



American Association of Avian Pathologists
July 15-19, 2006
Hawaii Convention Center
Honolulu, Hawaii



SCIENTIFIC PROGRAM

Monday, July 17, 2006 – Morning Program		
	Room 316A	Room 314
	Moderator: John Glisson	
7:00 AM	Keynote Speaker: David Swayne Room 316A The Changing Role of Avian Influenza on Global Avian Health	
	Moderator: Danny Magee	Moderator: Fred Hoerr
7:30 AM	Interesting Cases from the Poultry Diagnostic Laboratory, Part II Linares, Jose A.	Influence of Embryonic Incubation Temperature on the Immune Response and Performance of Broiler Chickens McElroy, Audrey P., David J. Caldwell, Michael Hulet, Richard Kerr, and Robert M. Gogal
7:45 AM	Four Practical Feed Interventions that Positively Affect the General Health Status of Broilers Allard, Jean Paul	Bacteriophage: An Alternative to Antibiotics in Avian Medicine and Poultry Production Huff, William E., Geraldine R. Huff, Narayan C. Rath, and Annie M. Donoghue
8:00 AM	The Role of Soybean Meal Trypsin Inhibitors in Field Outbreaks of Feed Passage in Broilers Ruiz, N. and F. de Belalcázar	In Vitro Sensitivity Testing of Field Isolates of <i>Mycoplasma gallisepticum</i> Levisohn, Sharon, Irina Gerchman, and Shimon Perk
8:15 AM	Free Range Chicken = Healthy? Lopez, Juan Carlos, Robin McFarlane, and Adriana Rodriguez	<i>Mycoplasma gallisepticum</i> in Commercial Layers Davison, Sherrill, Stanley Kleven, Eric Gingerich, Perry Habecker, Maricarmen Garcia, Susan Casavant, and Robert J. Eckroade
8:30 AM	Wind Speed Effects in "Green-leg" Condemnations in Broilers Cummings, Timothy S., Scott L. Branton, Philip A. Stayer, and Danny L. Magee	Effect of Overlaying F Strain <i>Mycoplasma gallisepticum</i> onto Commercial Layer Hens Previously Vaccinated with 6/85 Strain <i>Mycoplasma gallisepticum</i> Branton, Scott L., Jeff D. Evans, Spencer A. Leigh, Stephanie D. Collier, William A. Dozier, William R. Roush, and Joseph R. Olenrewaju
8:45 AM	Experiences with Peritonitis in a Commercial Table Egg Layer Complex Medina, Hugo A.	Role of <i>Mycoplasma synoviae</i> with or without <i>Escherichia coli</i> Infection in Egg Production and Peritonitis in Commercial Layers Raviv, Ziv, Naola M. Ferguson-Noel, Victoria A. Leiting, Ruth S. Wooten, and Stanley H. Kleven
9:00 AM	Soft Egg Shell Problem and Mortality: absence of Vit D3 in Vitamin Mineral Premix Dhillon, A. Singh and Curt Nelson	A Comparison of the Efficacy of <i>Mycoplasma gallisepticum</i> Vaccines Ferguson-Noel, Naola, Kalen Cookson, Ziv Raviv, Victoria A. Leiting, Ruth S. Wooten, and Stanley H. Kleven
9:15 AM	Calcium Tetany and Early Lay Mortality in Broiler Breeders Martin, Michael, Harold J. Barnes, and Mike J. Wineland	Delayed Serological Response to <i>Mycoplasma synoviae</i> Kleven, Stanley H., Naola Ferguson-Noel, Ziv Raviv, and Victoria A. Leiting
	Break 9:30 AM – 10:00AM	Break 9:30 AM – 10:00AM

	Moderator: Suzanne Young-Stamey	Moderator: Hector Cervantes
10:00 AM	Multiple Vitamin Deficiencies in Commercial Turkeys Crespo, Rocio, H.L. Shivaprasad, Richard P. Chin, Portia L. Cortes, and Robert Poppenga	REED RUMSEY AWARD: Pathogenesis of Infectious Bronchitis Virus in Chickens expressing Different MHC B Complex Genotypes Joiner, Kellye S., Frederic J. Hoerr, Sandra J. Ewald, Vicky L. van Santen, James C. Wright, and Haroldo Toro
10:15 AM	Can Poults Survive and Thrive without Hatchery Antibiotics? Hermes, David	A New Aid in the Prevention of Avian Colibacillosis Maiers, Jerry D., K. Cookson, J. Tian, and M. Kumar
10:30 AM	Effect of Electrolytes in Feed and Water on Health, Growth and Biochemical Properties of Chickens Fed an All Vegetable Diet Venne, Daniel, Younes Chourfi, Amer N. Silim, and Sylvain Gingras	Possible Transmission of Campylobacter between Hog and Turkey Production Systems Carver, Donna K., Sophia Kathariou, Sandra Wright, and Robin Siletzky
10:45 AM	The Role of Various Variables on Broiler Performance Parameters when Comparing Two Production Complexes Waldrip, Don	Crop Immune Response Post-Salmonella Enteritidis Challenge in Eight Commercial Layer Breed-Strains and Specific-Pathogen-Free (SPF) White Leghorns Vaughn, Lara E., Peter S. Holt, Randle W. Moore, and Richard K. Gast
11:00 AM	Temperature Programs for Rearing Heavy Broilers Owen, Robert L. and Karen Christensen	Tracking Salmonella thru the Poultry Production Pyramid Maurer, John J., Dana Cole, Charles L. Hofacre, and Michael P. Doyle
11:15 AM	Identification and Correction of Wing Breakage in Broiler Production Williams, Robert M.	Why has Salmonella Serovar Kentucky become Widespread in Poultry? Cole, Dana, Katherine Zamperini, Charles L. Hofacre, and John J. Maurer
AAAP Awards Luncheon 11:30 – 2:00 PM Lanai Ballroom – Sheraton Waikiki		

Monday, July 17, 2006 – Afternoon Program		
	Room 316A	Room 314
	Moderator: Karen Burns Grogan	Moderator: Eric Jensen
2:00 PM	Hurricane Katrina vs. the Mississippi Poultry Industry: Part 1 - The Storm Magee, Danny L., Sue A. Hubbard, Philip A. Stayer, and Marshall R. Putnam	Salmonella Bio-Mapping for Salmonella through the Poultry Processing Plant Stewart-Brown, Bruce, Will Morris, and Clay Silas
2:15 PM	Hurricane Katrina vs. the Mississippi Poultry Industry: Part II - Short Term Response Stayer, Philip A., Marshall R. Putnam, Sue A. Hubbard, and Danny L. Magee	Development and Evaluation of a Recombinant Strain based on the SEF14 Fimbrial Operon against a <i>Salmonella enteritidis</i> Challenge in Chickens Lopes, V.C., B.T. Velayudhan, D.N. Foster, D.A. Halvorson, and K.V. Nagaraja
2:30 PM	Hurricane Katrina vs. the Mississippi Poultry Industry: Part III - Long Term Response Putnam, Marshall R., Philip A. Stayer, Danny L. Magee, and Sue A. Hubbard	Developing a Predictable Gangrenous dermatitis Model for Broilers: lessons learned Collett, Stephen Richard, Young-Jae Cho, John R. Glisson, Charles L. Hofacre, and Margie D. Lee
2:45 PM	Hurricane Katrina vs. the Mississippi Poultry Industry: Part IV - Lessons Learned Hubbard, Sue Ann, Danny L. Magee, Marshall R. Putnam, and Philip A. Stayer	The Association of Enteric Infections with <i>Clostridium perfringens</i> in Broiler Field Cases of Gangrenous Dermatitis and the Successful Reproduction of Gangrenous Dermatitis using Oral or Intravenous Inoculation with <i>Clostridium septicum</i> Davis, Stephen W.
3:00 PM	ADJOURN	ADJOURN

Tuesday, July 18, 2005 – Morning Program		
	Room 316A	Room 314
	Moderator: Stewart Ritchie	Moderator: Guillermo Zavala
7:00 AM	Findings from Data-Mining Broiler Companies and Correlating Unique Parameters - Disease Indices, Vaccine Programs, Production Practices, and Timeline Trends Keck, Lloyd, John R. Tierce, and Greg Rennier	Evaluation of Roxarsone and/or Bacitracin Methylene Disalicylate on Broiler Performance Using Necrotic enteritis and Salmonella Challenge Models Heins Miller, Sharon, Mark W. LaVorgna, Stephen W. Davis, and Steven Clark
7:15 AM	Prevalence and Antimicrobial Resistance in Organic and Conventional Broilers Hapner, Kyle M. and Teresa Y. Morishita	Passive Immunity to <i>Clostridium perfringens</i> Type A: Practical Efficacy against Necrotic enteritis under US and Canadian Broiler Management Systems Newman, Linnea J., Charles Broussard, and Richard Phillips
7:30 AM	Identification of Heat Stress Risk Factors in Ontario Boiler Industry Sanei, Babak, Harry Huffman, and Lloyd Weber	Evaluation of Elanco Tylan Premix for the Prevention of Necrotic enteritis in Broiler Chickens Brash, Marina L., Randy N. Bragg, Paul C. Dick, Gordon H. Vessie, and Jeff B. Wilson
7:45 AM	Temperature and Oxygen Conditions during the last Four Days of Incubation in Bone Development of Chickens and Turkeys Oviedo, Edgar O., Michael J. Wineland, Vern L. Christensen, Debbie T. Ort, Michael K. Mann, and Sarah L. Funderburk	Organic Acids Effective to Ameliorate the Negative Impact on Broiler Performance due to Necrotic enteritis Quiroz, Marco A., Charles L. Hofacre, Greg F. Mathis, Julia Dibner, and Chris Knight
8:00 AM	Multistage and Single Stage Incubation Comparison: Field Performance Results with Commercial Yield Breed Broilers in a Paired House Trial Hill, Donna L. and Karen Christensen	Molecular Basis for Antimicrobial Growth Promoter Effects in Poultry Lee, Margie D., Jingrang Lu, and Charles L. Hofacre
8:15 AM	A Comprehensive Worm Study in Several Broiler Breeder Pullet Flocks Rings, Bret and Tom Yazwinski	Evaluation of Oral Administration with Live CU Strain <i>Pasteurella multocida</i> Vaccine in Broiler Breeder Pullets Finklin, Marilyn N., Bradley J. Turner, Charles L. Hofacre, and John R. Glisson
8:30 AM	Evaluation of Vertebral Lesions in Broilers with Gait Abnormalities: A Field Study Young-Stamey, Suzanne, John Barnes, and Ken Powell	Performance Differences in Sister Flocks: Is chicken Anemia Virus (CAV) the Culprit? Sommer, Franz, Carol J. Cardona, and Bruce R. Charlton
8:45 AM	Cycling Patterns of <i>Eimeria spp.</i> and its Correlation with Microscopic Lesions, Shedding of Fecal Oocysts, and Johnson and Reid Scores Ruano, Miguel and Douglas Marvil	The Pivotal Role of Feathers in Chicken Infectious Anemia Virus (CAV) Horizontal Spread Davidson, Irit, Irena Shkoda, Emmanuel Loebb, and Karel A. Schat
9:00 AM	Field Problems with <i>Eimeria maxima</i>: Effects of <i>Eimeria acervulina</i> on Concurrent <i>E. maxima</i> Infections Mathis, Greg F.	Chicken Anemia Virus (CAV) Serology Profile of Breeders and their Progeny Cardoso, Beatriz and Lindolfo Rocha
9:15 AM	Uniformity of Infection and Grow-out Performance following <i>in ovo</i> Vaccination with the Coccidiosis Vaccine Inovocox™ Doelling, V.W., R. Posten, and A. Martin	Vaccination of Broilers using a Live Chicken Infectious Anemia Virus Vaccine Hopkins, Brett A.
	Break 9:30 AM – 10:00AM	Break 9:30 AM – 10:00AM

	Moderator: Jagdev Sharma
	Lasher History Lecture: 10:00 – 10:30 AM Room 316A Bruce Calnek Avian Diseases: The Creation and Evolution of P. Philip Levine’s Enduring Gift
	AAAP Business Meeting Room 316A 10:30 – 12:00 noon
	Lunch 12:00 noon – 1:00 PM

Tuesday, July 18, 2005 – Afternoon Program		
	Room 316A	Room 314
	Moderator: Greg Mathis	Moderator: Pedro Villegas
1:00 PM	A Field Report on Salinomycin Toxicity in Broiler Breeder Chickens Corsiglia, Charles, Bruce Charlton, Portia Cortes, and H.L. Shivaprasad	RICHARD RIMLER PAPER AWARD: Detection, Subtyping, and Characterization of Avian Influenza via cDNA Microarray Maughan, Michele N., Travis W. Bliss, David L. Suarez, and Calvin L. Keeler, Jr.
1:15 PM	Construction and Evaluation of Recombinant <i>Salmonella</i> Vaccines expressing <i>Eimeria acervulina</i> Sporozoite and Merozoite Antigens Konjufca, Vjolca, Wanda Soo-Young, Mark Jenkins, and Roy Curtiss III	Evidence of Immune System Dysfunction in Poults Infected with Turkey-origin Reoviruses Day, J. Michael, Mary J. Pantin-Jackwood, and Erica Spackman
1:30 PM	Application of Polymerase Chain Reaction (PCR) and Drug-sensitivity Testing to Compare Species Composition and Anti-coccidial Drug Resistance in <i>Eimeria</i> Isolated from Vaccine- and Coccidiostat-utilizing Poultry Operation Jenkins, M.C., S. Klopp, G. Wilkins, and K. Miska	Investigation on the Pathogenicity of Avian Reoviruses Hafez, Hafez M., Olivai Gooß, Christine Prusas, and Doerte Lueschow
1:45 PM	Characterization of Viral Agents Associated with Runting and Stunting Syndrome in Young Broilers Sellers, Holly S., Erich G. Linnemann, Steven Bell, Susan M. Williams, and Guillermo Zavala	Evaluation of Infectious Bursal Disease and Chicken Anemia Viruses as Key Factors in the Reemergence of Gangrenous Dermatitis in Broilers Purvis, Linda B., Pedro Villegas, Ivan Alvarado, and Francisco Perozo
2:00 PM	The Pathogenesis of Agents Associated with Runting-Stunting Syndrome of Broilers in SPF Turkeys Spackman, Erica, Mary J. Pantin-Jackwood, and J. Michael Day	Field Safety and Efficacy Study of Bursal Disease-Marek's Disease Vaccine, Serotype 3, Live Marek's Disease Vector administered to one-day-old Commercial Birds or 18-day-old Embryonated Commercial Eggs Fernandez, Rafael J., Clovis Oliveira, and Jeovane Pereira
2:15 PM	Molecular Characterization of Enteric Viruses Circulating in the United States Pantin-Jackwood, Mary J., Erica Spackman, and James M. Day	Influence of Maternal Antibodies and Differences in Genetic Background on Infectious Bursal Disease Pathogenesis Rautenschlein, Silke, Jung Arne, Rebeski Dierk, and Scharr Heike
2:30 PM	Comparison of Enteric Virus RT-PCR Results with Production Data from Commercial Turkey Hens Rives, David V. and Mary Pantin-Jackwood	Protection against Infectious Bursal Disease by <i>in ovo</i> Vaccination with a Recombinant Avian Adeno-associated Virus Expressing the VP2 Gene Alvarado, Ivan, Pedro Villegas, Carlos Estevez, Francisco Perozo, and Linda Purvis
2:45 PM	Experimental Reproduction of Transmissible Viral Proventriculitis by Inoculation of Chickens with a Novel Adenovirus-Like Virus (Isolate R11/3) Guy, James S., John Barnes, Lynda Smith, and Maria Evans	Is There a Perfect Timing for Vaccination against Infectious Bursal Disease? Experiences from Field Studies in Broilers Block, Herman, Karen Meyer-Block, Rebeski Dierk, Scharr Keike, De Wit Sjaak, and Silke Rautenschlein
3:00 PM	Adjourn	Adjourn

Wednesday, July 19, 2006 – Morning Program		
	Room 316A	Room 314
	Moderator: Mark Jackwood	Moderator: David Swayne
7:00 AM	Case Report: LT in Broiler Breeder Flock Vaccinated with LT Vector Vaccine Johnson, Benjamin C.	Biological and Molecular Characterization of Recent Asian H5N1 Strains Suarez, David L., Erica Spackman, May J. Pantin-Jackwood, and David E. Swayne
7:15 AM	New Studies using GIS for Understanding Vaccinal Laryngotracheitis Epidemiology Dufour-Zavala, Louise, Allyson Jason, and Chris Somerjian	Overview of the USDA H5/H7 Low Pathogenicity Avian Influenza Program for the Live Bird Marketing System Hegngi, Fidelis N., Andrew Rhorer, Patrice Klein, Karen Grogan, Bruce Carter, and Thomas J. Myers
7:30 AM	Evaluation of Heating and Down Time Effects on Poultry Environment Contaminated with VLTV Jones, Kelli Holloway, Maricarmen Garcia, Marta Jaramillo, and Susan M. Williams	Implementation of the NPIP Low Path H5/H7 Monitoring Program in Commercial Poultry Grogan, Karen Burns, Andrew R. Rhorer, and Thomas J. Myers
7:45 AM	The Incidence and Clinical Significance of Hemorrhagic Enteritis Virus (HEV) Infections in Broilers Rosenberger, John K., Sandra Cloud, Nannette Olmeda-Miro, and Conrad Pope	A Field Report on H3N2 Swine Influenza in Minnesota Turkeys: Prevalence, Effect on Breeders in Production, Serology Comparisons, and Vaccination Strategy Lippert, Ron and Dale C. Lauer
8:00 AM	Characterization of Inclusion Body Hepatitis Adenovirus Isolates Cloud, Sandra S., John Rosenberger, Nannette Olmeda-Miro, and Conrad Pope	Can Live Attenuated Avian Influenza Viruses be Prepared for Use in Poultry? Song, Haichen and Daniel R. Perez
8:15 AM	Inclusion Body Hepatitis as a Primary Disease in Broilers in Saskatchewan, Canada Gomis, Susantha, Davor Ojkcic, Bob Goodhope, and Phil Wilson	Protective Efficacy of Inactivated Influenza Vaccines against Highly Pathogenic Asian H5N1 Avian Influenza Viruses in Chickens Jadhao, Samadhan J., Chang-Won Lee, and David L. Suarez
8:30 AM	Protection of Broiler Breeder against Inclusion Body Hepatitis by Vaccination of Grand Parent Flocks with a Bivalent Inactivated Fowl Adenovirus Vaccine Villegas, Pedro, Ivan Alvarado, Eric Jensen, and Gregorio Rosales	ELISA Test for the Differentiation of Infected and Vaccinated Animals (DIVA) using a Natural Truncated NS1 Protein of Avian Influenza Virus Avellaneda, Gloria E., Chang-Won Lee, and David L. Suarez
8:45 AM	Pathogenicity and Cross Protection Studies of IBV Field Isolates of Ontario, Canada Grgic, Helena, Bruce D. Hunter, Peter Hunton, and Eva Nagy	Impact of Respiratory Virus Vaccination on Detection of Avian Influenza Virus Infection in Broiler Chickens Gelb, Jr., Jack, Brian S. Ladman, and Conrad Pope
9:00 AM	Experimental TCV and REV Co-infection in Turkeys Turner, Bradley J., Guillermo Zavala, Taylor Barbosa, Sunny Cheng, Mark Jackwood, and Debbie Hilt	In ovo Vaccination with an Adenovirus Replicative-defective Recombinant Vaccine Protects Chickens against Avian Influenza Virus Challenge Toro, H., De-Chu Tang, David Suarez, and Kent van Kampen
9:15 AM	Effects of Experimental Infection with CAV and/or IBDV on IBV Infection and Immune Response van Santen, Vicky L., Haroldo Toro, Kellye S. Joiner, and Frederic J. Hoerr	Swine Flu (H3N2) in Turkey Breeders Tilley, Becky J., Eric C. Gonder, Chad E. Smith, and Sharon J. Jackson
	Break 9:30 AM – 10:00AM	Break 9:30 AM – 10:00AM

	Moderator: Kenton Kreager	Moderator: Gregorio Rosales
10:00 AM	<i>In vivo</i> and <i>in vitro</i> characterization of an oncogenic reticuloendotheliosis virus Barbosa, Taylor, Guillermo Zavala, Sunny Cheng, and Pedro Villegas	Duration of Immunity to the 2002-03 California Virulent Newcastle Disease Virus (vNDV) following a Single Newcastle Disease Vaccination of SPF Chickens Kapczynski, Darrell R. and Daniel J. King
10:15 AM	Current Epidemiology of RNA Tumor Viruses Zavala, Guillermo and Sunny Cheng	Killed Newcastle Disease Vaccination resulting in Significant Mortality Reduction in the Presence of Endemic Newcastle Disease Virus Olson, Terry R. and Mark Cox
10:30 AM	Efficacy of MDV and the Duration of Immunity against NDV and LT of the Recombinants rHVT/F and fHVT/LT Hein, Rudolf G., Gwen F. Slacum, and Lillian F. Melson	Incorporation of Realtime Reverse Transcriptase Polymerase Chain Reaction (rtRT-PCR) in Development of a Mucosal Challenge Model for a Lentogenic Strain of Newcastle Disease Virus (NDV) Inman, Melissa, Martin Ficken, and Timothy Miller
10:45 AM	Feather PCR Diagnostic Testing to Optimize Marek's Disease Vaccination Gustafson, Cheryl R., R. Currie, H. LeGalludec, and S. Baigent	Chicken Mucosal Immunity against VG/GA, LaSota and B1 Strains of Newcastle Disease Virus Perozo, Francisco, Pedro Villegas, Ivan Alvarado, and Linda Purvis
11:00 AM	The Role of the Marek's Disease Virus UL13 Gene in Generating Cell-Free Virus Silva, Robert F. and Isabel Gimeno	Role of the Attachment Glycoprotein in Avian Metapneumovirus Virulence and Pathogenesis Govindarajan, Dhanasekaran
11:15 AM	Propagation and Molecular Characterization of a Slow Growing Subgroup A Avian Leukosis Virus that was Originally Isolated from Commercial Marek's Disease Vaccines Fadly, Aly M., Robert F. Silva, and Scott P. Taylor	Development of a Vaccine-Challenge Model for Avian Metapneumovirus Infection in Turkeys: Evaluation of Turkey Turbinate Virus Preparations Halvorson, David, Binu T. Velayudhan, Anil J. Thachil, Sally L. Noll, Daniel P. Shaw, Sagar M. Goyal, and Kakambi V. Nagaraja
11:30 AM	Emergence of Subgroup J Avian Leukosis Virus Neutralizing Antibody Escape Variants in Meat-type Chickens Infected with Virus at Hatch Pandiri, Arun K.R., Willie M. Reed, Robert F. Silva, and Aly M. Fadly	Elimination of APV from Commercial Turkey Farm while Concurrently Stopping Vaccination McComb, Brian and Marion Garcia
11:45 AM	Methods to Distinguish Selected Serotype 1 MDV in Dually Infected Chickens Dunn, John R., Shari B. Gross, Richard L. Witter, Robert F. Silva, and Lucy F. Lee	Comparative Evaluation of Avian Metapneumovirus Spray and Eyedrop Vaccination Protocols for their Efficacy to Protect against Challenge Velayudhan, Binu, Anil J. Thachil, Igor Radovic, Sally Noll, David A. Halvorson, Daniel Shaw, Sagar M. Goyal, and Kakambi V. Nagaraja
12:00	Adjourn	Adjourn

INSTRUCTIONS FOR POULTRY POSTER PRESENTATION

The following is specific information about the 2006 AVMA Poultry Poster Presentation:

Location of Poultry Poster Presentation:

Hawaii Convention Center, Room 315

**Because of the large number of posters,
we will have 2 poster sessions in Honolulu.**

Please refer to the Poultry Poster Program for your session number.

**SESSION 1: Sunday, July 16th – 7:00 AM – 3:00 PM
 Monday, July 17th – 7:00 AM – 3:00 PM**

NOTE: Posters must be set up before 7:00 AM on Sunday, July 16th and removed promptly at 3:00 PM on Monday, July 17th.

**SESSION 2: Tuesday, July 18th – 7:00 AM – 3:00 PM
 Wednesday, July 19th – 7:00 AM – NOON**

NOTE: Posters must be set up after 3:00 PM on Monday, July 17th and before 7:00 am on Tuesday, July 18th. Posters must be removed after 3:00 PM on Wednesday, July 19th.

Dimensions: Size of the Mounting Board for Poster: 4 feet X 8 feet (48 inches x 96 inches). All posters must fit within the outer edges of the board. All boards will be double sided, so another presenter may be mounting a poster on the other side of the board at the same time.

General Information:

1. Your poster presentations must be available for viewing during the hours scheduled by the Poultry Poster Section.
2. Handouts are permitted. *Sale of any material is strictly prohibited.*
3. Poster sessions are intended to serve as informal discussions and not as lectures or paper reading sessions.
4. Pushpins will be available in the poster areas. Please do not write or paint on the poster boards.
5. Projection equipment and electrical outlets will not be provided in the poster session area.
6. One (1) complimentary convention registration will be provided for the primary author of each poster.

Poster Session
Sunday, July 16 – Wednesday, July 19, 2006
Room 315

SESSION 1 **Sunday, July 16 – 7:00 AM – 3:00 PM**
Monday, July 17 – 7:00 AM – 3:00 PM

Avian Influenza

1. **Isolation and Characterization of Type A Avian Influenza Viruses (H9N2) from Poultry Flocks in Jordan**
Al-Natour, Mohammad Q., Nadim M. Amarin, Hisham M. Al-Maaltah, and Ilaria Capua
2. **Transmissibility of H9N2-Avian Influenza Infection among Poultry Farms, Swine, and Farmers of Lebanon**
Barbour, Elie K., Vatche Cagherian, Henssam Sheib, Samar Dankar, Mohammed Farrah
3. **Laboratory Evaluation of the Survivability of H7N2 Avian Influenza and Newcastle Disease Virus to Commercial Disinfectants**
Robert L. Alphin, Eric R. Benson, Brian S. Ladman, George W. Malone, Michael D. Dawson, and Megan E. Lombardi
4. **Sensitivity of Dry Swabs Utilized in an Avian Influenza Surveillance Program**
Charlton, Bruce R., David H. Willoughby, Beate M. Crossley, Sharon K. Hietala
5. **PCR Screening during the First Outbreak of Avian Influenza in Romania**
Coste, Handan, Mihaela Zaulet, Monica Vanghele, and Mihai Turcitu
6. **Analysis and Utilization of CpG-Motif Oligonucleotides as Potential Immunostimulatory Agents against Avian Influenza Challenge**
El-Attrache, John, Adam Jester, Ping Cui, and Blanca Lupiani
7. **Evaluation on Safety and Efficacy of the Killed Vaccine against Low-Pathogenic Avian Influenza in Commercial Layer**
Ha, Bong-Do, In-Pil Mo, Hyun-hee So, Ho-gun Won
8. **Development of a Multiplex RT-PCR for Type A Influenza Virus and Avian H5, H7, and H9 Hemagglutinin Subtypes**
Khan, Mazhar I., Zhixun Xie, Yao-shan Pang, and Jianhua Sun
9. **Production of Nucleoprotein (NP) of Avian Influenza Virus (AIV) from Codon-optimized Synthetic NP Gene**
Kwon, Hyuk-Joon, Tae-Eun Kim, Sun-Hee Cho, and Sun-Joong Kim
10. **Immunopathogenesis of H9N2 Low Pathogenic Avian Influenza Virus Infection in Immunosuppressed SPF Chickens by Cyclosporine A (CsA) Treatment**
Kwon, Ji-sun, Hyun-jeong Lee, Yong-kuk Kwon, Youn-Jeong Lee, Chang-seon Song
11. **Evaluation of New Rapid Methods for the Surveillance of Avian Influenza**
Lamichhane, Chinta M.
12. **Are There Better Ways to Determine the Potential Pathogenicity of Avian Influenza Virus?**
Lee, Chang-Won

13. **Development and Evaluation of H5 Subtype-Specific Monoclonal Antibodies for Avian Influenza Diagnostic Tests**
Lu, Huaguang, Lin Lin, and Bill Scheuchenzuber
14. **Evaluation of the Immune Response of Chickens to Individual Avian Influenza Proteins**
Lupiani, Blanca, Vinayak Brahmakshatriya, Chinta Laminchane, and Sanjay M. Reddy
15. **Comparison of Sensitivity for the Detection of H5N1 using Two Different Serology Techniques**
Munoz, Ricardo and Miao DeYuang
16. **Avian Influenza in Romania – Apparition, Diagnostic and Epidemiology**
Nicolae, Stefan, Eugen Olaru, Juliana Onita, and Handan Coste
17. **Molecular Epidemiology and Surveillance of Avian Influenza Virus in Wild and Domestic Birds**
Pascua, Annabelle M., Nathaniel L. Tablante, and Daniel R. Perez
18. **Validation of H5 and Matrix Real-Time Reverse Transcriptase Polymerase Chain Reaction (rRT-PCR) Bead Reagents for the Detection of H5 Avian Influenza Virus**
Pedersen, Janice C., David L. Suarez, Amaresh Das, Dennis A. Senne, and B. Panigraphy
19. **Prevention and Control of Avian Influenza: Advances and Perspectives**
Avian Influenza Coordinated Agricultural Project (PI: Daniel R. Perez, Co-PI: Richard Slemmons)
Perez, Daniel R.
20. **Use of the Hemagglutination Inhibition Test to Assess Antigenic and Genetic Relatedness of Avian Influenza H5 Proteins**
Pfeiffer, Jennifer and David L. Suarez
21. **Pathogenesis of Avian Influenza Virus with Mutation in the NS1 Gene**
Reddy, Sanjay M., Vinayak Brahmakshatriya, and Blanca Lupiani
22. **Efficacy of a Vectored Fowl Pox-Avian Influenza Vaccine Administered Subcutaneously to One-day-old Broiler Chickens and Challenged with Fowl Pox Virus at Five Weeks Post-Vaccination**
Rojo Barrañón, Francisco J., Rafael Fernandez, Enrique Montiel, Héctor Garcia
23. **Efficacy of a Vectored Fowl Pox-Avian Influenza Vaccine Administered Subcutaneously to One-day-old Broiler Chickens and Challenged with Fowl Pox Virus Local Strain at Five Weeks Post-Vaccination**
Rojo Barrañón, Francisco J., Rafael Fernandez, Enrique Montiel, Héctor Garcia
24. **Avian Influenza Virus Surveillance in Wild Birds in Lower 48 during 2005**
Members of USDA CSREES AIV Surveillance in Wild Birds Network (Richard Slemmons, presenter)
Slemmons, Richard D., Carol J. Cardona, David A. Halvorson, Joseph J. Giambrone, John El-Attrache, and Daniel R. Perez
25. **Characterization of H9N2 Avian Influenza Virus Isolated from Korea**
Sung, Haan-Woo, Youn-Jeong, Lee, Jun-Gu Choi, Eun-Kyoung Lee, Jae-Hong Kim, Hyuk-Moo Choi
26. **H5N1 HPAI Virus in Wild Birds of Mongolia**
Swayne, David E. and David L. Suarez
27. **Vaccination with Alphavirus-derived Neuraminidase Partially Protects Chickens against Heterologous Avian Influenza Challenge**
Sylte, Matthew J., David L. Suarez, and Bolyn Hubby
28. **Responding to an Avian Influenza Outbreak: A Quick Reference Guide**
Tablante, Nathaniel L.
29. **Properties of an Avian Influenza Virus (H4N8) isolated from Adult Tom Turkeys**
Woolcock, Peter R., Jinling Li, Nichole Anchell, George Cooper, and Carol J. Cardona

30. **Quail carry Sialic Acid Receptors Compatible to bind Avian and Human Influenza Viruses**
Wan, Hongguan and Daniel R. Perez
31. **Antigenic and Genetic Studies on H3N2 Influenza A Viruses Isolated from Swine and Turkeys**
Yassine, Hadi
32. **Differentiation of Highly Pathogenic Strain H5N1 of AIV by Real Time PCR in the First Outbreak in Romania**
Zaulet, Mihaela, Handan Coste, Mihai Turcitu, and Monica Vanghele

Bacteria, Miscellaneous

33. **Campylobacter Susceptibility to Ciprofloxacin and Corresponding Fluoroquinolone Concentrations within the Gastrointestinal Tracts of Chickens**
Blore, P.J., I. Reyes-Herrera, K. Cole, and D.J. Donoghue
34. **Chronic Fowl Cholera with Osteomyelitis of the Skull in Broiler Breeders**
Bruzual, J.J., Matilde Alfonso, Guillermo Zavala, and John Smith
35. **The Efficacy of NETVAX[®] Necrotic Enteritis Vaccine in Protecting Cobb 500 Broiler Progeny from Vaccinated Breeders when Artificially Challenged with *Clostridium perfringens***
Davis, Stephen W., Charles Broussard, and Richard A. Phillips
36. **Serotyping and Antibiotic Susceptibility of *Riemerella anatipestifer* Isolates Obtained from Commercial Pekin Duck Flocks in Northeastern United States**
Galloway-Haskins, Rakijah, Alejandro Banda, and Tirath Sandhu
37. **Hemagglutinin Antibody Levels and Protection in Chickens given Infectious Coryza Vaccines**
Garcia F., Alejandro, Ariel M. Ortiz, Patrick J. Blackall, and Fernando Romo
38. **Development of Competitive ELISA to Determine Antibody Titer in Birds Vaccinated with *C. perfringens* Type A Alpha Toxoid (NetVax[™])**
Jayappa, Huchappa, Suzan Dimmick, Lindy Dierks, Joan Schrader, and Terri Wasmoen
39. **Molecular Characterization of *L. monocytogenes* Isolated from Poultry Meat**
Kurkure, Nitin V., Dewanand R. Kalorey, Pramod K. Jaliewar, Prashant S. Gunjal, Arun G. Bhandarkar, and Sukhadeve B. Barbuddhe
40. **A Serotypic Survey of poultry *Pasteurella multocida* Isolates from 1996 to 2005**
Lobsinger, Christine M., Charles L. Hofacre, and Stephan G. Thayer
41. **Virulence and Resistance Genotyping of Campylobacter from Production Turkeys in the Midwest**
Logue, Catherine M., Mohamed K. Fakhr, Shana R. Petermann, Ellen Lutgen Johnson, Julie S. Sherwood
42. **Prevalence of Bacterial Pathogens and their Antimicrobial Resistance in Backyard Poultry Flocks**
Moherman, Kimberly L. and J. David Latshaw
43. **A Bacteriologic Survey of Wing Web-applied Vaccine Reservoirs**
McRee, Andy
44. **Bacterial Orchitis and Epididymo-orchitis in Broiler Breeders**
Monleon, Rafael and Harold John Barnes
45. **Virulence and Immunogenicity of a *Riemerella anatipestifer* Serotype 3 Strain**
Sandu, Tirath
46. **M13 and ERIC 1R PCR Fingerprinting of *Ornithobacterium rhinotracheale***
Thachil, Anil J., Binu T. Velayudhan, Vanessa Lopes, Kakambi V. Nagaraja

47. **Histopathologic Lesions of Experimentally Induced Gangrenous Dermatitis in Commercial layers**
Williams, Susan M. and Stephen Collett
48. **Macrolide-resistance in *Campylobacter*: Emerging Frequency and Resistance Mechanisms**
Zhang, Qijing, Meiguan Yan, Sonia Pereira, and Orhan Sahin

E. coli

49. **Role of Iron Acquisition Systems in Virulence of an Avian Pathogenic *Escherichia coli* Strain**
Caza, Melissa, Roy Curtiss III, and Charles M. Dozois
50. **Bacterial Adhesins and Colonization of Respiratory Tissues by Avian Pathogenic *Escherichia coli* (APEC)**
Dozois, Charles M., Maria H. Lymberopoulos, Maryvonne Moulin-Schouleur, Roy Curtiss III
51. **Effects of a Dietary Yeast Extract on the Response to Transport Stress of Turkey Poults Previously Challenged with *Escherichia coli***
Huff, Geraldine, William E. Huff, Narayan C. Rath, Morgan B. Farnell, Fausto Solis de los Santos, and Anne M. Donoghue
52. **Distribution of Plasmids among Avian Pathogenic *Escherichia coli***
Johnson, Sara J., Timothy J. Johnson, and Lisa K. Nolan
53. **Exploring the Evolution of APEC Plasmids through Comparative Genomics**
Johnson, Timothy J. and Lisa K. Nolan
54. **A Novel Virulence Marker of Avian Pathogenic *Escherichia coli***
Kariyawasam, Subhashinie, Timothy J. Johnson, and Lisa K. Nolan
55. **Molecular Characterization of Avian Pathogenic *E. coli* (APEC) in Korea**
Kim, Sun-Joong, Tae-Eun Kim, Sun-Hee Cho, and Hyuk-Joon Kwon
56. **Detection of Iss Protein on the Outer Membrane of an Avian Pathogenic *E. coli* Isolate**
Lynne, Aaron M., Catherine M. Logue, and Lisa K. Nolan
57. **Analysis of the Avian Pathogenic *Escherichia coli* O78:K80:H9 Virulon**
Mukhopadhyay, Suman and Chris D. Herren
58. **Emergence of Virulent *Escherichia coli* Isolates in Poultry Production**
Nolan, Lisa K., Timothy J. Johnson, and Yvonne J. Wannemuehler
59. **Relationship between Host Age and Virulence Capacity of Avian Pathogenic *Escherichia coli* (APEC)**
Scaccianoce, Jennifer A., Yvonne M. Wannemuehler, Timothy J. Johnson, and Lisa K. Nolan
60. **Characterization of *E. coli* Isolates from Peritonitis Lesions in Commercial Laying Hens**
Trampel, Darrell W., Lisa K. Nolan, and Yvonne Wannemuehler
61. **Distribution of Plasmid-mediated Resistance and Resistance Genes among Avian *Escherichia coli***
Wannemuehler, Yvonne, Timothy J. Johnson, and Lisa K. Nolan
62. **Histopathological Effects of Intravenous Injections of *E. coli* on the Bone Marrow in Broilers including Quantitative Histomorphometric Changes**
Wilson, Floyd D., Timothy S. Cummings, and Mark A. Burlison

General Diseases

63. **Performance of Broiler Chickens Raise in Reuse Litter vs. New Litter**
Alba Chinchá, Monica, María E. Icochea, Pablo S. Reyna, Rosa I. González, Branko B. Alva, and María P. Vejarano
64. **Utility of Molecular Diagnostic Tests in Timely and Accurate Avian Disease Diagnosis**
Bautista, Daniel A.
65. **Fire Fighting Foam as an Emergency Mass Euthanasia Methodology for Floor-Reared Meat-Type Poultry**
Benson, Eric R., Michael D. Dawson, George W. Malone, Robert L. Alphin, Inma Estevez, and Garrett L. Van Wicklen
66. **Hurricane Katrina's Effect on the Poultry Industry in Mississippi**
Burleson, Mark A., Danny Magee, Sue Ann Hubbard, and Phil Stayer
67. **A Serological Study of One Company's Vaccination Program**
Burleson, Mark A., Phil Stayer, and Tim Cummings
68. **Incidence of Subclinical Diseases and Pathological Conditions in Clinically Normal Broilers from 3 Production Complexes Sorted by Sex and Age**
Cervantes, Hector M.
69. **Mixed Tumor in the Right Oviduct of a White Leghorn**
Cortes, Portia L., Rocio M. Crespo, H.J. Barnes, and H.L. Shivaprasad
70. **Histologic Lesions in the Proventriculus of Broilers and Broiler Breeders**
Fletcher, Oscar J., James S. Guy, and H. John Barnes
71. **Teaching Poultry Disease and the Importance of Poultry in Afghanistan**
Fulton, Richard M. and Robert M. Smith
72. **Use of Composting for Disposing Dead Poultry in Venezuela in Normal and Emergency Situations**
Gomez, Luis B. and Sonia Puche
73. **Efficiency of an Aluminosilicato in the Ammonia Control of Litter of Broiler Chickens**
Icochea, Eliana, Pablo S. Reyna, Jhon H. Guzman, Monica C. Alba, Rosa González, and Anthony Berrios
74. **The Effect of Two Broiler Catching Techniques on Wing and Leg Damage**
Jones, Kelli Holloway, Suanne D. Young-Stamey, Stephen R. Collett, Susan M. Williams, and Marilyn Finklin
75. **Pigeon Disease in Georgia 1996-2006**
Kelly, Donna K.
76. **Intestinal Intussusception in 11 wk-old Broiler Breeder Pullets**
Linares, Jose A.
77. **Acidification of Drinking Water: An Overview**
Marsh Johnson, Trisha
78. **Therapeutic and Prophylactic Anticoccidial Sensitivity of Coccivac-B**
Mathis, Greg F.
79. **Intestinal Changes Associated with Feed Deprivation and Recovery from Feed Deprivation in Laying Hens**
Moore, Randle W., Peter S. Holt, and Deana R. Jones

80. **Addressing Poultry Health Needs of Private Veterinary Practitioners**
Morishita, Teresa Y. and Meredith F. Davis
81. **Interfering Effect of Multiple Poultry Agents on Same FTA Cards on the Detection of Poultry Pathogens**
Moscoso, Hugo, Gwen Brown, and Charles L. Hofacre
82. **Prevalence of Antimicrobial Resistance in Migratory Passerines**
Decker, Crystal D. and Teresa Y. Morishita
83. **A Case of Acute Intoxication with Carbofuran in Ducks**
Nica, Daniela and Elisabeta G. Bianu
84. **Biomechanical Factors that Influence Femoral Spiral Fractures of Turkeys**
Oviedo, Edgar O., Peter R. Ferket, H. John Barnes, Diego V. Bohórquez, and Jesse L. Grimes
85. **Litter Impaction of the Lower Intestinal Tract of Broiler-Breeders**
Roza, Kristen, Michael P. Martin, and H. John Barnes
86. **Dermal Squamous Cell Carcinoma in a Six-month-old New Hampshire Red Chicken**
Sarver, Craig F. and Teresa Y. Morishita
87. **Resident Canada Geese: Vectors of Disease**
Schaul, Jordan, Lori Martin, Amna El Tayeb, Teresa Morishita, Peter Kobalka, and Walt Threlfall
88. **Development of Multiplexed Fluorometric Immunoassay for Poultry Diagnostics**
Seletskaja, Elena, Joe H. Simmons, Rajeev Dhawan, William R. Shek
89. **Severe Neuropathy in Broiler Breeder Pullets Associated with High Levels of Dietary Salt**
Senties-Cué, C. Gabriel, Danny L. Magee, Floyd D. Wilson, Philip A. Stayer, and William R. Maslin
90. **The Use of Oxydative Reduction Potential (ORP) as a Measure of the Effect of Water Sanitisers on Gumboro Vaccine**
Silim, Amer, Daniel Venne, Younes Chorfi, and Dianne Frenette
91. **Serological Evidence of Five Poultry Pathogens in Free-Ranging Chickens in Grenada**
Sharma, Ravindra N., Mohamed Iqbal Bhaiyat, Snehal Tawde, and Calum Macpherson
92. **A Comparison of Two Customer Requested and One Industry Derived Lighting Program**
Stayer, P.A., J. Paul Thaxton, Martha L. Ewing, and John Rice
93. **Lactic Acid Fermentation of Poultry Carcasses Prior to Rendering**
Tamim, Nada M., Rami A. Dalloul, Timothy A. Shellem, and John A. Doerr
94. **The Harderian Gland of a Mucosal Effector Site for Viral Infections**
van Ginkel, Frederik W., Vicky L. van Santen, and Haroldo E. Toro
95. **Cutaneous Aspergillosis in Broiler Breeder Pullets**
Van Sambeek, Francene Sophia, Fred J. Hoerr, and Susan Lockaby
96. **Some Answers to the Causes of 'Femoral Head Necrosis'**
Wilson, Floyd D., Philip A. Stayer, Lanny W. Pace, and Fred Muhammad

SESSION 2 **Tuesday, July 18 – 7:00 AM – 3:00 PM**
Wednesday, July 19 – 7:00 AM – NOON

Immunology, Immunity and Vaccines

97. **Development of Microsphere Assays for the Detection of Antibodies against Avian Pathogens**
Callison, Scott A., Tye O. Boynton, Deborah A. Hilt, and Mark W. Jackwood
98. **Investigating the Avian Macrophage Responses to Different *Eimeria* Species using cDNA Microarray**
Dalloul, Rami A., Hyun S. Lillehoj, Travis W. Bliss, Yeong H. Hong, Dong W. Park, and Calvin L. Keeler, Jr.
99. **Development and Use of an Avian Innate Immunity Microarray (AIM)**
Keeler, Jr., Calvin L., Hyun Lillehoj, Michael Kogut, Susan Lamont, and Travis Bliss

Infectious Bronchitis Virus

100. **siRNA Inhibition of Infectious Bronchitis Virus Replication**
Jackwood, Mark W. and Ralph A. Tripp
101. **Construction and Evaluation of DNA Vaccines coding for S1 and N of Infectious Bronchitis Virus**
Kwon, Hyuk Moo, Ena Kim, Son Il Pak, and Haan Woo Sung

Infectious Bursal Disease

102. **Detection by RT-PCR and Nucleotide Sequence Analysis of a Duck Circovirus Detected in Pekin Ducks in the United States**
Banda, Alejandro, Rakijah Galloway-Haskins, Tirath Sandhu, and Karel Schat
103. **Efficacy of a Turkey Herpesvirus (HVT-MDV serotype 3)-Infectious Bursal Disease (IBD) Vaccine, Live HVT Vector, IBD-VP2, Administered *in ovo* and to One-day-old SPF Chickens**
Cruz-Coy, Julio S., Clovis Oliveira, Jeovane Pereira, Fernanda Ambrosino, Airtón Gaudenci, Francois-Xavier Le-gros, and Nikki Pritchard
104. **Efficacy of Turkey Herpesvirus Vectored Infectious Bursal Disease Vaccine**
Esaki, Motoyuki, Kristi M. Moore, Takanori Sato, Shuji Saitoh, Mayumi Kubomura, Atsushi Yasuda, and Joan Leonard
105. **Serological Response with the Use of Three Different Bivalent Killed Vaccines against IBD and Reovirus in Broiler Breeders**
Gonzalez, Mauricio, Miguel M. Melchoir, Odette Urquiza, and Mario G. Lechuga
106. **Profiling of Infectious Bursal Disease Virus (IBDV) in the U.S.A. and Some Foreign Countries Based on Sequencing Genomic Material during 2003-2005**
Hamoud, Mohamed and Pedro Villegas
107. **Efficacy of the Vaccination against Infectious Bursal Disease in Broiler using an Immune Complex Vaccine at one-day-old**
Icochea, Eliana, Pablo S. Reyna, Monica C. Alba, Rosa I. Gonzalez, Jhon H. Guzman, Karina Vidal, Walter Paredes, and Paola Cruz
108. **Phylogenic Analysis of Very Virulent Infectious Bursal Disease Viruses**
Jackwood, Daral J. and Susan E. Sommer-Wagner

109. **Mechanisms of Cell Destruction by Infectious Bursal Disease Virus**
Khatri, Mahesh and Jagdev M. Sharma
110. **The Role of 4 Different Infectious Bursal Disease Vaccines in the Control of Field Infectious Bursal Disease Virus (IBDV) in a Broiler Ranch in California**
Mazaheri, A., B.R. Charlton, M.C. Bland, G.L. Cooper, A.A. Bickford, F. Sommer, and D.J. Jackwood
111. **Lymphocyte Depletion, Vaccine Virus Detection and Bursal Lesions in Commercial Broilers vaccinated with Commercially Available and Experimental Infectious Bursal Disease Vaccines**
Montiel, Enrique, Nikki Pritchard, Amy Holderfield, Julio Cruz, Robert Smith, and Kari Pack
112. **Infectious Bursal Disease Virus (IBDV) Surveillance**
Olmeda-Miro, Nannette, Sandra Cloud, and John Rosenberger
113. **Identification of Very Virulent Infection Bursal Disease (VVIBD) Virus in Colombia: A Five Year Study**
Tamayo, Maritza, Sergio Velez, and Kalen Cookson
114. **Infecting chickens and Inducing Immune Response by a VP3-deleted Infectious Bursal Disease Virus Expressing the GFP Reporter Gene**
Wu, Ching Ching, Michelle Peters, and Tsang Long Lin
115. **The Use of Live IBD Boosts in Breeders**
McCarty, John E.

Laryngotracheitis

116. **An Outbreak of Infectious Laryngotracheitis in Meat Chickens**
Crespo, Rocio
117. **Vaccination of Broilers using a Recombinant Fowl Pox-Infectious Laryngotracheitis Vaccine Inoculated in ovo**
Hopkins, Brett A.

Miscellaneous Virus

118. **Cross Virus-Neutralization Studies on Turkey Coronavirus**
Boynton, Tye O., Mark W. Jackwood, Scott A. Callison, and Deborah A. Hilt
119. **Sequence Comparison of the Right End of Fowl Adenovirus Genomes Representing Each Viral Species**
Garceac, Amalia and Eva Nagy
120. **Genetic Diversity in Turkey Coronavirus Viral RNA following Passage in Embryonating Eggs**
Hilt, Deborah A., Mark W. Jackwood, and Tye O. Boynton
121. **Selecting the Optimal Age to Vaccinate Turkeys against Hemorrhagic Enteritis Virus**
Hopkins, Brett A.
122. **Dynamics of the Chicken Anemia Virus at Commercial Broiler Farms**
Lechuga, Mario, Elena Salazar, Susano Medina, and Maritza Tamayo
123. **Detection and Sequencing of Avian Astrovirus from Broilers using RT-PCR**
Li, Lanqing, Frederic J. Hoerr, Michael J. Luther, and Emily M. Handley
124. **Spike Protein Gene-based Genetic Analysis of Turkey Coronavirus Isolates from Different Geographic Locations of the U.S.**

Lin, Tsang Long, Chien Chang Loa, Ching Ching Lu, Thomas Bryan, Thomas Hooper, and Donna Schrader

125. **Gene Function Studies of Fowl Adenovirus Type 9 Genome**
Nagy, Eva and Juan Carlos Corredor
126. **Genetic and Serologic Evidence of Reticuloendotheliosis Virus (REV) Integrated Avian Poxvirus (APV-REV) Infection of Wild and Exotic Birds**
Tadese, Theodros, Elvet A. Potter, and Willie M. Reed
127. **Rapid Diagnosis and Differentiation of Avianpox Viruses by Amplification of Specific Gene Fragments**
Tripathy, Deoki N. and Trina Westerman
128. **Production of Recombinant VP1 Protein and Specific Antibodies of Avian Polyomavirus**
Tsai, Hsiang-Jung, Chih-Ming Hsu, and Ing-Cerng Guo
129. **A Reproducible Model for Runting and Stunting Syndrome (RSS)**
Zavala, Guillermo, Taylor Barbosa, and Holly S. Sellers

Mycoplasma

130. **Is F Strain *Mycoplasma gallisepticum* (MG) Vaccine as Contagious and as Easily Spread as Thought?**
Davis, Stephen W., Charles Broussard, and Richard A. Phillips
131. ***Mycoplasma gallisepticum* Vaccine Strain 6/85 Penetrates into Chick Embryo Fibroblasts in High Numbers**
Dohms, John E. and Cynthia M. Boettger
132. **Field Evaluation of TS®-11 and Vectormune® FP-MG+AE Vaccines in Controlling MG Outbreak in Commercial Cage Layer Operation in Arkansas and Its Effects on Flock Performance**
Ghori, Hashim M., Lisa A. Newberry, and Stanley H. Kleven
133. ***Mycoplasma gallisepticum* Detection and Genotyping in Vaccinated Layer Flocks**
Godoy, Alecia, Maricarmen Garcia, Kristi Moore, Motoyuki Esaki, and Joan Leonard
134. **A Case Study of a Mycoplasma Problem Breeder Farm**
Kelly, Tami F., Fred Hoerr, Marshall Putnam, and Frank Baker
135. **Modulation of Gene Expression in Chicken Macrophages by *Mycoplasma synoviae***
Lavrič, Miha, Travis W. Bliss, John E. Dohms, Dušan Bencina, Mojca Narat, and Calvin L. Keeler, Jr.
136. **Comparison of Culture and PCR for the Detection of *M. iowae* in Turkey Embryos**
Leiting, V.A. and S.H. Kleven
137. **Further Western Spread of *Mycoplasma gallisepticum* Infection of House Finches**
Ley, David H., Deborah S. Sheaffer, and André A. Dhondt
138. **Mycoplasmosis in Free Living Water Fowls**
Moussa, Salah A.

139. **Natural Co-infection of *Avibacterium paragallinarum* and *A. gallinarum* in *Mycoplasma* spp. Seropositive Game Chickens**
Soriano V., Edgardo, Vladimir E. Morales, Vicente H. Vega, Andrea P. Zepeda, Nydia R. Reyes, Saul A. Ramirez, and Salvador B. Lagunas
140. **Use of *M. cloacale* Bacterin in Control of Infectious Sinusitis in Pheasants and Partridges Negative for *M. gallisepticum*, *M. synoviae*, and *M. meleagridis***
Spasojevic, Radivoje

Newcastle

141. **Phylogenetic Characterization of Endemic Newcastle Disease Viruses Isolated from Wild Birds during 2000 to 2004 in Delaware, Maryland, and New Jersey**
Afonso, C.L., Daniel J. King, David J. Stallknecht, and Richard Slemmons
142. **Exotic Newcastle Disease Virus: A Histopathologic Characterization in Encephalic Regions of Specific Pathogen Free Chickens**
Barri, Adriana, Nestor Ledesma, Guillermo Tellez, and John El-Attrache
143. **The Interaction between Newcastle Disease Virus and *E. coli* in Chickens**
Eltayeb, Amna B. and Robert P. Hanson
144. **Construction and Evaluation of Turkey Herpesvirus Vectored Newcastle Disease Vaccine**
Esaki, Motoyuki, Kristi M. Moore, Takanori Sato, Shuji Saitoh, Sakiko Saeki, Ayumi Fujisawa, Atsushi Yasuda, and Joan Leonard
145. **Real Time RT-PCR Developed for a Phylogenetically Divergent Group of Newcastle Viruses not Detected by Current Tests**
Kim, L. Mia, Claudio L. Afonso, David L. Suarez, and D. Jack King
146. **Stability of Selected Newcastle Disease Virus (NDV) Strains at Environmental Temperatures that Range from Hot to Cold**
King, Daniel J.
147. **Protection against CA02ENDV Challenge of Chickens Vaccinated with Inactivated Vaccines of Newcastle Disease Virus (NDV) from Different Genetic Lineages**
Miller, Patti J., Daniel J. King, and David L. Suarez
148. **The Role of Intergenic Sequences in Pathogenesis of Newcastle Disease Virus**
Yan, Yongqi, Daniel J. King, and Siba K. Samal

Parasitic Diseases

149. **Tiamulin and Semduramicin: Effects of Simultaneous Administration on Performance and Health of Growing Broiler Chickens**
Bafundo, Kenneth W., Annette Schuhmacher, and Jurgen Gropp
150. **The Characterization and Localization of the Protective Antigen SO7 in Developmental Stages of *Eimeria tenella***
Fetterer, Raymond H., Mark C. Jenkins, and Katarzyna B. Miska
151. **Biological Characteristics of the Lesser Species of Chicken *Eimeria***
Fitz-Coy, Steve
152. **Toxoplasmosis in Aviary Zebra Finches**
Fitzgerald, Scott D., Matti Kiupel, and Heather Teater

153. **Investigation of the Efficacy of Essential Oil Product on *Histomonas meleagridis* *in-vitro* and *in-vivo***
Hafez, Hafez M. and Ruediger Hauck
154. **Necrotic Enteritis Association with *Eimeria acervulina* and *E. maxima***
Mathis, Greg F. and Charles L. Hofacre
155. **Poultry Coccidiosis Control Programs: Live Vaccines**
Mathis, Greg F.
156. **Molecular Analysis of the Content and Diversity of *Eimeria* Species Present in Litter of Local Poultry Facilities using Ribosomal DNA (rDNA) Sequencing**
Miska, Katarzyna B., Mark C. Jenkins, and Spangler Klopp
157. **Chemical Constituents and Preliminary Antiparasitic Activity of *Ficus Platyphylla* (DEL)**
Mousa, Rehab S. and Salah A. Moussa
158. **Cytological Diagnosis of *Coccidia* Infection in Turkeys**
Osorio, Claudia, Steven Clark, Michael Martin, and H. John Barnes
159. ***Histomonas meleagridis*: Genotyping of Isolates using a Novel Technique: C-profiling**
van der Heijden, Harold M.J.F., Wil J.M. Landman, Sophie Greve, and Ron Peek

Pneumovirus

160. **Comparative Analysis of the Virulence of Early and Recent Isolates of Avian metapneumovirus of Turkey Origin from Minnesota**
Nagaraja, K.V., Binu T. Velayudhan, Sally Noll, and David A. Halvorson
161. **Production and Characterization of Monoclonal Antibodies Produced against Avian metapneumovirus Subtype C which React against the Nucleocapsid Protein**
Yu, Qingzhong, Carlos Estevez, and Darrell R. Kapczynski

Reovirus

162. **Characterization of a Novel Reovirus Isolated from Meat Birds in Central Georgia, USA**
Christenberry, Sam and Holly S. Sellers
163. **Reovirus Progeny Challenge Protection in Broiler Flocks with Differing Maternal Immune Status**
Cookson, Kalen and Joe Giambrone
164. **Case Report: Accidental Vaccination of Baby Chicks with a Virulent Reovirus Vaccine**
Dufour-Zavala, Louise and Guillermo Zavala
165. **Epidemiological Studies of Avian Reovirus Infection in the Broilers**
Kim Jong-man, In-Pil Mo, and Jin-Seok Song
166. **Molecular Investigations of Avian Reoviruses**
Lueschow, Doerte, Olivia Gooß, Christine Prusas, and Hafez M. Hafez

Salmonella

167. **Histopathological, Bacteriological, and Serological Investigation of *S. Enteritidis*-challenged Broilers Fed with Diets Supplemented with Non-immunized Egg Yolk Powder**
Agunos, Agnes C., Umapom Silphaduang, and Yoshinori Mine

168. **Use of an Inactivated Salmonella Vaccine in an Australian Poultry Operation**
Groves, Peter J. and Anthony Pavic
169. **Salmonella Shedding following Necrotic Enteritis Challenge: Efficacy of 2 Feed Additives in this Model**
Hofacre, Charles L., Greg F. Mathis, Sharon Heins Miller, and Mark LaVorgna
170. **Prevalence of *C. Jejuni*, *E. coli*, and *Salmonella* spp. at Public Picnic Areas in Metropolitan Parks**
Kobalka, Peter Joseph, Stephanie S. Gfeller-Samples, Teresa Y. Morishita, and Sara Jankovsky
171. **Critical Review of Egg Quality Improvement Programs in Relation to Suppression of *Salmonella enteritidis***
Shane, Simon M.
172. **A Survey of Salmonella Serotypes from Southeastern United States from 1999-2005**
Thayer, Stephan G., Christine M. Lobsinger, and Charles L. Hofacre
173. **Systemic Review of Intervention Strategies for *Salmonella* in Broiler Production and Processing**
Wills, Robert W., R. Hartford Bailey, and Kristin M. Clements

Toxins

174. **Poisoning of Wild Geese by Organophosphated Pesticides**
Bianu, Elisabeta and Daniela A. Nica
175. **Sodium Hypochlorite Toxicity in 5-day-old Turkey Poults**
Chin, R. P.
176. **A Field Investigation of the Total Tissue Arsenic Content of Broilers Medicated with and without 3-Nitro® (Roxarsone)**
Clark, Steven R., Mark W. LaVorgna, Kurt N. Dobson, and Sharon Heins Miller
177. **Evaluation of Tissue Arsenic Levels Following the Withdrawal of 3-Nitro® (Roxarsone) in the Diet**
Dobson, Kurt N., Mark LaVorgna, Steven Clark, and Sharon Heins Miller
178. **Toxicopathological Effects of Ochratoxin A and Its Interaction with Newcastle Disease in Indian Layer Chicken**
Gounalan, S., C. Balachandran, and B. Murali Manohar

Tumor viruses

179. **Characterization of Various Isolates of a Naturally Occurring Recombinant Avian Leukosis Virus using Biological Assays and Polymerase Chain Reaction**
Banat, Ghida R., Robert F. Silva, Willie M. Reed, and Aly M. Fadly
180. **Sensitivity and Specificity of Subgroup-Specific PCR for Detection of Avian Leukosis Virus**
Cheng, Sunny and Guillermo Zavala
181. **Co-infection and Vertical Transmission of Avian Leukosis Virus Subgroup J and Reticuloendotheliosis Virus in Chicken Flocks in China**
Cui, Zhizhong, Shuhong Sun, and Lucy F. Lee
182. **Dissemination and Spread of a Chimeric Marek's Disease Virus Vaccine**
Gergen, Linda R., Joan S. Schrader, Stephanie M. Cook, and Terri L. Wasmoen

183. **Load of MDV DNA in Peripheral Blood as Criterion for Early Diagnosis of Marek's Disease**
Gimeno, Isabel M. and Robert F. Silva
184. **Skin Leucosis Induced by MDV**
Heidari, Mohammad, Scott D. Fitzgerald, Robert F. Silva, and Huanmin M. Zhang
185. **Immunological Evaluation of Marek's Disease Virus Early Infection on the Pathogenesis of Infectious Bronchitis Virus Infection in Broiler Chickens**
Lee, Hyun-Jeong, Ji-Sun Kwon, Youn-Jeong Lee, Yong-Kuk Kwon, Hyung-Kwan Jang, and Chang-Seon Song
186. **The Role of Marek's Disease Virus Gene pp38 in Transactivation of Promoter Activities**
Lee, Lucy, Zhizhong Cui, and Sanjay Reddy
187. **Immunohistochemical Detection of a B-cell Antigen in Lymphoid Tumors in Chickens**
Lockaby, Susan B. and Frederic J. Hoerr
188. **Polymorphisms in the Genomes of Oncogenic and Attenuated Pathotypes of Marek's Disease Virus Serotype 1**
Spatz, Stephen J. and Venugopal Nair