry Processing Plant Spangler Klopp, Daniel Austria Bautista, Brenda R. Sample, Kathy J. Philips, and Billie Jean Wright	Isolation and Characterization of a new variant Infectious Bursal Disease Virus identified by a diagnostic approach using reverse genetics Vijay Durairaj, Holly S. Sellers, Egbert Mundt
9:00 AM	Turkey Slaughter Establishments Operating Under the Salmonella Initiative Program Becky J. Tilley, Alice L. Johnson	Efficacy of single dose recombinant HVT-IBDV vaccination (Vaxxitek®) against classical and variant IBDV strains Francisco Perozo, Pedro Villegas, Linda Purvis, Rafael Fernandez & Julio Cruz
9:15 AM	The Utility of a Commercial Real-Time PCR Assay for Screening Salmonella sp. in Poultry Carcass Rinses and Environmental Samples Daniel Austria Bautista, Spangler Klopp, Brenda R. Sample, Kathy J. Philips, and Billie Jean Wright	Spectrum of protection provided by passive and active immunity to IBD viruses Vilmos Palya, Tamas Mato, Timea Tatar-Kiss, Yannick Gardin
	Break 9:30-10:00AM	
	Moderator: Richard Chin	
10:00-	Lasher History Lecture:	Dr. Ray Williams A History of Coccidiosis to 1950 Room: 6B
10:30-12:00 PM	AAAP Business Meeting	
12:00-1:00PM	Lunch	

	Session I (Room 6B)	Session II (Room 6C)
	Moderator: Phil Stayer	Moderator: Isabel Gimeno
1:00 PM	Correlation between use of various coccidial control programs and incidence of Gangrenous Dermatitis in an endemic broiler complex: Part 1: Field Observations G. Donald Ritter	Comparison of water based foam depopulation with and without CO2 gas to CO2 and Ar-CO2 gassing Eric R Benson, Mary Rankin, Keith J. Johnson. Robert L. Alphin
1:15 PM	Correlation between use of various coccidial control programs and incidence of Gangrenous Dermatitis in an endemic broiler complex: Part 2: Gastrointestinal microbiota G. Donald Ritter, J. A. Benson, S. M. Dunham, A. P. Neumann, T. G. Rehberger and G. R. Siragusa	Effects of increased light intensity on tendon ruptures in eight pound broilers Annika L. Hoffman, Philip A. Stayer
1:30 PM	Comparison of turkeys from flocks raised on farms either endemic or non-endemic for gangrenous dermatitis: Part 1 Microbiologic differences Michelle M. Andersen, Jodi A. Benson, Susan M. Dunham, Anthony P. Neumann, Thomas G. Rehberger and Gregory R. Siragusa	The beta-tubulin sequence of H. meleagridis suggests susceptibility against Benzimidazoles and confirms the phylogenetic position of H. meleagridis Ruediger Hauck, Hafez M. Hafez
1:45 PM	Comparison of turkeys from flocks raised on farms either endemic or non-endemic for gangrenous dermatitis: Part 2 Gastrointestinal microbiota Michelle M. Andersen, Jodi A. Benson, Susan M. Dunham, Anthony P. Neumann, Thomas G. Rehberger and Gregory R. Siragusa	Chronological study of the pathogenesis of Marek's disease virus in the eye and brain Arun K.R. Pandiri, Aneg . Cortes, Isabel M. Gimeno
2:00 PM	Quantitative detection of C. septicum in turkey flocks experiencing reoccurring episodes of gangrenous cellulitis by real-time PCR Anthony P. Neumann, Sue M. Dunham, Jodi A. Benson, Michelle M. Andersen, Thomas G. Rehberger and Greg R. Siragusa	Dimerization partners of Marek's disease virus encoded Meq protein play an important role in T-cell transformation Paulette F. Suchodolski, Blanca Lupiani, Lucy F. Lee and Sanjay M. Reddy
2:15 PM	Immune reactive components of Clostridium perfringens causing Cellulitis in turkeys Anil J. Thachil, David A. Halvorson, and Kakambi V. Nagaraja.	Protection properties of mutant rMd5 viruses expressing the Meq protein of CVI988 vaccine strain Blanca Lupiani, Sanjay M. Reddy
2:30 PM	Control of Turkey cellulitis using an inactivated Clostridial toxoid vaccine K.V. Nagaraja, Thachil A.J and D.A. Halvorson	Factors affecting the efficacy of recombinant Marek's disease vaccine protection Lucy F. Lee
2:45 PM	Prevalence of netB positive and negative isolates of C. perfringens from healthy and diseased animals and their ability to produce necrotic enteritis Thomas G. Martin & Joan A. Smyth	Characterization of the immune responses elicited by double vaccination against Marek's disease Aneg Lucia Cortes, Richard L. Witter, Isabel M. Gimeno
	Break 3:00-3:30 PM	

	Session I (Room 6B)	Session II (Room 6C)
	Moderator: Mike Martin	Moderator: Pat Waknell
3:30 PM	<p>Importance of mixed Clostridium perfringens isolates in the experimental reproduction of necrotic enteritis in broiler chickens, a new infection model</p> <p>Martine Boulianne, Mathiew Belanger, Philippe Fravallo, Robert J. Moore, and Ann Letellier</p>	<p>Effect of route of vaccination with serotype 1 Marek's disease vaccines on the recruitment of lymphocytes and macrophages in the lungs</p> <p>Ricardo A. Cortes, Aneq Lucia Cortes, Oscar Fletcher, Isabel M. Gimeno</p>
3:45 PM	<p>Molecular toxinotyping of Clostridium perfringens isolates from organic farms</p> <p>Jessica Brady, Omar Abu-Dahab, Carlyle Bennett, Bill Guenter, Juan C. Rodriguez-Lecompte, James D. House</p>	<p>Virus competition for shedding and tumor formation over time in Marek's disease virus dual-infected chickens</p> <p>John R. Dunn, Richard L. Witter, Robert F. Silva, Lucy F. Lee, Scott D. Fitzgerald, Richard M. Fulton, Steve R. Bolin, John B. Kaneene</p>
4:00 PM	<p>Ulcerative enteritis in broiler breeder chickens and captive capercaillie (Tetrao urogallus) in Scotland in 2008</p> <p>Alisdair M. Wood, Luca Bano, Ilenia Drigo</p>	<p>Role of Pulmonary Immune Response on the Efficacy of Serotype 1 Marek's Disease Vaccines</p> <p>Isabel M. Gimeno, Aneq L. Cortes, Richard L. Witter</p>
4:15 PM	<p>A decrease in FOCAL DUODENAL NECROSIS (FDN) lesion number and severity with use of FDN specific Direct Fed Microbial (DFM).</p> <p>Tammy A. Baltzley, Sue M. Dunham, Firmin Lago, Jodi A. Benson, Greg R. Siragusa</p>	<p>Detection of VECTORMUNE HVT® Vaccines in Feather Tips by Real-Time PCR</p> <p>Motoyuki Esaki, Takanori Sato, Lauren Jensen, Shuji Saitoh, Sakiko Saeki, Ayumi Fujisawa and Kristi Moore Dorsey</p>
4:30 PM	<p>Turkey Cellulitis Incidence in a Dexamethasone Immunosuppression Model</p> <p>Geraldine R. Huff, William E. Huff, Narayan C. Rath</p>	<p>Immunological Basis for Resistant and Susceptibility to Marek's Disease</p> <p>Mohammad Heidari</p>
4:45 PM	<p>The Environmental Impact, Welfare and Production Characteristics of First-Lay and Molted Turkey Breeder Hens</p> <p>Eric C Gonder</p>	<p>The importance of pp38 splice variants for the pathogenesis of Marek's disease</p> <p>Karel A. Schat, Priscilla H. O'Connell, Micheal S. Piepenbrink, Keith W. Jarosinski</p>
5:00 PM	<p>A survey to investigate the adoption of biosecurity measures among commercial broiler growers in Georgia</p> <p>Fernanda C. Dorea, Dana J. Cole, Charles Hofacre</p>	<p>Insertion of a Reticuloendotheliosis Virus LTR into the Marek's Disease Virus Genome</p> <p>Robert F. Silva, Taejoong Kim, Jody Mays and Aly M. Fadly</p>
5:15 PM	<p>Biosecurity in a newly constructed egg production facility: results after 12 years</p> <p>David A Halvorson</p>	<p>Pathogenicity of a molecular clone of Marek's disease virus with an insert of Long Terminal Repeat (LTR) of reticuloendotheliosis virus (REV).</p> <p>Aly M Fadly, Taejoong Kim, Jody Mays and Robert F. Silva</p>
5:30 PM	Adjourn	

Wednesday, July 15, 2009		
Westin Hotel		
	Session I (Cascade I)	Session II (Cascade II)
	Moderator: Charlie Broussard	Moderator: Haroldo Toro
8:00 AM	Pathogenesis of vertebral osteorthritis ("Spinal Abscesses") in male broiler breeders casued by enterococcus Leslie T. Martin, Michael P. Martin, and H. John Barnes	Richard B. Rimler Memorial Paper*: Evidence of multiple recombination events in an Avian Coronavirus Infectious Bronchitis virus Enid T. McKinley*, Deboah A. Hilt, Mark W. Jackwood
8:15 AM	Deciphering the role of Polyphosphate kinases in Campylobacter jejuni colonization/ pathogenesis D. Gangaiah, B. Adhikari, B. Jeon, Q. Zhang, Z. Liu, Y. Sanad, M. Drozd, and G. Rajashekara	Genomic and Phylogenetic Comparisons of Emerging Coronaviruses S. W. Thor, D.A. Hilt, E.T. McKinley, and M.W. Jackwood
8:30 AM	Reduced fitness associated with macrolide-resistant Campylobacter in chickens Qijing Zhang, Taradon Luangtongkum, Virginia Seng, and Orhan Sahin	Selection of Minor Viral Subpopulations within Ark-type Infectious Bronchitis Vaccine Effect on Tracheal Damage and Mucosal Immune Responses Vicky L. van Santen, Eunice N. Ndegwa, Kellye S. Joiner, Frederick W. van Ginkel, Haroldo Toro
8:45 AM	Isolation and Characterization of Streptococcus suis from Broiler Chickens Subhashinie Kariyawasam, Patricia A. Dunn, Eva A. Wallner-Pendleton, and Suzanne Myers	Assessing Intraspatial Variation of Infectious Bronchitis Virus in the Host Rodrigo Gallardo, Vicky van Santen, Haroldo Toro
9:00 AM	Consumers: Their Perceptions and How They Change Robert L Owen, Jeffrey Mellinger, Michael Opperman	Genomic Analysis of Pathogenic and Attenuated Strains of Infectious Bronchitis Virus J.E. Phillips, D.A. Hilt, E.T McKinley, S.W. Thor, and M.W. Jackwood
9:15 AM	The effect of metam sodium on infectivity of Eimeria oocysts Raymond Fetterer, Mark Jenkins, Kate Miska, Ronald Richardson, George Cain	Isolation and Characterization of Recent Infectious Bronchitis Virus Isolates from NE Georgia Arun B. Kulkarni, Elena Behnke and Reynaldo Resurreccion
	Break 9:30-10:00AM	
	Moderator: Hector Cervantes	Moderator: Pedro Villegas
10:00 AM	Molecular Characterization of Eimeria species infecting turkeys Katarzyna B. Miska, Thilak Rathinam, Ryan S. Schwarz, David Chapman	All-Natural Compound Tested for Activity Against IBV in Chickens Mark W. Jackwood, Richard Rosenbloom, Michael Petteruti, Deborah A. Hilt, Amber W. McCall, and Susan M. Williams
10:15 AM	Using molecular techniques to differentiate vaccine and field strains of Eimeria spp. oocysts in coccidiostat- and vaccine-utilizing poultry farms Mark Jenkins, Katarzyna Miska, Raymond Fetterer, Spangler Klopp	Proliferative and Lymphocytic Pneumonia in Broiler Chickens Oscar J. Fletcher, James Davis, John Smith, Mark Dekich
10:30 AM	Histopathological changes in the small intestine associated with Eimeria praecox infection. Jenny A. Fricke, Greg. F. Mathis, Charles L. Hofacre, Blair E. Telg, Andres F. Montoya and Susan M. Williams	Reed Rumsey Award Winner*: Evaluation of Recombinant Vector-Vaccines against Infectious Laryngotracheitis (ILT) under Experimental Conditions Deirdre I. Johnson*, Maricarmen Garcia, Guillermo Zavala

	Session I (Cascade I)	Session II (Cascade II)
10:45 AM	How Eimeria praecox infection affects broiler intestinal immunity Lindsay H. Stuard, Kate B. Miska, Mark C. Jenkins, Ray H. Fetterer, Sungwon Kim, Rami A. Dalloul	Analysis of Climatic Factors during Outbreaks of Vaccinal Laryngotracheitis Louise Dufour-Zavala
11:00 AM	Comparison of broiler performance and vaccine infectivity after Inovocox" vaccination at E18 or E19. Lauren K. Griffin, Larry Charniga, Mohamed Hamoud, Vivian Doelling, Michelle Miller, Rebecca Poston	Benefits of the New Intra-Muscular Wing Killed Vaccination on Commercial Egg Pullets Hugo Medina
11:15 AM	Improved Coccidiosis Control with Anticoccidial Drugs Following Vaccination with Coccivac-B Greg F. Mathis, and Matilde Alfonso and Charles Broussard	Nonsuppurative myocarditis in turkeys in California: a retrospective study of forty five cases. Monique S. Franca, Rocio M. Crespo, Richard P. Chin, Peter Woolcock, Hulimangala L. Shivaprasad
11:30 AM	Paired House Trials for Comparing Body Weights at 28 and 42 Days of Age in Broilers Receiving Either Inovocox or Salinomycin Jonathan L. Schaeffer, Larry M. Charniga, John Dickson, David G. Kelly and Rebecca M. Poston	Association of Gross, Microscopic, and Histopathologic Examination of Enteric Lesions in Young Turkeys Steven R Clark, David Rives, Steven Matthis, Oscar Fletcher
11:45 PM	Is coccidiosis the problem? Steve Fitz-Coy	Pathology and mortality associated with graded levels of melamine and cyanuric acid fed to young broiler chickens Alex Bermudez, George Rottinghaus, David Ledoux, Lindsay Brand, Rita Dourado, Rafael Murarolli, and Mengshi Lin
12:00 PM	Adjourn	

Avian Influenza**1 Anti-viral activity and toxicity of the Alder tree extract against avian influenza virus subtype H9N2**

Il Hwan Kim, Hyuk Joon Kwon, Sun Hee Cho, Young Jin Ahn, Sun Joong Kim, Seong Ryul Cho, Jeong Chan Ra, Jae Hong Kim

2 Biological Characterization of Avian Influenza Viruses Isolated from Wild Birds

Seong-Hwan Byun, Min-Jeong Kim, Hwan-Hee Kim, Chang-Hee Lee, Jeong-Hwa Shin, In-Pil Mo

3 Determination of Survivability of Avian Influenza (AI) Viruses in Poultry Litter and Experimentally Infected Chickens

Aline R. Reis, Casey W. Ritz, David E. Stallknecht, and Maricarmen Garcia

4 Establishment of neuraminidase (NA) subtype 2 specific ELISA for Influenza A virus from avian and swine origin

Maricarmen Garcia, Alice Mundt, and Aline Reis

5 Expression of an influenza virus hemagglutinin gene in a fowl adenovirus vector

Eva Nagy, Dan-Hui Yang and Peter J. Krell

6 In Vitro Comparison of the Cytokine Response to Avian Influenza Virus from Peripheral Blood Lymphocytes Isolated From Chickens Differing in Mx631 Gene Polymorphism.

Darrell R. Kapczynski, Sandra Ewald, Emily Livant, Ludmilla Kaltenboeck, and David L. Suarez

7 Increased pathogenicity and altered host responses after adaptation of a mallard H5N2 LPAIV in IBDV-pre-exposed chickens.

Gloria C. Ramirez-Nieto, Chul-Hong Kim, Hyun S. Lillehoj, Haichen Song, H. L. Shivaprasad, Ivan G. Gomez-Osorio, Daniel R. Perez.

8 Interspecies Transmission of Triple Reassortant H3N2 Influenza Viruses Between Swine and Turkeys: Molecular Studies.

Mahesh Khatri, Chang-Won Lee, and Y.M. Saif

9 AIV and NDV surveillance in Peru: An update For The 2006-2007-2008 Migratory Season and H7N3-AIV strain Isolation

Rosa Gonzalez, Eliana Icochea, Armando Gonzalez, Bruno Ghersi, David Blazes, and Joel Montgomery

10 Live-attenuated H7N2 and H9N2 avian influenza viruses for potential use as in ovo vaccines

Cai Y, Song H, Ye J, Araya Y, Padmanabhan R, Perez

11 **Pathogenicity of H5N1 A/Duck/Vietnam/201/05 reassortants in ducks**

Jamia L. Wasilenko, Luciana Sarmento, and Mary Pantin-Jackwood

12 **Resurgence of H5N2 Avian Influenza in Live Bird Markets in the Northeast U.S.**

David L. Suarez, L. Mia Kim, Janice C. Pedersen, and Dennis A. Senne

13 **Studies of phylogeny and sequence analysis of H9N2 avian influenza viruses**

Yanyan Huang, Beixia Hu, Sanjie Cao, Xintian Wen, Dong Xu, Mazhar Khan, Xiumei Zhang

14 **Susceptibility of chicken T cells to low pathogenic H5 influenza viruses.**

Mahesh Khatri, Hadi M. Yassine, Yehia M. Saif and Chang-Won Lee

15 **Viral Adaptation to Host Species-Effect of LP-AIV Passage within a Host**

Brian S. Ladman, Jack Gelb, Jr., Conrad Pope, Erica Spackman and Richard Slemons

Bacteria, Miscellaneous

16 **Amyloid arthropathy associated with various bacteria in Brown Leghorn Chickens**

Shivaprasad H. L., M. Franca, R. P. Chin and R. Crespo

17 **Application of Bacillus subtilis PB6 in Turkey Field Trials**

Andrew G Yersin, and Sally Moore

18 **Comparative Genome Analysis of Gallibacterium anatis Causing Peritonitis in Laying Hens**

Timothy J. Johnson, Claudia Fernandez, Adam Stell, Anders M. Bojesen, and Lisa K. Nolan

19 **Detection of Campylobacter jejuni DNA in Broiler Cecal Dropping by Polymerase Chain Reaction**

Sam P. Christenberry, Rick J. Meinersman, John R. Glisson, Kristi M. Moore, Charles M. Corsiglia, Thomas J. Dempsey

20 **Gallibacterium anatis in broiler breeder flocks in the Republic of Panama: Clinical diagnosis and control measures**

Erick N. Calderon, Karina Thomas

21 **Retrospective Study of Pasteurella multocida Isolates in Mississippi**

Sue A. Hubbard

22 Unusual Pathology Manifested with an Outbreak of Ornithobacterium rhinotracheale Associated Meningoencephalitis in Commercial Broiler Chickens

Floyd D. Wilson, Shuping Zhang, Sue Ann Hubbard and Danny L. Magee

Chicken Anemia Virus

23 A Retrospective Study of the Correlation between Chicken Anemia Virus and Avian Leukosis Virus Subgroup J Infection in Broiler and Broiler breeder Chickens

Lanqing Li, Michael R. Luther, Alicia Wise, Frederic J. Hoerr

24 An 8-year longitudinal survey for the presence of antibodies to chicken infectious anemia virus in two specific-pathogen-free strains of chickens

Karel A Schat, Ynte H Schukken

25 Serologic Survey of Chicken Infectious Anemia in Backyard Poultry in Argentina

Celina Buscaglia

Clostridium

26 Development of a Clostridium perfringens alpha toxin (Phospholipase C) antibody ELISA assay using a single serum dilution

Stephan G. Thayer, Charles L. Hofacre, and Charles Broussard

27 Development of bacteria-vectored vaccines for necrotic enteritis

A. Khatiwara, S. L. Layton, G. Tellez, L. R. Berghman, B. M. Hargis and Y. M. Kwon.

Coccidiosis, Cryptosporidiosis

28 Mechanisms of intestinal Barrier Failure in subclinical Enteritis

Marco A. Quiroz, Julia D. Dibner, and Chris Knight

29 Nicarbazin Anticoccidial Dose Response

Greg F. Mathis

30 The transcriptome of the coccidian parasite Eimeria maxima the merozoite life stage

Ryan S. Schwarz, Raymond H. Fetterer, Katarzyna B. Miska

31 Which Eimeria Species Most Affects the Production of Necrotic Enteritis in Broiler Chickens

Greg F. Mathis, and Jenny A. Fricke, and Charles L. Hofacre

32 Relationship between Active Infection with *Cryptosporidium baileyi* and anti- *C.baileyi* Antibody Responses

Hayet Abbassi and Muriel Naciri

E. coli

33 APEC Virulence Plasmids: Multi-Purpose Contributors to Disease

Lisa Nolan, Timothy Johnson, Yvonne Wannemuehler, Kelly Tivendale, Ganwu Li, Subhashinie Kariyawasam, Catherine Logue, and Paul Mangiamele

34 Does the Use of Aresenic-containing Compounds Promote the Selection of Multidrug-Resistant APEC

Catherine M. Logue, Yvonne M. Wannemuehler and Lisa K. Nolan

35 Predicting the virulence of Avian Pathogenic *E. coli* using serogroup, phylogenetic group and MLST

Kathy T. Mou, Kelly A. Tivendale, Yvonne Wannemuehler and Lisa K. Nolan

36 Use of GFP- and RFP-Labeled APEC to Evaluate Adherence

Yvonne M. Wannemuehler, Ganwu Li, and Lisa K. Nolan

37 R Plasmids Found among Emergent APEC Strains

Paul Mangiamele, Timothy J. Johnson, Yvonne M. Wannemuehler, Catherine M. Logue, & Lisa K. Nolan

Immunology, Immunity, and Vaccines

38 Holistic treatment of immunosuppressed broilers coinfecting with *Mycoplasma gallisepticum* and Infectious Bronchitis Virus

Elie K. Barbour, Ryan H. Yagi, Houssam A. Shaib, Mohamed T. Farran and Fawwak T. Slaiman

39 The turkey genome sequence: implications to immunity, disease and overall health

Rami A. Dalloul, Oswald Crasta, Kent Reed, Audrey McElroy, Otto Folkerts, Ed Smith, Dave Burt, Rick Jensen, Roger Coulombe, Jerry Dodgson

Infectious Bronchitis Virus

40 Characterization of infectious bronchitis virus field strains isolated in 2008 from poultry farms in Mississippi.

Alejandro Bando, Tiffany Nuesch, and Holly S. Sellers

41 Comparison of the Pathogenicity of Two Infectious Bronchitis Strains, Qu16 and Qu_MV, Isolated from Quebec, Canada

Leni Corrand, Mona Morin, Carl Gagon, Amer Silim, Davor Ojkic, and Jean-Pierre Vaillancourt

42 Evaluation of safety and protective efficacy of bivalent live nephropathogenic infectious brochitis virus K2 vaccine combined with nonpathogenic Newcastle virus DSB-HP strain (Live K2-ND bivalent vaccine) by coarse spray iin 1-day-old commercial broilers

Jeong-Yong Park, Hyun-Jeong Lee, Ha-Na Yoon, Seung-Hwan Jung, Tae-Hyun Lim, Dong-Hoon Lee, Youn-Jeong Lee, Won Hur, Joong-Bok Lee, Seung-Yong Park, In-Soo Choi, Chang-Seon Song

43 Evaluation of the Effectiveness of Two Infectious Bronchitis Vaccine Programs for Preventing Disease Caused by the IBV Qu_MV Field Isolate from Quebec

Leni Corrand, Mona Morin, Carl Gagon, Davor Ojkic, and Jean-Pierre Vaillancourt

44 Investigations into the genotype of the S1 gene and the tissue distribution of a unique IBV strain present in the United States

Peter R Woolcock, Carol J Cardona, Mingke Yu, Richard P Chin, Rocio Crespo H L Shivaprasad, Bruce R Charlton, Hailu Kinde

45 Pathological and molecular diversity of Brazilian strains of IBV: multiple lineages can cause multiple diseases

Laura Y. B. Villarreal, Delair A. Bolis, Thaisa L. Sandri and Paulo E. Brandeo

46 Unusual lesions of nephritis associated with Infectious Bronchitis virus in Chickens

Shivaprasad H. L., M. Franca, M. Yu and P. R. Woolcock

Infectious Bursal Disease

47 Update on the Molecular Epidemiology of Infectious Bursal Disease Virus in Latin America

Maritza Tamayo, Sergio Velez

48 Identification of infectious bursal disease viruses in broiler chickens at processing plants.

Daral J. Jackwood and Susan E. Sommer-Wagner

49 Recombinant Sub-Unit VP2 vaccine protects against challenge with US isolates of standard and variant Infectious Bursal Disease strains

Avner E Finger, Theodore Girshick and Bezalel Gutter

50 Specific humoral immunity elicited by DNA encoding infectious bursal disease virus large segment gene and avian influenza virus hemagglutinin gene

Ching Ching Wu, Yung-Yi Chen, Tsang Long Lin

51 The Isoleucine at position 451 is not critical for pep46 activity in Infectious Bursal Disease Viruses.

Daral J. Jackwood and Susan E. Sommer-Wagner

Laryngotracheitis

52 Characterization of infectious laryngotracheitis virus involving in a severe outbreak in Peruvian commercial layers flocks

Jorge Luis Chacon- Villanuevan, Rodrigo Arce, Alfredo Condemarin, Tom Yamashiro, Antonio J. Piantino Ferreira.

53 Developing a Practical ILT Control Program for Non-Commercial Poultry Flocks

Nathaniel L. Tablante, Jennifer Timmons, Connie Hodgson

54 Differentiation of vaccine strains and field isolates of infectious laryngotracheitis virus by sequence analysis of ICP4 gene

Jorge Luis Chacon- Villanueva, Antonio J. Piantino Ferreira

55 Generation and characterization of antisera against selected glycoproteins of Infectious laryngotracheitis virus

Alice Mundt and Maricarmen Garcia

Management

56 A Novel and Practical Method Utilizing the Latin Square as a Basis for Statistical Analysis of Variance Between Two Experimental Treatments in the Hatchery

Mark A. Dekich, Robert W. Keirs, E. David Peebles

57 A novel chlorination technique to improve the safety, efficacy, and handling of chlorine in poultry watering systems.

Douglas A. Anderson and Douglas Pennock.

58 Biosecurity Risk Assessment of Live Bird Markets In Bangladesh and West Africa

Jarra Jagne, Mick Fulton, Linda Spink, David Tardif-Douglin

59 Day of Hatch vs Day after Hatch Placement of Turkey Poults: the influence of environment on turkey health and performance

Rosemary A. Marusak, Dennis P. Wages, H. John Barnes, David Rives, Michael Martin, David H. Ley, Michael Day

60 Effect of Fresh Dietary Garlic Powder on Some of Serum Biochemical Parameters in Broiler Chicks

Ramezanali Jafari, Mohammad Razijalali, Rezvan Kiani

61 Evaluation of Biosecurity and Monitoring System in the Breeder Farm Specialized for the Production of Human Influenza Vaccine

Eun-Ok Jeon, Man-Ha Rou, Jeom-Ju Kim, Han-Sung Oh and In-Pil Mo

62 The Identification of Fungi Collected from Commercial Poultry Houses using an Automated real-time PCR System.

J. Allen Byrd, Morgan B. Farnell, Marcos X. Sanchez, Jackson L. McReynolds, H. Morgan Scott, Michael A. Davis, David J. Nisbet, and David J. Caldwell

63 Use of the I-Stat Serum Chemistry Analyzer for Evaluation of Poult Flip-Over Syndrome

Michael P. Martin, Rosemary Stoertz, Summer Russell, David Rives, Oscar Fletcher, and H. John Barnes

Miscellaneous Virus

64 An unpredicted subgenomic mRNA produced by turkey coronavirus

Tsang Long Lin, Jianzhong Cao, Ching Ching Wu

65 Biological assessment of recombinant avian metapneumovirus subgroup C (aMPV-C) viruses containing different length of the G gene in cultured cells and SPF turkeys

Qingzhong Yu, Carlos N. Estevez, and Laszlo Zsak

66 Characterization and Complete Genome Sequence of Avian Paramyxovirus Serotype-3

Sachin Kumar, Siba K. Samal

67 Detection of Turkey type 2 astroviruses (TAstV2) in guinea fowl buildings: assessment of the cleaning -disinfection procedures

Jean-Luc Guerin and Xavier Dubord

68 Development of reference antisera to enteric-origin avian viruses

J. Michael Day, Mary J. Pantin-Jackwood

69 Metagenomics analysis of intestinal contents from runting-stunting-syndrome diseased broiler

Taejoong Kim, Rebecca V. Thurber, Holly S. Sellers, and Egbert Mundt

70 Pathogenicity of recently re-emerged fowl adenovirus (serotype 4, 9 and 11) isolated from broilers vaccinated with infectious bursal disease intermedia

Tae-hyun Lim, Seung-Hwan Jung, Jeong-Yong Park, Hyun-jeong Lee, Dong-hoon Lee, Ha-na Yoon, Young-Ho Hong, Ho-Sik Yoon, Joong-Bok Lee, Seung-Yong Park, In-Soo Choi, Chang-Seon Song

71 Safety and Efficacy of Fowl Adenovirus Serotype-4 Inactivated Oil Emulsion Vaccine in Chicken

Ji-Ye Kim, Jong-Nyeo Kim, Hyun-Hee So and In-Pil Mo

72 The Comparison of Pathogenicity in the SPF Chickens Challenged with Fowl Adenovirus and/or Avian Reovirus

In-pil Mo, Kyeong-cheol Min, Dong-myong Choi, Jong-man Kim

73 The design of a SYBR Green real-time PCR assay for the detection of Duck and Goose circoviruses (DuCV and GoCV) and its application to diagnosis.

Leni Corrand, Martine Deplanche and Jean-Luc Guerin

74 Turkey Stunting and Enteritis Syndrome - Pennsylvania Cases

Eric N. Gingerich, Sherrill A. Davison

Mycoplasma

75 Detection of ts-11 vaccine in the presence of wild-type Mycoplasma gallisepticum using a unique restriction enzyme site

Victoria A. Laibinis, Maricarmen Garcia, Scott Callison, Nilo Ikuta, and Naola Ferguson-Noel

76 Evaluation of a new multiplex real-time PCR assay for the detection of Mycoplasma gallisepticum and Mycoplasma synoviae in poultry

Scott A. Callison

77 Serological results with an improved Serum Plate Agglutination antigen for Mycoplasma synoviae. Cancelled

Gloria Avellaneda and Theodore Girshick

Newcastle

78 A Highly Virulent Strain of Newcastle Disease Virus Elicits a Strong Innate Immune Response and Nitric Oxide Production In Vivo

Cary A. Rue, Leonardo Susta, Corrie C. Brown, Darrell R. Kapczynski, David L. Suarez, Daniel J. King, Patti J. Miller, and Claudio L. Afonso

79 An experimental egg transmission of Newcastle disease virus

Soo-Min Lee, Jin-Hwa Lee, Ji-Woong Shin, Hyun-Seok Oh, Haan-Woo Sung

80 Characterization of Paramyxovirus Isolated from Migratory Wild Birds

Jong-Bo Shim, Chang-Won Im, Ho-Keun Won, Dong-Gil Shin, Hang-Sik Roh and In-Pil Mo

81 Immunogenicity and safety of thermostable Newcastle disease virus vaccine candidate, K17 strain, originated from wild bird

Seung-Hwan Jung, Jeong-Yong Park, Tae-Hyun Lim, Hyun-Jeong Lee, Dong-Hun Lee, Ha-Na Yoon, Joong-Bok Lee, Seung-Yong Park, In-Soo Choi, Chang-Seon Song

82 Presence of apoptosis, as determined by immunohistochemistry, in lymphoid tissues of chickens infected with strains of Newcastle disease virus of varying virulence

Leonardo Susta, Laura Harrison, Jian Zhang, Claudio L. Afonso, Patti Miller, and Corrie Brown

Salmonella

- 83 **Development of a selective MPN assay for the enumeration of Salmonella in poultry carcass rinses**
Stephan G. Thayer, Roy D. Berghaus, Randall Singer, and Charles L. Hofacre
- 84 **Identification of Salmonella in backyard chicks and characterization of the salmonella isolates by serotyping and multiplex PCR**
Rezvan Kiani, Adel Feizi
- 85 **Protection from Salmonella Enteritidis (SE) contamination in eggs derived from hens vaccinated with vaccines SE PROGRAMS**
~~Gwenlyan P. Slacum, Rudolf G. Hein, Phyllis A. Lynch~~
- 86 **Reduction of Salmonella egg contamination by a commercial bivalent bacterin after intravenous challenge of layer chickens at the onset of lay**
Masashi Okamura, Rie Kitou, Kei Kasai, Yuki Kuno, Yuki Sakamoto, Shinji Hosono, Kazuaki Takehara, and Masayuki Nakamura
- 87 **Re-evaluation of the conventional methods of isolating Salmonella pullorum using strains isolated from backyard flocks**
Douglas Waltman and Richard K. Gast
- 88 **Salmonella typhimurium Infection in a Finch Aviary**
Donna J. Kelly
- 89 **Transcriptional Analysis of the Avian Innate Immune Response to Salmonella enteritidis**
Calvin L. Keeler, Jr., Huaijun Zhou, Travis W. Bliss, Ida H.T. Chung, Susan J. Lamont
- 90 **Twenty Years of Salmonella Monitoring: Milestones and Setbacks**
Michael Opitz, Dawna Beane, Alma Homola, Emily Thomas and Anne Lichtenwalner
- 91 **Update on the Pullorum-typhoid agglutination test and what it is detecting**
W. Douglas Waltman

Tumoral Diseases

- 92 **A comparative study of three antigen-capture ELISA kits for detection of Avian leukosis virus group specific antigen**
Sunny Cheng and G. Zavala

93 Accumulation of Quasi-Species during Serial Passage-Induced Attenuation of Marek's Disease Virus-1 (MDV-1)

Stephen J. Spatz, Isabel M. Gimeno, and Mohammad Heidari

94 Marek's Disease Seortype 1 virus detection in the field by Qualitative PCR method

Maritza Tamayo, Jaime Gallardo, Amanda McCarty, Mireia Toldra

95 Marek's Disease Virus MicroRNA Expression in Feather Tips

Milos Markis, Grace Isaacs, Erin Bernberg, Amy Anderson, Lisa Waidner, Joan Burnside, John K. Rosenberger, and Robin Morgan

96 Tumors and Tumor-like Lesions of the Female Reproductive Tract: A Proposed Classification

H. John Barnes

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