2015 INTERNATIONAL POULTRY SCIENTIFIC FORUM
JANUARY 26 – 27
**Program Summary**

**MONDAY SESSIONS JANUARY 26**

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<tr>
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<tr>
<td>B-311</td>
<td>7:45 a.m. – Noon</td>
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**TUESDAY SESSIONS JANUARY 27**

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Officers of the SPSS 2014-2015

President: Dr. Stacey Roberts, Akey Nutrition
First VP: Dr. David Caldwell, Texas A&M University
Second VP: Dr. Omar Gutierrez, Huvepharma
Past President: Dr. Susan Watkins, University of Arkansas
Executive Secretary: Dr. Mary Beck
Poultry Science Department
Mississippi State University
Mail Stop 9665
Mississippi State, University 39762
Phone: 662.325.3416
Email: m.beck@msstate.edu

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Dr. Joe Giambrone, Auburn University
Dr. Blanca Lupiani, Texas A&M
Dr. Ken Macklin, Auburn
Dr. Patti Miller, SEPRL, USDA-ARS
Dr. Mary Pantin-Jackwood, SEPRL, USDA-ARS
Dr. Holly Sellers, UGA
Dr. John Smith, Fieldale
Dr. Dennis Wages, NCSU
Dr. Susan Williams, UGA

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Department of Population Health
University of Georgia
953 College Station Road
Athens, Georgia 30602-4875
Phone: 706.542.5475
Email: mjackwoo@uga.edu
Pathology
Chair: Dr. Edgar Oviedo-Rondon, North Carolina States University
Room Number: B-311
Monday, January 26, 2015

8:15 a.m. M1
Antibacterial Activity of Ethanol and Methanol Extracts of Date Pits Against Staphylococcus aureus and Escherichia coli
Sherif Hassan*, Yousef Al-Yousef King Faisal University, Al-Ahsa, 31982, Saudi Arabia

8:30 a.m. M2
Control of complicated respiratory distress in broilers using a synergistic effect with Ma5 and 4/91 IB vaccine strains at different ages.
Francisco Rios-Cambré*, Jesus Gabrieles-Jimenez*, Alejandro García-Cantá*, Francisco Zorrilla-Fierro* 1 MDS Animal Health Mexico, Santiago Tinguistienca, Mexico; 2 MDS Salud Animal Mexico, Santiago Tinguistienca, Mexico

8:45 a.m. M3
Coccidiostat withdrawal from broiler diets containing refined functional carbohydrates (RFC) from enzymatically hydrolyzed yeast
John Brake*, S. Auttawong*, S. Jalukar*, J. Oppy* 1 North Carolina State University, Raleigh, NC, USA; 2 VI-COR, Mason City, IA, USA

9:00 a.m. M4
Is white striping of the breast affected by the coccidiosis control program?
Corrado Longoni*, Elisa Russo*, Mattia Cechinato*, Giulia Tassone*, Antonella Dalle Zotte* 1 Merck Animal Health, Riharolo Canavese, Italy; 2 Merck Animal Health, Legnaro, Italy; 3 Department of Animal Medicine, Production and Health, University of Padova, Legnaro, Italy

9:15 a.m. M5
An evaluation of the anticoccidial efficacy of the feed additives Algamune™ AM or Algamune™ ZPC fed to commercial broiler chickens exposed to a mixed challenge of Eimeria acervulina, E. maxima, and E. tenella
Robert Levine*, B. Lumpkins*, Greg Mathis* 1 Algal Scientific Corporation, Northville, MI, USA; 2 Southern Poultry Research, Athens, GA, USA

9:30 a.m. M6
Experimental co-infection of SPF chickens with low pathogenic avian influenza virus (LPAIV), subtypes H9N2, H5N2 and H7N9, and infectious bronchitis virus (IBV)
Mar Costa-Hurtado*, Diane Smith, Mark W. Jackwood, Erica Spackman*, Eric Shepherd*, Mary Pantin-Jackwood* 1 Southeast Poultry Research Laboratory USDA/ARS, Athens, GA, USA; 2 Poultry Diagnostic and Research Center, Athens, GA, USA; 3 SEPRL-ARS_USDA, Athens, GA, USA

9:45 a.m. M7
Effects of Fermentation Product of S. cerevisiae XPC™ in Chicken Diets on Resistance against Infectious Bronchitis Virus
Cassandra Breedlove*, Aly Gheta, Stephen Gulley, Frederick van Ginkel, Kellye Joiner, Vicky van Santen, Haroldo Toro Auburn University, Auburn, AL, USA

10:00 a.m. M8
Cytokine and chemokine gene expression in footpad dermatitis in chickens affected by incubation temperatures and litter conditions
Edgar Oviedo-Rondon*, J. Jenna Scott*, Abdoullah Oufkir, Albaraa Sarsour, Shelly Nolin* 1 Prestage Department of Poultry Science, North Carolina State University, Raleigh, NC, USA; 2 North Carolina State University, Raleigh, NC, USA

10:15 a.m. Break

10:30 a.m. M9
An outbreak of Goose Venerable Disease in a commercial breeder operation in California.
Silvia Carnaccini* 1, Naola Ferguson-Noel*, Richard Chin, Mark Bland, Bruce Charton, Arthur Bikford, Gabriel Sentíes-Cué. 1 California Animal Health & Food Safety (CAHFS) Laboratory System, University of California, Davis, Turlock, CA, USA; 2 Poultry Diagnostic & Research Center, University of Georgia, Athens, GA, USA; 3 Cutler Veterinary Associates International, Moorpark, CA, USA
10:45 a.m. M10
Effects of in ovo injection of Inovocox EM1 vaccine and turn-out times on broiler performance
Adebayo Sokale*GS1, E. David Peebles1, Christopher Williams2 1Mississippi State University, Mississippi State, MS, USA; 2Zoetis Animal Health, Durham, NC, USA

11:00 a.m. M11
Establishing the correlation between broiler body weight gain, gross lesion score, and microscores in three anticoccidial sensitivity tests
Miguel Barrios*GS1, Manuel Costa1, Emily Kimminau1, Lorraine Fuller1, Steven Clark2, Gene Pest1, Robert Beckstead1 1The University of Georgia, Athens, GA, USA; 2Zoetis, West Jefferson, NC, USA

11:15 a.m. M12
Establishing the correlation between broiler body weight gain, gross lesion score, and microscores in three anticoccidial sensitivity tests
Miguel Barrios*GS1, Manuel Costa1, Emily Kimminau1, Lorraine Fuller1, Steven Clark2, Gene Pest1, Robert Beckstead1 1The University of Georgia, Athens, GA, USA; 2Zoetis, West Jefferson, NC, USA

11:30 a.m. M13
Adaptation of Embryo Attenuated Infectious Bronchitis Virus Arkansas to Kidney Cells
Aly Ghetas*GS, Grace Thaxton, Cassandra Breedlove, Vicky van Santen, Haroldo Toro Auburn University, Auburn, AL, USA

11:45 a.m. M14
Evaluation of the infection and transmission of wild type and recombinant strains of Newcastle Disease Virus in Japanese Quail
Valerie Marcano*GS1, Tim Olivier2, Claudio Afonso2 1Southeast Poultry Research Laboratory (SEPRL) ARS, USDA, Athens, GA, USA; 2SEPRL, ARS, USDA, Athens, GA, USA

12:00 p.m. Lunch
Immunolesions of melanopsin receptive neurons in the adult Pekin drake attenuates the hormonal reproductive axis.
Gregory S Fraley*, Kelly Frazier, Erin Alenciks, Amanda Porter Hope College, Holland, MI, USA

Chronic feed administration of Dexamethasone increase intestinal permeability similar to feed restriction stress in broiler chickens
Eduardo Vicuna*1, Viviek Kuttappan, Rosario Seeber-Galarza, Juan-David Latorre, Olivia Faulkner, Guillermo Tellez, Billy Hargis, Lisa Bielke University of Arkansas, Fayetteville, AR, USA

Effect of in ovo feeding of dextrin-iodinated casein on mitochondrial and autophagy associated molecules in broiler embryos
Shaymaa Abou-Saad*GS1, Elizabeth Greene2, Alissa PiekarSKI2, Kentu Lassitor2, Billy M. Hargis2, Lisa R. Bielke2, Parag Chary2, Sami Dridi2, Walter Botjie2 1University of Arkansas, Fayetteville, AR, USA; 2Dept. of Poultry Science, Univ. of Arkansas, Fayetteville, AR, USA; 2Zoetics, Kalamazoo, MI, USA

Parental sex effect of parthenogenesis on hatchability of Chinese Painted quail
Holly Parker*, Aaron Kiess, Chris McDaniel Mississippi State University, Mississippi State, MS, USA

Both Bifidobacterium animalis and its metabolites impact broiler breeder sperm motility
Melissa Triplett*1, Christopher McDaniel1, Aaron Kiess1 Mississippi State University, Mississippi State, MS, USA; 2Mississippi State, Mississippi State, MS, USA

The sperm storage tubule epithelium (SST-E) and its role in sperm storage
Murray Bakst* ARS, USDA, Beltsville, MD, USA

Assessing total body surface area of broiler chickens utilizing Computed Tomography (CT) technology
Jonathan Morris*1, Ajoy Sharma2, Wayne Daley2, Robert Beckstead1 1The University of Georgia, Athens, GA, USA; 2The University of Georgia College of Veterinary Medicine, Athens, GA, USA; 2Georgia Tech Research Institute, Atlanta, GA, USA

Salmonella emerging serotypes for poultry industry: Salmonella Infantis identified in a broiler vertical integration
Martha Pulido-Landinez*, Alejandro Banda2, Jean Guard3 1National University of Colombia, Bogota, DC, Colombia; 2Mississippi State University, Brandon, MS, USA; 3USDA, Athens, GA, USA

Original XPC™ improves performance in broilers receiving a live coccidiosis vaccine
Stephanie Frankenbach1, Don McIntyre Diamond V, Cedar Rapids, IA, USA

Evaluation of Original XPC™ and its effects on Clostridial Dermatitis induced mortality and performance of tom turkeys
Dan Moore1, Don McIntyre2, Jonathan Broomhead2, Steve Davis1, Sam Hendrix1 1Colorado Quality Research, Wellington, CO, USA; 2Diamond V, Cedar Rapids, IA, USA
11:00 a.m. M27
Field Studies: Preharvest Salmonella Control Using the Immune Modulator Original XPC™ in Broilers and Commercial Turkeys
Charles Hofacre1, Roy Berghaus1, Don McIntyre2, Doug Smith2 1The University of Georgia, Athens, GA, USA; 2Diamond V, Cedar Rapids, IA, USA

11:15 a.m. M28
Immunomodulatory effects of Diamond V Original XPC™ supplementation on immune gene expression in broilers
W. K. Chou1, J. W. Park1, J. B. Carey1, D. R. McIntyre2, L. R. Berghman3 1Poultry Science Department Texas A&M University, College Station, TX, USA; 2Diamond V Mills, Cedar Rapids, IA, USA; 3Departments of Poultry Science and Veterinary Pathobiology Texas A&M University, College Station, TX, USA

11:30 a.m. M29
Effects of Diamond V Original XPC™ on modulating adaptive immune function in broilers
Jung-Woo Park1, W.K. Chou1, L. R. Berghman1, D.R. McIntyre2, J. B. Carey1 1Poultry Science Department Texas A&M University, College Station, TX, USA; 2Diamond V Mills, Cedar Rapids, IA, USA

11:45 a.m. M30
PCR Eimeria diagnostics from broiler complexes across the United States and Canada
Emily Kimminau1, Lorraine Fuller1, Greg Mathis2, Steven Clark3 1University of Georgia, Athens, GA, USA; 2Southern Poultry Research, Athens, GA, USA; 3Zoetis, Durham, NC, USA

12:00 p.m. Lunch
Processing & Products
Chair: Dr. Mark Berrang, USDA-Agricultural Research Service
Room Number: B-313
Monday, January 26, 2015
7:30 a.m. M31
Ultrasonic for Disinfection
Aklilu G Giorges*, Doug Britten, John Pierson Food Processing Technology Division Georgia Tech Research Institute, Atlanta, GA, USA

7:45 a.m. M32
Dissolved Air Flotation as superior pre-treatment for poultry waste water
Wilbert Menkveld*, Sigpe Verbeek1 Nijhuis Water Technology B.V., Doetinchem, Netherlands; 2Nijhuis Water Technology Inc., 560 West Washington Blvd, Unit 320, Chicago, Illinois, 60661, IL, USA

8:00 a.m. M33
The Ascomix system: converting waste and water in one reactor towards clean water and biogas
Wilbert Menkveld* Nijhuis Water Technology B.V., Doetinchem, Netherlands

8:15 a.m. M34
Cooking Frozen Turkey Containing Stuffing: Preparation Characteristics Once Thawed and From Progressively Reduced Solid Temperatures
Ed Moran*, Laura Bauermeister Auburn University, Auburn, AL, USA

8:30 a.m. M35
Post-mortem pH decline in broiler carcasses subjected to either air or ice chill environments
Sara Orlowski*, Audrianna Rogers, Alex Gilley, Fred Pohlman, Nicholas Anthony University of Arkansas, Fayetteville, AR, USA

8:45 a.m. M36
Meat quality of broiler breast fillets with white striping and woody breast muscle myopathies
Vishwesh V Tijare*, Famous Yang1, Christine Z. Alvarado1, Craig Cono1, Casey M. Owens1
1University of Arkansas, Fayetteville, AR, USA; 2Texas A&M University, College Station, TX, USA

9:00 a.m. M37
Evaluating breast meat tenderness using a blunt version of the Meullenet-Owens Razor Shear method of broilers raised for small or big bird market programs.
Famous L. Yang*, Vishwesh V. Tijare1, Aline Giampietro2, Casey M. Owens1
1University of Arkansas, Fayetteville, AR, USA; 2FCAVE-UNESP, Jaboticabal, Brazil

9:15 a.m. M38
Salmonella presence and counts on different skin parts from turkey carcasses
Ye Peng*, Walid Q Alali2, Mark A. Harrison2, Xiangyu Deng1 University of Georgia Department of Food Science and Technology, Griffin, GA, USA; 2SPR Group, Athens, GA, USA

9:30 a.m. M39
Effect of sub-lethal oxidative stress of chlorine on biofilm forming ability of various Salmonella strains
Janak Dhakal*, Chander Sharma Mississippi State University, Starkville, MS, USA

9:45 a.m. M40
Addition of charcoals to broilers feeds did not impact Salmonella Typhimurium colonization or persistence, or the pH of the crop or duodenum during a 6 wk growout
Kimberly Wilson*, Dianna Bourassa2, Adam Davis1, Elizabeth Freeman1, R.Jeff Buhr2 The University of Georgia, Athens, GA, USA; 2USDA-ARS Russell Research Center, Athens, GA, USA

10:00 a.m. M41
Effect of Original XPC on prevalence and numbers of Salmonella (S.) from ceca of turkey hens inoculated at 1 d of age with S. Typhimurium and at 56 d with S. Heidelberg
D. P. Smith1, G. F. Mathis2, C. L. Holtsma3, R. D. Berghaus3, D. R. McIntyre1 Diamond V, Cedar Rapids, IA, USA; 2SIR Group, Athens, GA, USA; 3University of Georgia, Athens, GA, USA

10:15 a.m. M42
Evaluation of a novel biologic formulation to reduce Salmonella in market age broilers
Jose Luis Vicente1, Jacob Lum, Matthew Faulkner, Ross Wolfenden Pacific Vet Group USA Inc., Fayetteville, AR, USA
10:30 a.m. M43
Inhibition of Salmonella Typhimurium by Cultures of Cecal Bacteria during Aerobic Incubation
Arthur Hinton Jr1, Gary Gamble1, Kimberly Ingram1, Ensaf Taha1, Ronald Holser1 1Russell Research Center, Athens, GA, USA; 2Tuskegee University, Tuskegee, AL, Afghanistan

10:45 a.m. M44
Re-evaluation of broiler carcass scalding protocols on the recovery of Campylobacter from breast skin after defeathering
Amanda Howard1, Kimberly Wilson1, Dianna Bourassa2, R.Jeff Buhr2 1The University of Georgia, Athens, GA, USA; 2USDA-ARS Russell Research Center, Athens, GA, USA

11:00 a.m. M45
Detection of Campylobacter on the outer surface of retail broiler meat packages and from the exudate within
Mark Berrang1, Brian Oakley2, Richard Meinersmann1 1USDA-Agricultural Research Service, Athens, GA, USA; 2Western University, Pomona, CA, USA

11:15 a.m. M46
Comparison of Selective Campylobacter Media for Detection and Enumeration of Naturally Occurring Campylobacter spp. on Poultry
Charlotte Steininger1, Mark Berrang2, Mark Harrison1 1University of Georgia, Food Science and Technology, Athens, GA, USA; 2USDA-Agricultural Research Service, Athens, GA, USA

11:30 a.m. M47
Quantifying moisture content on eggs that have been sweated in various environments
Janet Gradl1, Pat Curtis1, Kevin Keener2 1Auburn University, Auburn, AL, USA; 2Purdue University, West Lafayette, IN, USA

11:45 a.m. M48
Impact of extended stun duration and voltage on the recovery of consciousness in broilers
C.E. Harris1, Dianna Bourassa2, Kimberly Wilson3, R. Jeff Buhr2 1The University of Georgia, Athens, GA, USA; 2USDA-ARS Russell Research Center, Athens, GA, USA; 3University of Georgia, Athens, GA, USA

12:00 p.m. Lunch
Environment Management I
Chair: Dr. Lisa Bielke, University of Arkansas
Room Number: B-314
Monday, January 26, 2015
7:45 a.m. M49
The Growth Performance of A Synthetic Naked-Neck Chicken Line under A Natural Hot Environment
Essam A. El-Gendy* Cairo University, Cairo, Egypt
8:00 a.m. M50
Effect of AviLighting™ LED Feeder Light on light intensity near feed & water areas, broiler body weight uniformity & litter consumption at time of housing to 3 weeks of age in an antibiotic-free chicken program.
J.L. McNaughton*, M. Roberts*, M. Barnas*, S. Holland* 1AHPharma, Inc., Salisbury, MD, USA; 2lighting LLC, North East, MD, USA
8:15 a.m. M51
The effect of Brazilian propolis on leg health in broilers reared under heat stress
Usama Mahmoud*1, Mootaz Abdel-Rahman2, Madeha Darwish2, Todd Applegate1, Heng-Wei Cheng2 1Purdue University, Lafayette, IN, USA; 2Assiut University, Assiut, Egypt; 3Livestock Behavior Research Unit, USDA-ARS, Lafayette, IN, USA
8:30 a.m. M52
Level of corticosterone in chicks from commercial strains subjected to embryonic thermal stimulation
Fernanda Flores*1, Irenilza de Alencar Nääs1, Rodrigo Garofallo Garcia2, Wanderley Moreno Quinteiro-Filho2, Thomas Calil3 1College of Agricultural Engineering - University of Campinas, Campinas, SP, Brazil; 2Federal University of Grande Dourados, Dourados, MS, Brazil; 3University of São Paulo, São Paulo, Brazil; 4PasReform of the Brazil, Rio Claro, Brazil
8:45 a.m. M53
Bacterial Prevalence on Broiler Farms from an Integrator in Alabama
Katrina English*1, Kenneth Macklin1, Manpreet Singh1, Laci Olivia1, James Krehling1, Amnuay Segrest1 1Auburn University, Auburn, AL, USA; 2Purdue University, West Lafayette, IN, USA
9:00 a.m. M54
Isolation, screening and identification of Bacillus spp. as direct-fed microbial (DFM) candidates for aflatoxin B1 biodegradation
Rosario Galarza-Seeber*1, Juan Latorre, Billy Hargis, Guillermo Tellez University of Arkansas, Fayetteville, AR, USA
9:15 a.m. M55
Effect of prolonged administration of dexamethasone in feed on intestinal permeability in broiler chicks
Eduardo Vicuña*1, Vivek Kuttappan, Rosario Seeber-Galarza, Juan-David Latorre, Olivia Faulkner, Guillermo Tellez, Billy Hargis, Lisa Bielke University of Arkansas, Fayetteville, AR, USA
9:30 a.m. M57
Effects of feeding dried distillers grains with solubles to broilers challenged with C. perfringens and Eimeria on necrotic enteritis
Laci Mackay*1, James Krehling, William Dozier III, Kenneth Macklin Auburn University, Auburn, AL, USA
9:45 a.m. Break
10:00 a.m. M58
Gastrointestinal parasitic prevalence and associated risk factors in backyard poultry at three ecological zones of Nepal
Bibek Regmi*1 Agriculture and Forestry University, Bhutaha, Nepal
10:15 a.m. M59
Cecal Salmonella and indigenous microflora response to Original XPC™-fed broilers
Stephanie Roto*1, Sang In Lee, Peter Rubinelli, Si Hong Park, Steven Ricke University of Arkansas, Fayetteville, AR, USA
10:30 a.m. M60
Antimicrobial Effect of an Essential Oil Blend on Surface-attached Salmonella on Polyvinyl Chloride
Sangyoon Song*GS1, Walid Alali1, Joseph Frank2, Charles Hofacre3 1University of Georgia Center for Food Safety, Griffin, GA, USA; 2University of Georgia Department of Food Science & Technology, Athens, GA, USA; 3University of Georgia Poultry Diagnostic and Research Center, Athens, GA, USA

10:45 a.m. M61
A non-invasive approach for predicting 4-day percent breast yield in broilers
Alex Gilley*GS, Sara Orlowski, Adrianna Rogers, Judith England, Nicholas Anthony University of Arkansas, Fayetteville, AR, USA

11:00 a.m. M62
Variation in water usage between different drinker lines in a broiler house.
Cody Brown*GS, Michael Czarick, Brian Fairchild University of Georgia, Athens, GA, USA

11:15 a.m. M63
Comprehensive study of the effects of egg storage, floor and nest eggs, and broiler breeder flock age on hatchability and 14-day livability, feed conversion ratio, and body weight in broiler chicks.
Emily Lhamon*GS1, D. E. Yoho2, L. Butler3, R. K. Bramwell 1University of Arkansas, Fayetteville, AR, USA; 2Center of Excellence for Poultry Science, University of Arkansas, Fayetteville, AR, USA; 3Cobb-Vantress, Inc., Siloam Springs, AR, USA

11:30 a.m. M64
Distribution and Effects of Probiotic Spray on Microbial Properties of Hatcher Cabinets
Lucas Graham*GS1, Johel Bielke1, Kyle Teague1, Guillermo Tellez1, Billy Hargis1, Ross Wolfenden2, Lisa Bielke1 1University of Arkansas, Fayetteville, AR, USA; 2Pacific Vet Group-USA, Fayetteville, AR, USA

11:45 a.m. M65
Effect of a lactic acid bacteria-based probiotic in ovo on hatchability and recovery of bacteria in broiler chicks
Kyle Teague*GS1, Lucas Graham1, Lisa Bielke1, Ross Wolfenden2, Billy Hargis1, Guillermo Tellez1 1University of Arkansas, Fayetteville, AR, USA; 2Pacific Vet Group-USA, Fayetteville, AR, USA

12:00 p.m. Lunch
Metabolism & Nutrition 1
Chair: Dr. Kelley Wamsley, Mississippi State University
Room Number: B-315
Monday, January 26, 2015
7:45 a.m. M66
Growth and carcass characteristics of broilers fed varying levels of processed cassava waste meal
Stanley Omoikjoje*, Dick Obasoyo Ambrose Alli University, Ekpoma, Nigeria
8:00 a.m. M67
Nitrogen corrected apparent metabolizable energy and lipid digestibility of distillers corn oil sources varying in free fatty acid content fed to growing broilers
William Dozier1,2, Kurt Perryman1, Brian Ken3 1Auburn University, Auburn, AL, USA; 2USDA-Agricultural Research Service, Ames, IA, USA
8:15 a.m. M68
Effect of ß-mannanase on broiler growth performance and energy utilization in the presence of increasing dietary galactomannan
Rocky Latham*GS1, Brandon Carter2, Jake Pieniazek1, Jason T. Lee1 1Texas A&M University, College Station, TX, USA; 2Elanco Animal Health, Greenfield, IN, USA
8:30 a.m. M69
Efficacy of l-threonine on broiler growth performance and energy utilization in the presence of increasing dietary L-threonine
Samuel Okunlola*GS, Matthew Kimbrough, Isaac Ugochukwu1, Kunal Shankar1, Dr. Tu Swain2, Dr. Victor Tikondelwa1 1Texas A&M University, College Station, TX, USA; 2Elanco Animal Health, Greenfield, IN, USA
8:45 a.m. M70
Effect of heat and enzymes on nitrogen-corrected apparent metabolizable energy (AMEn) of mechanically-pressed soybean meal (MPS) and the use of MPS on production performance of broiler chickens
Banuka Rajapakse*GS, Derek Anderson Department of Plant and Animal Sciences, Faculty of Agriculture, Dalhousie University, Truro, NS, Canada
9:00 a.m. M71
Effects of heat and oxidative stress on the expression of orexin and its related receptors in avian liver
Stephanie Khaldi*GS, Elizabeth Greene, Walter Bottje, Sami Dridi University of Arkansas - Fayetteville, Fayetteville, AR, USA
9:15 a.m. M72
Dietary Supplementation of Choline and Betaine in Heat-Stressed Broilers
Kouassi Kpodo*GS1, J. Summers, R. Ray, R. Beckford University of Tennessee, Knoxville, TN, USA
9:30 a.m. M73
Immunomodulatory effects of 25-hydroxycholecalciferol treatment in a chicken macrophage and T-cell line
Antrison Morris*GS, Ramesh Selvaraj The Ohio State University, Wooster, OH, USA
9:45 a.m. Break
10:00 a.m. M74
Lutein has anti-inflammatory effect in LPS-challenged broiler chickens
Mariana Lemos de Moraes*GS, Elizabeth Santin1, Andraé Machado Leal Ribeiro1, Kirk Charles Klausing1 1Federal University of Rio Grande do Sul, Porto Alegre, Brazil; 2Federal University of Paraná, Curitiba, Brazil; 3University of California, Davis, Davis, CA, USA
10:15 a.m. M75
Effect of breeder age on yolk fatty acid composition and yolk absorption during embryonic development
Nirun Boonsinchai*GS, Justina Caldas1, Phiphob Soddee2, Karen Vignale1, Monticha Putsakum3, Ethan Holt1, Andrew Magnuson1, Jinrong Wang1, Judith England1, Craig Coon1 1University of Arkansas, Fayetteville, AR, USA; 2Charoen Pokphand Foods, Bangkok, Thailand; 3Sukhothai Thammathirat Open University, Nonthaburi, Thailand

9
10:30 a.m. M76
The effects of incubation conditions and trace mineral source in broiler breeder and broiler progeny diets on the live performance of Ross 708 male broilers.
Coltin Caraway*GS1, Stacey Homen2, Greg Page3, Wilbert Litjens4, John Brake1  
1North Carolina State University, Raleigh, NC, USA; 2Nutreco; Trouw Nutrition USA, Highland, IL, USA; 3Nutreco; Canada Agresearch, Guelph, ON, Canada; 4Nutreco; Selko Feed Additives, Tilburg, Netherlands

10:45 a.m. M77
Effect of Escalating Level of Guar Meal Supplemented with or without ß-Mannanases on Productive Performance of Broilers
Munawar Hussain*GS  
University of animal and veterinary and Animal Sciences Lahore, Okara, Pakistan

11:00 a.m. M78
Phosphorus and phytase application to broiler breeder grower and layer diets affect egg weight and body weight during production
Yun Mei Lin*GS1, John Brake1, Peter Plumstead2  
1North Carolina State University, Raleigh, NC, USA; 2Department of Animal and Wildlife Sciences, University of Pretoria, SA Danisco Animal Nutrition, DuPont Industrial Biosciences. Marlborough, UK, Pretoria, South Africa Malborough, UK, South Africa

11:15 a.m. M79
Impact of variable corn nutrient content, AME prediction, and xylanase inclusion on broiler growth performance
Rocky Latham*GS, Helen V. Masey O’Neill2, Tara York2, Cody Flores2, Jason T. Lee3  
1Texas A&M University, College Station, TX, USA; 2AB Vista, Marlborough, United Kingdom

11:30 a.m. M80
Liquid application method (LAM), feed form (FF) and feed pan location effects on D28-56 Ross x Ross 708 male broiler performance and processing characteristics
Robert B Sellers*GS1, John Boney2, Chris McDaniel1, Joseph S. Moritz2, Kelley G. S. Wamsley3  
1Mississippi State University, Starkville, MS, USA; 2West Virginia University, Morgantown, WV, USA

11:45 a.m. M81
Effect of enzyme complex in pellet or mash feeds with different nutritional levels on the performance of broilers from 1 to 21 days old
Bruno Carvalho*GS, Melissa Hannas, Luiz Fernando Albino, Victor Barros, Bruna Kreuz  
Federal University of Viçosa, Viçosa, Brazil

12:00 p.m. Lunch
Metabolism & Nutrition II
Chair: Dr. Matthew Koci, North Carolina State University
Room: B-311
Monday, January 26, 2015

1:00 p.m. M82
Effects of varying coccidiosis control and inclusions of algal beta-1,3-glucan (ABG) on D0-59 Ross x Ross 708 male broiler performance and processing
Cameron Cardenas1, Wei Zhai1, Robert Levine2, Kelley Wamsley1,2 Mississippi State University, Starkville, MS, USA;3 Algal Scientific, Northville, MI, USA
1:15 p.m. M83
Effects of commercially available antibiotic alternatives on 0 to 41 d male broiler chicken intestinal morphology and microflora
Xi Wang1, Yuhua Farnell, Aaron Kiess, Kelley Wamsley, Wei Zhai Mississippi State University, Starkville, MS, USA

1:30 p.m. M84
Response of broilers to Virginiamycin and a Xylanase enzyme under summer condition
Derek Elmor1, H. M. Cervantes2, G. M. Pesti1, M. J. Da Costa1, K. W. Bafundo1 University of Georgia, Athens, GA, USA;4 Phibro Animal Health Corp., Teaneck, NJ, USA;3 Microbial Discovery Group/Phibro Animal Health Corp., Teaneck, GA, USA

1:45 p.m. M85
Influences of Virginiamycin and Magni-Phi on broiler performance
M. J. Da Costa1, K. W. Bafundo1, H. M. Cervantes2, G. M. Pesti1 University of Georgia, Athens, GA, USA;4 Phibro Animal Health Corp., Teaneck, NJ, USA

2:00 p.m. M86
Where do probiotics live and work?
Anne Ballou1, Rizwana Ali, Jim Croom, Matthew Koci North Carolina State University, Raleigh, NC, USA

2:15 p.m. M87
Evaluation of multiple direct fed microbial (DFMs) on male broiler growth performance
Kolton Page1, Cody Flores1, Ray Poursalam1, Jason Lee1 Texas A&M University, College Station, TX, USA;2 Kerry Inc, Dallas, TX, USA

2:30 p.m. M88
Evaluation of a direct fed microbial (DFM) on broiler growth performance and processing yield
Kyle Smith1, Hunter Walters1, Jacob Price1, Nathan Augspurger2, Michael King3, Sona Son3, Jason Lee1 Texas A&M University, College Station, TX, USA;3 JBS United, Inc., Sheridan, IN, USA;2 Microbial Discovery Group/JBS United, Inc., Franklin, WI, USA

2:45 p.m. M89
Inclusion of Bacillus direct-fed microbials in a broiler diet containing corn-DDGS: Effect on performance parameters, microbiota population and bone quality
Juan Latorre1, Jose Vicente2, Xochitl Hernandez-Velazco3, Ross Wolfenden2, Billy Hargis1, Guillermo Tellez1 University of Arkansas, Fayetteville, AR, USA;2 Pacific Vet Group-USA, Inc., Fayetteville, AR, USA;3 Universidad Nacional Autonoma de Mexico, Mexico City, Mexico

3:00 p.m. M90
Understanding white striping using protein turnover
Karen Vignale1, Justina V. Caldas1, Judith England1, Nirun Boonsinchai1, Andrew Magnuson1, Erik D. Pollock2, Casey M. Owens1, Sami Dridi1, Craig N. Coon1 University of Arkansas, Fayetteville, AR, USA;2 University of Arkansas Stable Isotope Lab, Fayetteville, AR, USA

3:15 p.m. M91
Effects of quantitative feed restriction on myopathies of the Pectoralis major muscles in broiler chickens at 32, 42, and 50 days of age
Kathryn Meloche1, Sacit Bilgili, William Dozier Auburn University, Auburn, AL, USA

3:30 p.m.
USPOULTRY Presentation - Room Number B-313-314

4:00 p.m. - 6:00 p.m.
Poster Reception - Room Number B-308-309
Effect of vaccination for coccidia and Sporulin® inclusion on broiler performance during natural exposure to Clostridium perfringens

Alamanda Calvert*, Christa Honaker1, Chris Ott1, Diego Paiva1, Marie Schirmacher1, Kendre Stringfellow2, Audrey McElroy1 Virginia Tech, Blacksburg, VA, USA; 2Novus International, St. Charles, MO, USA; 3Texas A&M University, College Station, TX, USA

Determination of the minimum infectious dose of the Arkansas DPI-type Infectious Bronchitis vaccine administered via hatchery spray cabinet

Christina Leyson*, Deborah Hilt, Brian Jordan, Mark Jackwood University of Georgia, Athens, GA, USA

Transmission of heterologous IBV challenge after bivalent vaccination in broiler chickens

Eric Shepherd*, Christian Lapp1, Deborah Hilt1, Mark Jackwood1, Brian Jordan1 The University of Georgia College of Veterinary Medicine, Athens, GA, USA; 2The University of Georgia Poultry Diagnostic and Research Center, Athens, GA, USA

Potential of glycoprotein J gene deleted infectious laryngotracheitis virus (ILTV) strain as a live attenuated vaccine

Gustavo Henrique Schneiders*, Sylva M. Riblet, Maricarmen Garcia University of Georgia, Athens, GA, USA

Replication of infectious laryngotracheitis virus (ILTV) in the conjunctiva, nasal cavity, and harderian gland after eye-drop, intranasal and gavage inoculation

Gabriela Beltran*, Guillermo Zavala, Maricarmen Garcia The University of Georgia, Athens, GA, USA

Characterization of Histomonas meleagridis in peafowl.

Lorelei Clarke*, H.L. Shivaprasad2, Silvia Carnaccini2, Robert Beckstead2, Daniel Rissi1 University of Georgia, Department of Pathology, Athens, GA, USA; 2University of California at Davis, California Animal Health and Food Safety Laboratory, Tulare, CA, USA; 3University of California, Davis, California Animal Health and Food Safety Laboratory, Turlock, CA, USA; 4University of Georgia, Department of Poultry Science, Athens, GA, USA

Reducing the incidence of bacterial chondronecrosis with osteomyelitis in broilers with a dietary combination of Bacillus subtilis C-3102 (Calsporin) and IMWS50 yeast cell wall preparation

John Schleifer*, A. Al-Rubaye2, R. F. Wideman2, Y.M. Kwon2, T. Lohrmann1 Quality Technology International, Inc., Elgin, IL, USA; 2University of Arkansas, Fayetteville, AR, USA

Enteric Inflammation Modeling for Induction of Spondylolthisis (Kinky Back) in Broilers

Lisa Bielek*, Johel Bielek1, Vivek Kuttapann1, Eduardo Viciu1, Randle Moore2, Rosario Seeber-Galarza1, Juan-David Latorre2, Amanda Woffenden1, Olivia Faulkner1, Guillermo Tellez2, Billy Hargis1 University of Arkansas, Fayetteville, AR, USA; 2Poultry Diagnostic Laboratory, Texas A&M Veterinary Medical Diagnostic Laboratory, Center, TX, USA

Case report: Isolated masculinization of commercial leghorn hens in production

Blayne Mozisek* Merck Animal Health, Austin, TX, USA
3:00 p.m. M101
In vivo test tube: the growing feather as a dermal test-site to monitor temporal, qualitative and quantitative aspects of innate and adaptive immune responses.
Gisela Erf1, Olfat Alaamri1, Hyeonmin Jang1, Kristen Byrne1, Daniel Falcon1, Mikaila Wilson1, Zoraida Aguilar2, Robert Dienglewicz1 1University of Arkansas, Division of Agriculture, Department of Poultry Science, Fayetteville, AR, USA; 2Zystein, LLC, Springdale, AR, USA

3:15 p.m. M102
Genotypic analysis of S class genome segments of two novel avian reoviruses associated with tenosynovitis in chickens
Vijay Durairaj1, Erich Linnemann, Vanessa Gauthiersloan, Alan Icard, Holly S. Sellers Poultry Diagnostic and Research Center, The University of Georgia, Athens, GA, USA

3:30 p.m.
USPOULTRY Presentation - Room Number B-313-314

4:00 p.m. - 6:00 p.m.
Poster Reception - Room Number B-308-309
Metabolism & Nutrition III
Chair: Dr. David Ledoux, University of Missouri
Room Number: B-313
Monday, January 26, 2015

1:00 p.m. M103
Dietary Threonine Requirement of Pekin Ducks from 1 to 14 Days of Age Based on Performance, Serum Immune Activity and Intestinal Mucin Secretion
Qian Zhang1, Qiufeng Zeng1, Paul Cotter2, Todd Applegate1 1Purdue University, West Lafayette, IN, USA; 2Cotter Laboratory, Arlington, MA, USA

1:15 p.m. M104
Efficacy of two adsorbents in ameliorating the toxic effects of aflatoxin in broiler chicks
Tiffany Shannon1, David Ledoux1, George Rottinghaus1, Daniel Shaw1, Aleksandra Daković2, Vera Dondu1 1University of Missouri, Columbia, MO, USA; 2Institute for Technology of Nuclear and Other Mineral Raw Materials, Belgrade, Serbia

1:30 p.m. M105
Impact of dietary Black Soldier Fly prepupae meal on broiler performance
Shurong Li1, Fengchun Yang, Heather Burley, Paul Patterson, R. Michael Hulet1 1The Pennsylvania State University, State College, PA, USA

1:45 p.m. M106
Effects of dietary amino acid density and tribasic copper chloride supplementation in Eimeria acervulina-infected chicks
Samuel Rochell1, Terri Parr2, James Usry2, Carl Parsons1, Ryan Dilger1 1University of Illinois, Urbana, IL, USA; 2Micronutrients, Indianapolis, IN, USA

2:00 p.m. M107
The effect of feed processing of novel, low trypsin inhibitor, whole soybeans on the performance of turkey hens reared from 0-21 days
C. E. Evans1, J. L. Grimes1, C. R. Stark2, A. C. Fahrenholz1, J. D. Garlich1 1North Carolina State University, Raleigh, NC, USA; 2Kansas State University, Manhattan, KS, USA

2:15 p.m. M108
Evaluation of Pennycress Meal as a feed ingredient for broilers
Rashed Alhotan1, Gene Pesti1, Ronald Holser2 1Department of Poultry Science; University of Georgia, Athens, GA, USA; 2United States Department of Agriculture, Agricultural Research Service, Athens, GA, USA

2:30 p.m. M109
The use of low-tannin grain sorghum in broiler diets
Park Waldroup1, Samantha Shelton1, Deepthi Gadde1, Joel Thompson1, Susan Watkins2 1University of Arkansas Poultry Science Department, Fayetteville, AR, USA; 2University of Arkansas, Fayetteville, AR, USA

2:45 p.m. M110
Evaluation of NSP enzymes for broiler diets
Park Waldroup1, Changji Lu, Sarah Goodgame, Franco Mussini, Danny Bradley University of Arkansas, Fayetteville, AR, USA

3:00 p.m. M111
Comparative performance of different broiler genotypes and morphometric analysis
Park Waldroup1, Franco Mussini1, Sarah Goodgame1, Changji Lu1, Danny Bradley1, Julia Dibner2 1University of Arkansas Poultry Science Department, Fayetteville, AR, USA; 2Novus International, St. Louis, MO, USA

3:15 p.m. M112
Evaluation of calcium levels in broiler grower diets with normal and extended levels of phytase
Park Waldroup1, Sarah Goodgame, Danny Bradley, Franco Mussini, Changji Lu University of Arkansas, Fayetteville, AR, USA

3:30 p.m.
USPOULTRY Presentation - Room Number B-313-314

4:00 p.m. - 6:00 p.m.
Poster Reception - Room Number B-308-309
1:00 p.m. M113
Microbial efficacy of a new water sanitation technology as compared to hydrogen peroxide and chlorine
Pramir Maharjan¹, Samantha Cox², Tyler Clark², Susan Watkins² ¹University of Arkansas, Fayetteville, AR, USA; ²University of Arkansas, Fayetteville, AR, USA

1:15 p.m. M114
Incubation temperature profiles affect litter moisture in broilers
Albaraa Sarsour¹, Edgar Oviedo-Rondón², Jenna Scott² ¹Prestige Department of Poultry Science, North Carolina State University, Raleigh, NC, USA; ²North Carolina State University, Raleigh, NC, USA

1:30 p.m. M115
Effect of propolis supplementations on behavioral activities of heat stressed broiler chickens
Usama Mahmoud¹, Mootaz Abdel-Rahman¹, Madeha Darwish¹, Todd Applegate¹, Heng-Wei Cheng¹ ¹Purdue, Lafayette, IN, USA; ²Assiut University, Assiut, Egypt

1:45 p.m. M116
Relationship among feed form, behavior and welfare, and growth performance using male broilers
Xianjiang Wen², A.F. Liu, M.M. Beck, K.G.S. Wamsley, B. Sellers, X. Wang, W. Zhai ¹Purdue, Lafayette, IN, USA; ²Mississippi State University, Mississippi State, MS, USA

2:00 p.m. M117
Stress assessment by hematology - The requirements
Paul Cotter ¹Cotter Laboratory, Arlington, MA, USA

2:15 p.m. M118
Sustainability: Key parameters to measure ecological impact of the feed industry
Franco Mussini¹, John Thomson², Michael Binder², Thomas Kaufmann² ¹Evonik Industries, Cave Springs, AR, USA; ²Evonik Industries, Kennesaw, GA, USA; ³Evonik Industries, Hanau, Germany

2:30 p.m. M119
AMINOFootprint: A novel tool to accurately measure sustainability progress in the poultry industry
Franco Mussini¹, John Thomson¹, Michael Binder², Thomas Kaufmann² ¹Evonik Industries, Kennesaw, GA, USA; ²Evonik Industries, Hanau, Germany

2:45 p.m. M120
Seasonal US broiler integrator performance history vs. coccidiosis control program: practical epidemiology and economics
Linnea Newman ¹Merck Animal Health, Summit, NJ, USA

3:00 p.m. M121
Efficacy of a combination of Bacillus subtilis and B. licheniformis on the performance of broilers under intestinal stress
Michael Sims¹, Anee Berg Kehlet², David Harrington² ¹Virginia Diversified Research, Corp., Harrisonburg, VA, USA; ²Chr. Hansen A/S, Harsholm, Denmark

3:15 p.m. M122
Improving turkey performance using a Bacillus-based feed additive
Anee Berg Kehlet¹, Krzysztof Kozlowski², Vlastislav Machander² ¹Chr. Hansen A/S, Harsholm, Denmark; ²Uniwersytet Warmińsko-Mazurski w Olsztynie, Olsztyn, Poland; ³MID, s.p., Ustrasice, Poland

3:30 p.m.
USPOULTRY Presentation - Room Number B-313-314

4:00 p.m. - 6:00 p.m.
USPOULTRY Presentation - Room Number B-308-309
Evaluation of a thermotolerant xylanase on broiler growth performance and ileal digestible energy

Cody Flores, Rocky Latham, Patrick Biggs, Jason Lee
Texas A&M University, College Station, TX, USA; Bioresource International, Inc., Durham, NC, USA

Evaluation of NSPase inclusion in diets manufactured with high and low quality corn on male broilers

Hunter Walters, Jake Pieniazek, Blyn Brown, Roy Brister, Shivaram Rao, Jason Lee
Texas A&M University, College Station, TX, USA; JBS United, Sheridan, IN, USA; Tyson Foods, Springdale, AR, USA; Foster Farms, Livingston, CA, USA

Evaluation of an enzyme composite on growth performance and ileal digestible energy

Austin Jasek, Kolton Page, Rocky Latham, Nelson Ward, Jason Lee
Texas A&M University, College Station, TX, USA; DSM Nutritional Products, Parsippany, NJ, USA

Evaluation of multiple levels of phytase and non phytase enzyme inclusion on broiler growth performance

Tucker Allcorn, Mallori Williams, Rocky Latham, Milan Hruby
Texas A&M University, College Station, TX, USA; Danisco Animal Nutrition, DuPont Industrial Biosciences, St. Louis, MO, USA

Energetic efficiency and body composition of broilers fed diets with exogenous enzymes during starter, grower and finisher

Justina Caldas, Nirun Boonsinchai, Ethan Holt, Andrew Magnuson, Jinrong Wang, Judith England, Craig Coon
University of Arkansas, Fayetteville, AR, USA

Evaluation of xylanase enzyme efficacy in broiler diets.

Marissa Kost, A. C. Fahrenholz, J. Brake
Prestage Department of Poultry Science, North Carolina State University, Raleigh, NC, USA

Effect of adding phytase to broiler diets containing low phytate-low stachyose and normal phytate soybean meal on live performance, total phosphorus digestibility, and bone ash

Ilana Barasch, John Brake, Adam Fahrenholz, Saghai Marouf
North Carolina State University, Raleigh, NC, USA; Virginia Polytechnic Institute, Blacksburg, VA, USA

Effect of a heat-stable xylanase, alone and in combination, with a commercial phytase on broiler performance from day-of-hatch until 42 days of age

Ilana Barasch, Jesse Grimes, Jim Garlich, Patrick Biggs
North Carolina State University, Raleigh, NC, USA; Bioresource International, Inc., Durham, NC, USA

Effects of intermittent wheat inclusion on broiler performance, gastrointestinal tract health, and footpad dermatitis during a 46 d production period

Klint McCafferty, Craig Wyatt, Kenneth Macklin, William Dozier
Auburn University, Auburn, AL, USA; AB Vista Feed Ingredients, Chesterfield, MO, USA

Effects of calcium concentration on true ileal phosphorus digestibility and true phosphorus retention determined using the regression technique in growing broilers

Kurt Perryman, Helen Masey O'Neill, Mike Bedford, William Dozier
Auburn University, Auburn, AL, USA; AB Vista Feed Ingredients, Marlborough, United Kingdom
3:30 p.m.
USPOULTRY Presentation - Room Number B-313-314
4:00 p.m. - 6:00 p.m.
Poster Reception - Room Number B-308-309
Effect of β-mannanase (Hemicell-HT) feed enzyme on post-molted layer performance in 11 white egg strains

Mark Jackson¹, Ken Anderson¹, ¹Blanco Animal Health, Fayetteville, AR, USA; ²North Carolina State University, Raleigh, NC, USA

Cannabaxanthin improves the productivity of the layer hen: A meta-analysis approach

Murtula Umar Faruk¹, Franz Roos², Fernando Cesneros³, ¹DSM Nutritional Products, France, ²Village-Neuf, France, ³DSM Nutritional Products Ltd, Kaiseraugst, Switzerland

The protective effects of lyopene on the spontaneous ovarian cancer through inhibiting the pathway of NF-κb pathway in laying hen model

Kazim Sahin¹, Engin Yenice², Mehmet Tuzcu¹, Cemal Orhan¹, Cengizhan Mizrak², Ibrahim Hanifi Ozercan¹, Nurhan Sahin¹, Bahaddin Yilmaz², Omer Kucuk² ¹First University, Elazig, Turkey; ²Poultry Research Institute, Ankara, Turkey; ³Winship Cancer Institute of Emory University, Atlanta, Georgia, USA, ¹Winship Cancer Institute of Emory University, Atlanta, GA, USA

Curcumin prevents the development of spontaneous ovarian tumors through the Keap1-Nrf2/ARE signaling in laying hen model

Kazim Sahin¹, Mehmet Tuzcu¹, Cemal Orhan¹, Nurhan Sahin¹, Hakkı Tastan², Osman Guler³, Ibrahim H Özercan¹, Omer Kucak² ¹First University, Elazig, Turkey; ²Gazi University, Ankara, Turkey; ³Veterinary Control Institute, Elazig, Turkey; ⁴Emory University, Atlanta, GA, USA

The effect of adding magnesium oxide to pullet and layer diets on body weight, bone characteristics, egg production and manure moisture

E. Ernest M. Pierson¹, Michael Lilburn², Darrin Karcher³, Dan Nason⁴ ¹The Pierson Consulting Group, University City, MO, USA, ²The Ohio State University, Wooster, OH, USA; ³Michigan State University, East Lansing, MI, USA; ⁴Premier Magnesia, LLC, Overland Park, KS, USA

The effect of four different feeding programs from rearing period to sexual maturity on protein turnover in parent stock broiler breeders

Karen Vignale¹, Justina V. Caldas¹, Judith England¹, Nirun Boonsinchai¹, Phibob Sodsee², Erik D Pollock³, Sami Dridi¹, Craig N. Coon¹ ¹University of Arkansas, Fayetteville, AR, USA; ²CP, Bangkok, Thailand; ³University of Arkansas Stable Isotope Lab, Fayetteville, AR, USA

Evaluation of feeding programs on broiler performance and financial return

Douglas Faria¹, Renata Trevisan², Vanessa Nakagi³, Paula Bravo², Daniel Faria Filho² ¹Faculdade de Zootecnia e Engenharia de Alimentos (FZEA) - Universidade de Sao Paulo (USP), Pirassununga, Brazil; ²FZEA/USP, Pirassununga, Brazil

Strain and feed form (FF) effects on D28-49 male broiler performance and D43 and 50 processing characteristics

Robert B. Sellers¹, Paul B. Tillman², Joseph S. Moritz³, Kelley G. S. Wamsley¹ ¹Mississippi State University, Starkville, MS, USA; ²Poultry Technical Nutrition Services LLC, Buford, GA, USA; ³West Virginia University, Morgantown, WV, USA
Replacement of corn by sorghum at grower phase diets for broilers and the effect of an enzymatic blend containing protease, xylanase and phytase to improve nutrient utilization

Guilherme Aguiar Mateus Pasquali1, Rafael Gustavo Hermes2, Vitor Barbosa Fascina3, Monica Megui Aoyagi1, Amanda Lapa Silva1, Everton Moreno Muro1, José Roberto Sartori1,1 UNESP, Botucatu, Brazil; 2 DSM Nutritional Products, São Paulo, Brazil; 3 DSM Nutritional Products, Mairinque, Brazil

10:00 a.m. T143

Sorghum inclusion, particle size and adding a protease affects broiler performance

Albaraa Sarsour1, Edgar Oviedo-Rondón1, Thays Quadros2, Fabiana Luiggi3, Nadia Bassi4, 1 North Carolina State University, Raleigh, NC, USA; 2 Universidade Estadual Paulista, Campus Jaboticabal, Jaboticabal, Brazil; 3 Universidade Estadual Paulista, Campus Botucatu, Botucatu, Brazil; 4 EMBRAPA, Soinas e Aves, Concordia, Brazil

10:15 a.m. T144

Effects of the Level and Relationship of Calcium and Available Phosphorus on Starter Broiler Chickens

Alejandro Diaz Alonso1, Sergio Gomez Rosales2, Maria De Lourdes Angeles3, 1 Vifimos Sa De Cv, Guadalajara Jal., Mexico; 2Initap, Ajuchilan, Oro, Mexico

10:30 a.m. T145

A value based approach to compare the optimum dose of an E. coli and a Buttilauxella phytase in broiler diets

Luke Barnard1, Luis Romero1, Velmurugu Ravindran2, 1 Danisco Animal Nutrition - DuPont Industrial Biosciences, Marlborough, United Kingdom; 2 Massey University - Institute of Vet, Animal and Biomedical Sciences, Palmerston North, New Zealand

10:45 a.m. T146

Response of Broilers Fed with Graded Levels of DL-2-Hydroxy-(4-methylthio)Butanonic Acid (HMTBA) form 15 to 28 days of age

Raquel Araujo1, Ricardo Gonzalez-Esquerra2, Sergio Luiz Vieira3, Cesar Pontini1, 1 Novus do Brasil Com. e Imp. LTDA., São Paulo, Brazil; 2 Departamento de Zootecnia, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil

11:00 a.m. T147

Response of Broilers Fed Graded Levels of DL-2-Hydroxy-(4-methylthio)Butanonic Acid (HMTBA) During the Finisher Phase

Raquel Araujo1, Ricardo Gonzalez-Esquerra2, Sergio Luiz Vieira3, Cesar Pontini1, 1 Novus do Brasil Com. e Imp. LTDA., São Paulo, Brazil; 2 Departamento de Zootecnia, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil

11:15 a.m. T148

Response of Starter Broilers Fed Graded Levels of Methionine using DL-2-Hydroxy-(4-methylthio)Butanonic Acid (HMTBA) as Its Synthetic Form

Ricardo Gonzalez-Esquerra1, Raquel Araujo1, Sergio Luiz Vieira2, Cesar Pontini1, 1 Novus do Brasil Com. e Imp. LTDA., São Paulo, Brazil; 2 Departamento de Zootecnia, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil

11:30 a.m. T149

Profitability of the Response of Broilers to Graded Levels of DL-2-Hydroxy-(4-methylthio) Butanonic Acid (HMTBA) Fed as the Sole Source of Synthetic Methionine

Ricardo Gonzalez-Esquerra1, Raquel Araujo1, Sergio Luiz Vieira2, Cesar Pontini1, 1 Novus do Brasil Com. e Imp. LTDA., São Paulo, Brazil; 2 Departamento de Zootecnia, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil

11:45 a.m. T150

Effect of a unique carrier-based organic acid blend (Salkil) on the performance of broiler breeders and their progeny

Leon Broom1, Lúcio Araújo2, Cristiane Araújo2, Luciano Sá3, Ian Cockshott4, Emma Graystone5, 1 Anpario, Worksop, United Kingdom; 2 University of Sao Paulo, São Paulo, Brazil; 3 Kiotechagil, São Paulo, Brazil; 4 Kiotechagil, Nottinghamshire, United Kingdom; 5 Anpario, Nottinghamshire, United Kingdom
Can vaccines create hot viruses? Lessons from Marek’s disease
Andrew Read* Pennsylvania State University, State College, PA, USA

1:00 p.m. SCAD Business Meeting B-312
1:00 p.m. SPSS Business Meeting B313
SCAD III
Chair: Dr. Vijay Durairaj, University of Georgia
Room Number: B-312
Tuesday, January 27, 2015
8:00 a.m. T151
Avian Pneumovirus (APV) - A new respiratory disease challenge in Poultry in India
Pratap Rananavare* Merck Animal Health, Summit, NJ, USA
8:15 a.m. T152
Evaluation of different vaccination approach to control MPV, IBV, NDV and IBDV infections in broiler flocks- Polish experience in diverse field conditions
Danuta Furmanek* MSD Animal Health, Niemcz, Poland
8:30 a.m. T153
Protection of Ma5, DE07 and GA08 Live IBV Vaccines against a Highly Pathogenic GA08 Field Isolate in Broilers.
Ivan Alvarado*, Alejandro Banda*, Lifang Yan*, Obiageli Chukwulobe*, Floyd Wilson* 1Merck Animal Health, Athens, GA, USA; 2Mississippi State University, Pearl, MS, USA
8:45 a.m. T154
Understanding ArkDPI vaccination failure when applied by hatchery spray cabinet
Brian Jordan*, Eric Shepherd, Giselle Rossa, Erin Anderson, Debbie Hilt, Mark Jackwood The University of Georgia, Athens, GA, USA
9:00 a.m. T155
Combining recombinant and live vaccines in-ovo for infectious bursal disease protection
Elise Myers*, Tom Inglis*, Darko Mitevski* 1 Merck Animal Health Canada, Kirkland, QC, Canada; 2Poultry Health Services, Airdrie, AB, Canada
9:15 a.m. T156
Comparison of early onset of protection given by Bursaplex® or Vaxxitek® against IBDV
Kalen Cookson*, A. Avakian*, T. Barbosa*, J. Dickson*, J. Giambrone*, T. Villalobos* 1 Zoetis, Lawrenceville, GA, USA; 2Zoetis, Kalamazoo, MI, USA; 3Zoetis, Durham, NC, USA; 4Auburn University, Auburn, AL, USA
9:30 a.m. T157
The impact of H9N2 avian influenza virus vaccine antigenic variation on virus infectious dose in chickens
Yue Wang*, Erin Spackman USDA-ARS Southeast Poultry Research Laboratory, Athens, GA, USA
9:45 a.m. T158
Measurement of airborne influenza virus during hen slaughtering in an ABSL-3E bioBUBBLE®
Kateri Bertran*, Kira Moresco, David E Swayne Southeast Poultry Research Laboratory USDA/ Agricultural Research Service, Athens, GA, USA
10:00 a.m. T159
Mucosal immune response in broilers following vaccination with inactivated influenza and recombinant Bacillus subtilis
Olivia Faulknor*, Darrell Kapcynski*, Lisa Bielke*, Amanda Wolfenden*, Vivek Kuttappan*, Luc Berghman*, Billy Hargis* 1University of Arkansas, Fayetteville, AR, USA; 2Southeast Poultry Research Laboratory, USDA-ARS, Athens, GA, USA; 3Texas A&M University, College Station, AR, USA
10:15 a.m. T160
Optimizing Marek’s Diseases vaccination protocols with in ovo vaccination
Taylor Barbosa*, Tarsicio Villalobos*, John Dickson*, Aneg Lucia Cortes*, Nik Faiz*, Isabel Gimeno* 1Zoetis Global Poultry, Durham, NC, USA; 2North Carolina State University, Raleigh, NC, USA
10:30 a.m. T161
Comparison of protection using two CVI988 commercial vaccines against very virulent plus Marek’s Disease virus challenge
Tarsicio Villalobos*, Taylor Barbosa*, John Dickson*, Aneg Lucia Cortes*, Nik Faiz*, Isabel Gimeno* 1Zoetis Inc., Durham, NC, USA; 2North Carolina State University, Raleigh, NC, USA
10:45 a.m. T162
Recombinant vaccine could control ND problem in high ND challenged area
Husam Bakri1, Entisar Al-Hallaq2 1MSD-Animal Health, Dubai, United Arab Emirates; 2MSD-Animal Health, Amman, Jordan

12:00 p.m. Milton L. Dendy Keynote Address B-313
Can vaccines create hot viruses? Lessons from Marek’s disease
Andrew Read* Pennsylvania State University, State College, PA, USA

1:00 p.m. B-312

1:00 p.m. B313
Metabolism & Nutrition VI
Chair: Dr. Brett Lumpkins, Southern Poultry Research, Inc.
Room Number: B-313
Tuesday, January 27, 2015
7:30 a.m. T163
Effects of fumonisins on turkey and the efficacy of a mycotoxin deactivating enzyme
Verena Starkl*1, Sabine Masching2, Simone Schramberger1 BIOMIN Holding GmbH, Austria, Herzogenburg, Austria; BIOMIN Holding GmbH, Austria, St. Pölten, Austria; BIOMIN Holding GmbH, Austria, Vienna, Austria

7:45 a.m. T164
Effects of soybean meal source and protease on energy and nutrient digestibility in broiler chickens
Catarina Stefanelli1, Sergio Luiz Vieira1, Barbara Mallmann1, Heitor Rios1, Liliane Borsatti1, José Otávio Bertí Sorbara2, Rafael Gustavo Hermes1 UFRGS, Porto Alegre, Brazil; DSM Nutritional Products, São Paulo, Brazil; DSM Nutritional Products, Porto Alegre, Brazil

8:00 a.m. T165
Evaluation of a thermostable xylanase in broilers fed different types of diets
Fenglan Yan1, Merecedes Vazquez-Anón1, Drew Lichtenstein1, Jonny Lyon1 Novus International Inc., St. Charles, MO, USA; Verenium Corporation, San Diego, CA, USA

8:15 a.m. T166
The use of carbohydrases on broilers diets including 10% barley leads to the same productive performance as a standard Corn-SBM based diet.
Rafael Hermes1, Sebastiana C. C. Azevedo2, Joao Luiz Kil1, Vitor B. Fassina2, Douglas Haese2, Dailton P. Rosin1, Jose Otavio B. Sorbara1 DSM Nutritional Products, São Paulo, Brazil; Universidade Vila Velha, Vila Velha, Brazil; Centro de Tecnologia Animal - CTA, Vila Velha, Brazil

8:30 a.m. T167
A phytogenic feed additive with esters of short and medium chain fatty acids can replace in-feed antibiotics in broilers
Jan Dirk van der Klis1, Leopold Jungbauer Delacon Biotechnik GmbH, Steyregg, Austria

8:45 a.m. T168
The efficacy of a xylanase vs. a complex of carbohydrases on the growth performance of turkey hens fed a wheat-soybean meal based diet from 0 to 84 days-of-age
J.L. Grimes1, A.C. Fahrenholz1, I.B. Barasch1, C.E. Evans1, S. Gately2, N. Sriperm2, S.B. Essick1, R.B. Shirley1 North Carolina State University, Raleigh, NC, USA; Adisseo USA, Inc., Alpharetta, GA, USA

9:00 a.m. T169
Fiber and nutrient retention responses of supplemental xylanase in broiler chickens fed wheat based diets are independent of the acclimatization period to test diets
Eliejb Kiarie1, Luis Romero1, Ravi Ravindran2 DuPont Industrial Biosciences-Danisco Animal Nutrition, Marlborough, United Kingdom; Massey University, Palmerston North, New Zealand

9:15 a.m. T170
Effects of protease and glucanase on nutrient digestibility of soybean meal in broiler chickens
Sergio Luiz Vieira1, Catarina Stefanelli1, Gabriela de Oliveira Santiago1, Natália Chaves Serafini1, José Otávio Berti Sorbara2, Rafael Gustavo Hermes1 UFRGS, Porto Alegre, Brazil; DSM Nutritional Products, São Paulo, Brazil

9:30 a.m. T171
The effect of a protease and a carbohydrase on true ileal amino acids digestibility.
Rodrigo Knop Guazzi Messias1, Luiz Fernando Teixeira Albino1, Sandra Carla Saldugero1, Horácio Santiago Rostagno1, José Otavio Sorbara2, Rafael Hermes2 Universidad Federal de Viçosa, Viçosa, Brazil; DSM Nutritional Products, São Paulo, Brazil

9:45 a.m. T172
Eimeria acervulina infection decreases growth, plasma carotenoids, and apparent ileal amino acid digestibility in broiler chicks
Samuel Rochell1, Ariane Helmbrecht2, John Thomson3, Terri Parr4, James Usry4, Carl Parsons1, Ryan Dilger1 University of Illinois, Urbana, IL, USA; Evonik Industries, Hanau-Wolfgang, Germany; Evonik Corporation, Kennesaw, GA, USA; Micronutrients, Indianapolis, IN, USA
10:00 a.m. T173
Evaluation of Xylanase and Poultrygrow 250™ (a Protease Enzyme) Alone or in Combination in a Reduced Density Broiler Diet
Brett Lumpkins1, Greg Mathis2, J.C. Bodin3, Ludovic Lahaye3 1Southern Poultry Research, Inc., Athens, GA, USA; 2Jefo, Saint-Hyacinthe, QC, Canada

10:15 a.m. T174
The effect of exogenous phytase and xylanase on dietary energy and nutrient digestibility for broiler chickens
Waseem Mirza1, Vasil Pirgozliev1, Paul Rose1, Mike Bedford2 1The National Institute of Poultry Husbandry, Harper Adams University, Newport, Shropshire TF10 8NB, Shropshire, United Kingdom; 2AB Vista Feed Ingredients, Woodstock Court, Blenheim Road, Marlborough Business Park, Marlborough, Wiltshire, SN8 4AN, UK, Marlborough, United Kingdom

10:30 a.m. T175
Effects of B-mannanase on nutrient utilization in young broilers fed diets containing variable levels of B-mannan
Justina Caldas1, Jinrong Wang1, Karen Vigne1, Nirun Boonsinchai1, Andrew Magnuson1, Monticha Putsakum1, Judith England1, Craig Coo1 1University of Arkansas, Fayetteville, AR, USA; 2School of Agriculture and Cooperatives, Nonthaburi, Thailand

10:45 a.m. T176
Protease supplementation and reduction of crude protein and methionine + cystine in diets of laying hens from 21 to 44 weeks of age
Diana Suckeversi1, Douglas Emygdio de Faria1, Daniel Faria Filho1, Leandro Félix Demuner1, Julian Andres Muñoz2, José Otávio Sorbara2, Rafael Hermes2, Vitor Barbosa Fascino2 1Faculty of Animal Science and Food Engineering, University of Sao Paulo, Pirassununga, Brazil; 2DSM Nutritional Products, Pirassununga, Brazil

11:00 a.m. T177
Influence of a phytogenic blend on nutrient digestibility and growth performance in broiler chickens
Ganapathi Raj Murugesan1, Christine Hunger2, Carina Schieder2, Klaus Manner3, Jurgen Zentek3 1BIOMIN America Inc., San Antonio, TX, USA; 2BIOMIN Holding GmbH, Herzogenburg, Austria; 3Freie University of Berlin, Berlin, Germany

11:15 a.m. T178
Effect of Hemicell HT™ enzyme on the immune system of chickens and their performance
Nannette Olmeda Geniec1, Fatemeh Alemi2, Kirk Klasing2 1Elanco Animal Health, Aston, PA, USA; 2University of California Davis, Davis, CA, USA

11:30 a.m. T179
Impact of dietary mannan-oligosaccharide (Bio-mos®cess) on productive performance, immune status and control of necrotic enteritis in broiler chickens
Mohamed Ahmed Tony1, Ahmed Abd El-Hadi2, Mohamed Mamdouh Hamoud1 1Department of Nutrition and Clinical Nutrition, Faculty of Veterinary Medicine, Cairo University, Giza, Egypt; 2Poultry Production Following Sector, Agrarian Reform, Giza, Egypt; 3Department of Poultry Diseases, Faculty of Veterinary Medicine, Cairo University, Giza, Egypt

11:45 a.m. T180
Performance evaluation of commercial broilers fed Algamune™ZPC10, a zinc polysaccharide complex containing beta-1,3-glucan derived from microalgae
Geoff Horst1, Robert Levine1, Karen Christensen2 1Algal Scientific Corporation, Northville, MI, USA; 2OK Industries, Fort Chaffee, AZ, USA

12:00 p.m. Milton L. Dendy Keynote Address B-313
Can vaccines create hot viruses? Lessons from Marek’s disease
Andrew Read Pennsylvania State University, State College, PA, USA

1:00 p.m. SCAD Business Meeting B-312
1:00 p.m. SPSS Business Meeting B313
Environmental Management III
Chair: Dr. Jacob Lum, Pacific Vet Group
Room Number: B-314
Tuesday, January 27, 2015

8:15 a.m. T181
Unique Gasification Process for Litter Generating Energy and Fertilizer
Jerod Smeek* DenYon LLC, Webster, IA, USA

8:30 a.m. T182
Methods to evaluate efficacy of In-Ovo Marek’s vaccination
Pieter Kuhne* MSD AH, in US Merck AH, Boxmeer, Netherlands

8:45 a.m. T183
Comparative effects of in ovo versus subcutaneous vaccination and pre-placement holding time on post-hatch broiler performance
E. David Peebles1, Taylor Barbosa2, Timothy Cummings2, John Dickson2, Sharon Womack1
1Mississippi State University, Mississippi State, MS, USA; 2Zoetis, Research Triangle Park, NC, USA

9:00 a.m. T184
Minimizing reduction in average daily gain in broiler chicks following the use of anticoccidial vaccines through concomitant treatment with a lactic acid bacteria-based probiotic
Matthew Faulkner1, Jacob Lum2, Jose Vicente3, Ross Wolfenden2 pacificvetgroup.com, Fayetteville, AR, USA; 3Pacific Vet Group, Fayetteville, AR, USA

9:15 a.m. T185
Comparing the Bioactivity of two 25-OH-Vitamin D3 Sources (Bio-D® and Hy-D®) with Commercial or NRC Diet Formulations for Early Turkey Growth Performance and Bone Mineralization
R. Michael Hulet1, L. A. Kitto1, O. Gutierrez2, J. A. Lee2 1Pennsylvania State University, University Park, PA, USA; 2Huvepharma, Inc., Atlanta, GA, USA; 3Texas A&M University, College Station, TX, USA

9:30 a.m. T186
Application of a specifically selected probiotic at the hatchery improves seven day weight gain as well as mortality in commercial broiler chicks.
Ross Wolfenden, Matthew Faulkner, Anita Menconi, James Barton, Jacob Lum, Jose Vicente Pacific Vet Group, Fayetteville, AR, USA

9:45 a.m. T187
The effect of sulfur inclusion in broiler diets on ammonia levels in poultry litter
Ken Macklin*, Joseph Hess, James Krehling, Laci Mackay, Katrina English, Nathan Frazier Auburn University, Auburn, AL, USA

10:00 a.m. Break

10:15 a.m. T189
Innovative Waste Management Case Study: Converting wastewater and organic waste into nutrient recovery, green energy and water reuse
Laetitia d’Ursel1, Robin Parduyns2 1Waterleau, Costa Mesa, CA, USA; 2Waterleau, Brussels, Belgium

10:30 a.m. T190
Enumeration of water quality indicator bacteria in broiler litter.
Craig Coulfl, Terry Gentryl, Daren Harmel2, Emily Martinl, Sheena Pophaml, Scott Winkler2
1Texas A&M University, College Station, TX, USA; 2USDA-ARS, Temple, TX, USA

10:45 a.m. T191
Trend of Various Egg Quality Traits in Commercial Layers from Field Test Data
Levent Turkmut1, Neil O’Sullivan2, Jesus Arango3, Petek Settar1 1Hy-Line International, Johnston, IA, USA; 2Hy-Line International, Dallas Center, IA, USA

11:00 a.m. T192
Effect of air velocity on laying hen performance and egg quality
Joseph Purswell1, Scott Branton1, Brian Luck2, Jeremiah Davis3 1USDA-ARS Poultry Research Unit, Mississippi State, MS, USA; 2University of Wisconsin, Madison, WI, USA; 3Mississippi State University, Mississippi State, MS, USA
Resource use by hens in enriched colony cages
Richard Blatchford*, Joy Mench University of California, Davis, Davis, CA, USA

National Poultry Improvement Plan Update
Denise Brinson USDA-National Poultry Improvement Plan, Conyers, GA, USA

Can vaccines create hot viruses? Lessons from Marek’s disease
Andrew Read Pennsylvania State University, State College, PA, USA

1:00 p.m. SCAD Business Meeting B-312
1:00 p.m. SPSS Business Meeting B313
Metabolism & Nutrition VII
Chair: Dr. Vivek Kuttappan, University of Arkansas
Room Number: B-315
Tuesday, January 27, 2015
7:30 a.m. T195
Effect of Adding Worm Casting as a Source of Humic Acids on the Feeds of Broiler Chickens
Sergio Gomez Rosales*, Maria De Lourdes Angeles Inifap, Queretaro, Mexico
7:45 a.m. T196
Effect of Adding Different Dietary Levels of Distillers Dried Grains with Solubles (DDGS) on Productive Performance of Broiler Chicks
Sherif Hassan*, Abdulaziz Al Asqil King Faisal University, Al-Ahsa, 31982, Saudi Arabia
8:00 a.m. T197
Metabolizable energy of diets containing wheat DDGS supplemented with four levels of xylanase when fed to laying hens
I.M. Whiting1, V.R. Pirgozliev2, S.P. Rose1, A.M. Mackenzie1, A.M. Amerah1 1Harper Adams University, Shropshire, United Kingdom; 2Danisco Animal Nutrition, Wiltshire, United Kingdom
8:15 a.m. T198
Optimal inclusion rates of low-fat distillers dried grains with solubles (LF-DDGS) in male broilers aged 28 to 42 d of age
E.J. Kim*, J.L. Purswell, S.L. Branton ARS-USDA Poultry Research Unit, Mississippi State, MS, USA
8:30 a.m. T199
Determination of AME of soybean oil industry by-products: acidulated soapstock, glycerin, lecithin and their blend
Liliane Borsatti*, Sergio Luis Vieira, Silvana Rauber, Catarina Stefanello, Barbara Mallmann, Cesar Pontin Federal University of Rio Grande do Sul, Porto Alegre, Brazil
8:45 a.m. T200
Combinations of by-products from the soybean oil industry AME and plasma triglyceride of broilers
Liliane Borsatti1, Sergio Vieira1, Heitor Rios1, Patricia Soster1, Pedro Ferzola1, Edgar Oviedo-Rondón1 1Federal University of Rio Grande do Sul, Porto Alegre, Brazil; 2North Carolina States University, Raleigh, NC, USA
9:00 a.m. T201
Field observation: contamination of imported yellow corn with raw soybeans is an additional source of trypsin inhibitors contributing to the occurrence of outbreaks of rapid feed passage in broiler chickens.
Nelson Ruiz1, Nelson Ruiz1, Jorge Castillo2, Jhon Freedy Suárez2, Leonardo Naranjo2, Fabiola de Belalcázar2 1Nelson Ruiz Nutrition, LLC, Suwanee, GA, USA; 2Jorge B Castillo Consulting Inc., Cambridge, ON, Canada
9:15 a.m. T202
Enterococcus faecium improves broiler performance when added to the drinking water
Anée Berg Kehlet*, David Harrington Chr. Hansen A/S, Hørsholm, Denmark
9:30 a.m. T203
Comparison of serum fluorescein isothiocyanate-dextran (FITC-d) levels in various gut inflammation models in broiler chickens
Vivek Kuttappan1, Rosario Galarza-Seeber1, Amanda Wolfenden1, Karen Wedekind2, Jeffery Essobar1, Eduardo Vicia1, Juan Latorre1, Olivia Faulkner1, Guillermo Tellez1, Billy Hargis1, Mercedes Vazquez-Amor1, Lisa Bielke1 1University of Arkansas, Fayetteville, AR, USA; 2Novus International Inc., St. Charles, MO, USA
9:45 a.m. T204
Performance of broiler chickens fed Bacillus subtilis in diets with reduced metabolizable energy
Anée Berg Kehlet1, Greg Mathis1, David Harrington1 1Chr. Hansen A/S, Hørsholm, Denmark; 2Southern Poultry Research, Inc., Athens, GA, USA
10:00 a.m. T205
Role of a candidate Bacillus subtilis direct-fed microbial on digesta viscosity, bacterial translocation and bone mineralization in neonatal poults fed with a rye-based diet
Guillermo Tellez*, Juan Latorre1, Xochitl Hernandez-Velazco1, Jose Vicente2, Ross Wolfenden3, Billy Hargis4
1University of Arkansas, Fayetteville, AR, USA; 2UNAM, Mexico City, Mexico; 3PVG, Fayetteville, AR, USA; 4UA, Fayetteville, AR, USA

10:15 a.m. T206
Feeding a Buttiauxella phytase and a 3-strain Bacillus direct-fed microbial (DFM) combination improves broiler performance
Luke Barnard1, Luis Romero1, Olayiwola Adeola1, Danisco Animal Nutrition - DuPont Industrial Biociences, Marlborough, United Kingdom; 2Purdue University, West Lafayette, IN, USA

10:30 a.m. T207
Effects on performance of lysine levels and nucleotide source combined with yeast (Saccharomyces cerevisiae) cell wall supplementation in broiler diets
Melina Aparecida Bonato1, Lúcio Francelino Araújo2, Ricardo Luis Carmona Barbalho3, Edney Pereira dos Silva1
1 ICC Industrial Comércio Importação e Exportação Ltda., São Paulo, Brazil; 2Faculdade de Zootecnia e Engenharia de Alimentos - Universidade de São Paulo, Pirassununga, Brazil; 3ICC Industrial Comércio Exportação e Importação Ltda., São Paulo, Brazil; 4Faculdade de Ciências Agrárias e Veterinárias - Universidade Estadual Paulista, Jaboatobal, Brazil

10:45 a.m. T208
Influence of organic trace minerals on performance, carcass yield and excretion of broilers in summer season
Douglas Farina1, Amanda Caniatto2, Vinicius Caetano2, Leandro Demuner2, Bruna Pacheco3
1Faculdade de Zootecnia e Engenharia de Alimentos - Universidade de Sao Paulo (USP), Pirassununga, Brazil; 2FZEA/USP, Pirassununga, Brazil

11:00 a.m. T209
B. amyloliquefaciens probiotic supplementation compensates reduction of energy and aminoaids in poultry diets
Alvaro Ortiz1, Saksit Srinongkote2, Pilar Honrubia2, Juan José Mollo1
1 NOREL S.A., Madrid, Spain; 2Bangkok Animal Research Center CO., LTD., Bangkok, Thailand; 3NOREL S.A., León, Spain

11:15 a.m. T210
A mixture of medium chain fatty acids slows down transmission of Salmonella between broiler chickens
Manu De Laet1, David Hermans, Rob Goedegebure, Renato Costa Nuscience Group, Drongen, Belgium

11:30 a.m. T211
A mixture of medium chain fatty acids slows down transmission of Salmonella between broiler chickens
Manu De Laet1, David Hermans, Rob Goedegebure, Renato Costa Nuscience Group, Drongen, Belgium

11:45 a.m. T212
Effect of feeding organic acids as antibiotic replacer to broiler chickens challenged with salmonella
Aloeldein Abudabos
King Saud University, Riyadh, Saudi Arabia

12:00 p.m. Milton L. Dendy Keynote Address B-313
Can vaccines create hot viruses? Lessons from Marek’s disease
Andrew Read
Pennsylvania State University, State College, PA, USA
Poster Session
Chair: Dr. Greg Fraley, Hope College

P213
Avian hepatitis E virus infection in a broiler-breeder flock in Jordan
Saad Gharabeh1, Nadim Amarir2 1Jordan University of Science and Technology, Irbid, Jordan; 2Boehringer Ingelheim, Amman, Jordan

P214
Newcastle disease and infectious bronchitis IgA antibodies titering by ELISA test in tracheal swab and lachrymal fluid samples
Ruben Merino1, Patrick Dominguez2, Nadia Prado3, Viviana Urdaneta2, Iván Pineda1, Nancy López1, Teresa Olivares1 1Universidad Nacional Autónoma de México, México, Mexico; 2Universidad Nacional de Colombia, Bogotá, Colombia

P215
Karen Lopez1, David Halvorson1, Timothy Goldsmith1, Mary Hourigan2, Carol Cardona1 1University of Minnesota College of Veterinary Medicine, St. Paul, MN, USA; 2University of Minnesota, St. Paul, MN, USA

P216
Effect of diluting a commercial Newcastle disease recombinant vaccine on the protection of broiler chickens challenged with a virulent strain of Newcastle disease virus.
Ignacio Osorio1, Alma Delia González2, Rodrigo Casante2, Eduardo Lucio2, Rubén Merino1 1Universidad Nacional Autónoma de México, México, Mexico; 2Investigación Aplicada S. A. de C. V., Tehuacán, Mexico

P217
The evolution of respiratory diseases in poultry farms from Romania during 2013 - 2014 determined by ELISA and PCR assays
Leigh Nagy1, Daniela Botus1, Jarrett Cotter2, Virgilia Popa2, Marian Culcescu2, Eduard Caplan3, Jenica Bucur2, Gheorghe Stratulat2 1Affinitech Ltd, Bentonville, AR, USA; 2Farmavet SA, Bucharest, Romania; 3National Society Pasteur Institute, Bucharest, Romania

P218
Benefits medicating in drinking water stabilized
Nancy Christy1, Josue Sanchez2, Jorge Coss3, Gabriel Gomez1 1Boehringer Ingelheim, Mexico, Mexico; 2Boehringer Ingelheim, Queretaro, Mexico; 3Boehringer Ingelheim, Puebla, Mexico; 4Alcer, Mex, Mexico

P219
Comparison of various levels of the direct fed microbial Opti-bac L on broiler chickens during a natural Clostridium perfringens exposure
Marie Schirmacher1, Diego Paiva1, Christa Honaker1, Alamanda Calvert1, Audrey McElroy2 1Virginia Polytechnic Institute and State University, Blacksburg, VA, USA; 2Texas A&M University, College Station, TX, USA

P220
Evaluating the pathogenicity of the infectious bronchitis virus Arkansas 99 vaccine
Frances Ashby1, Deborah Hilt, Mark Jackwood, Brian Jordan The University of Georgia, Athens, GA, USA

P221
Andres Rodriguez-Avila1, Javier Gomez2, Gerardo Quiniones-Chois2, Laila Bernat3 1BioARA S.A., Guaduas, Colombia; 2Universidad de la Salle, Bogota, Colombia

P222
In vitro cell screen assay of nickel (II) sulfate and cadmium sulfate showed growth inhibition of Histomonas meleagridis
Anna Kenyon1, Miguel Barrios, Robert Bedstead The University of Georgia, Athens, GA, USA
Sentinel Cells and Agglomeration in Circulating Blood are Indications of Stress
Paul Cotter* Cotter Laboratory, Arlington, MA, USA

Regulatory considerations for therapeutic interventions against histomoniasis (Blackhead disease) in turkeys
Prajwal Regmi1, Ruby Hsieh2, Jeffrey Gilbert1, Janis Messenheimer1 1 Center for Veterinary Medicine, Food and Drug Administration, Rockville, MD, USA; 2University of Minnesota, Minneapolis, MN, USA

Resistance Profile of Salmonella Typhi and Salmonella Paratyphi in Relation to Antimicrobial Agents
Vitor Franceschini1, Gustavo Savoldi2, Ewerton Zanellato3, Andre Grossi4, Guilherme Severo5, Erica Luca3, 1 Farmabase Saúde Animal, Campinas, SP, Brazil; 2Farmabase Saúde Animal, Chapecó-SC, Brazil; 3Farmabase Saúde Animal, Ituajé-SC, Brazil; 4 Farmabase Saúde Animal, Jaguariuna-SP, Brazil; 5Instituto Federal do Triângulo Mineiro, Uberlândia-MG, Brazil

Evaluation of intestinal absorption, skin deposition and digestibility of xanthophylls in broilers challenged with Eimeria acervulina, E. tenella, and E. maxima
Xochitl Hernandez-Velasco1, Nancy Frade-Negrete2, Benjamin Fuente-Martínez2, Manuel Quiroz-Pesina2, Ernesto Avila-Gonzalez2 1Universidad Nacional Autónoma de México (UNAM), Mexico City, Mexico; 2Departamento de Medicina y Zootecnia de Aves, FMVZ, UNAM, Mexico, Mexico; 3Centro de Enseñanza, Investigación y Extensión en Producción Avícola, FMVZ-UNAM, Mexico City, Mexico; 4Industrias VEPINSA S.A. de C.V., Mexico City, Mexico

Determination of Minimum Inhibitory Concentration (MIC) for Halquinol and its Isomers 5,7-Dichloro-8-Hydroxyquinoline and 5-Chloro-8-Hydroxyquinoline in Relation to Isolates for Escherichia Coli, Salmonella Gallinarum and Salmonella Enteritidis.
Alexandre Machado1, Marcia Milare2, Daniela Carneiro2, Sara Zacca3 1 Farmabase Saúde Animal, Campinas-SP, Brazil; 2 Farmabase Saúde Animal, Jaguariuna-SP, Brazil

Outbreak of marek’s disease virus in game fowl (fighting cocks) and its analysis from the haematological point of view. A case report
Yasmin Martínez59 Universidad Nacional Autónoma de México- Facultad de Medicina Veterinaria y Zootecnia, México, Mexico

Evaluation of the effectiveness of vaccination against marek’s disease (em) determined by the presence of hvf vaccine virus through endpoint pcr technique in game birds (Gallus gallus)
Norma Patricia Ficachi García59, Nestor Ledesma Martinez  UNAM, Mexico, Mexico

Novel statistical approaches toward Salmonella surveillance in live and processed poultry
Maurice Pitesky* University of California Davis, Davis, CA, USA

Effect of thermal manipulation during fetal phase on adaptative capacity of broiler chickens Viviane Souza Morita59, Vitor Rosa de Almeida, Isabel Cristina Boleli São Paulo State University, UNESP, Jaboticabal, Brazil, Jaboticabal, Brazil

Nutritional Effects on Parent Stock W-36 and its Influence on the Sex Ratio and Development of Offspring
McCaide WootenUG, Zachary Lowman, Christopher Ashwell North Carolina State University, Raleigh, NC, USA

Identification of recessive mutations that cause early embryonic deformities in the Athens Canadian Random bred line maintained at the University of Georgia
Jason Payne59, Clayton Wing, Robert Beckstead The University of Georgia, Athens, GA, USA
P235
Effect of In Ovo injection of vitamin D on hatchability, ash content, mineral composition and bone strength of chicks
Thays Quadros1, Karina Duarte1, Carla Domingues1, Rafael Marques1, Elaine Santos1, Diana Castilhano1, Sarah Sgavioli1, Juan Alva1, Otto Junqueira2 1Faculty of Agriculture and Veterinary Sciences, Jaboticabal, Brazil; 2Faculty of Agriculture and Veterinary Sciences, Jataí, Brazil

P236
Effects of the in ovo injection of organic zinc, manganese, and copper on the hatchability and bone parameters of broiler hatchlings
Tiago Oliveira1, Elizabeth Kim2, Anna Caixeta1, E. David Peebles3 1Universidade Federal de Lavras, Missisippi State University, Starkville, MS, USA; 2USDA, Starkville, MS, USA; 3Mississippi State University, Starkville, MS, USA

P237
Parental sex effect of parthenogenesis on egg weight in mated Chinese Painted quail
Courtney Wades1,2, Holly Parker, Aaron Kiess, Chris McDaniel Mississippi State University, Mississippi State, MS, USA

P238
The effects of Bac-D10 when used as a water additive in broiler chicks supplemented with probiotics
Chelsea Phillips3, Zack Lowman, Christopher Ashwell North Carolina State University, Raleigh, NC, USA

P239
Impact of oral Lactobacillus gavage on seminal and cloacal Lactobacillus concentrations in roosters
Juliana Hirai3, Melissa Triplett, Christopher McDaniel, Aaron Kiess Mississippi State University, Mississippi State, MS, USA

P240
Antimicrobial resistance and biofilm formation in E. coli strains isolated from poultry carcasses in retail stores in several location in Mexico
Margarita Fernanda Gómez Meza1, Cecilia Rosario Cortés Universidad Nacional Autónoma de México, México, Mexico

P241
Effect of bone residue inclusion and poultry species on fat oxidation in rendered meals for pet food
Sara Cutler Kemin Industries, Des Moines, IA, USA

P242
Interaction between water quality and poultry processing efficiency
Ronald Holser Russell Research Center, Athens, GA, USA

P243
Evaluating the correlation between water activity and percentage moisture in rendered protein meals
Sarah Mathe1,2, Charles Starkey2, Cassandra Jones1 1Kansas State University, Manhattan, KS, USA; 2American Proteins, Inc., Cumming, GA, USA

P244
Dripping test to evaluate the quality of frozen chickens’ carcasses sold in northwestern São Paulo State supermarkets, Brazil
Max José Araújo Faria Junior, Carolina de Matos Figueiredo, Guilherme Pedrini Bortolatto, Ilderipes Luiz Carvalho Bossolani, Marcos Franke Pinto, Silvia Helena Venturiol Perri, Manoel Garcia Neto Faculdade de Medicina Veterinária de Araçatuba — UNESP — Univ. Estadual Paulista, Araçatuba, Brazil

P245
Dietary inclusion of docosahexaenoic acid (DHA) rich micro-algae meal on oxidative stability and water-holding capacity of broiler thigh meat during storage
Rebecca Delles1,2, Tuoying Ao2, Mike Ford3, Ryan Samuel1, Youling Xiong2, Anthony Pescatore3, Austin Cantor4, Karl Dawson1 1Alltech, Inc., Nicholasville, KY, USA; 2Alltech, Inc., Lexington, KY, USA; 3University of Kentucky, Lexington, KY, USA; 4University of Kentucky, Lexington, KY, USA
P246
Defecating of broiler carcasses subjected to delayed scalding 1, 2, 4, and 8 hours after slaughter
Caitlin Harris1,2, Dianna Bourassa1, Kimberly Wilson1, R. Jeff Buhr1
1The University of Georgia, Athens, GA, USA; 2USDA-ARS Russell Research Center, Athens, GA, USA

P247
Reduction of Salmonella on chicken skin by the sequential application of chemical treatments and Salmonella lytic bacteriophage preparation
Anuraj Tharadiyil Sukumaran1,2, Chander Shekhar Sharma
1Mississippi State University, Starkville, MS, USA; 2USDA-ARS, Athens, GA, USA

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1Hope College, Holland, MI, USA

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1Hope College, Holland, MI, USA; 2South Crossing Veterinary Center, Caledonia, MI, USA

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1Hope College, Holland, MI, USA

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1University of Maryland Extension, Salisbury, MD, USA; 2University of Maryland Extension, Centreville, MD, USA

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1Anitox Corporation, Lawrenceville, GA, USA; 2USDA-ARS, Athens, GA, USA
LED use in broiler rearing has less impact in birds' performance than fluorescent Light
Rodrigo Garcia*, Fabrício Araujo, Irenilza Naas, Fabiana Caldara, Nilsa Lima, Roselaine Ponso, Carolina Rosa Agrarian Sciences College, Federal University of Grande Dourados, Dourados, Brazil

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John Linhoss*, Jeremiah Davis, Joseph Purswell* Mississippi State University, Starkville, MS, USA; USDA-ARS Poultry Research Unit, Starkville, MS, USA

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Lasheda Brooks*, Jon Moyle, Bill Brown, Brigid McCrea Delaware State University, Dover, DE, USA; University of Maryland, College Park, Salisbury, MD, USA; University of Delaware, Georgetown, DE, USA

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Irenilza de Alencar Naas*, Raquel B. T. Rodrigues da Silva, Rodrigo Garófallo Garcia, Fabiana Caldara Federal University of Grande Dourados, Dourados, Brazil

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Effects of light sources and intensity on growth performance and carcass characteristics of heavy broilers at 56 days of age
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Infrared thermography of Japanese quails reared with different energy densities in the feed
Rodrigo Garcia*, Kelly Nunes, Irenilza Naas, Cinthia Eyng, Fabiana Caldara, Mayara Santana, Luciana Foppa Agrarian Sciences College, Federal University of Grande Dourados, Dourados, Brazil

Quality of Japanese quail eggs (Coturnix coturnix japonica) exposed to artificial lighting with LED different colors
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Effect of pullet limestone particle size on performance and bone health of pullets and laying hens raised in deep litter systems
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1 Agrarian Sciences College, Federal University of Grande Dourados, Dourados, Brazil; 2 Agrarian Sciences College, Federal University of Santa Maria, Santa Maria, Brazil; 3 PasReform of the Brazil, Rio Claro, Brazil; 4 University of Arkansas, Elkins, AR, USA; 5 University of Arkansas, Fayetteville, AR, USA; 6 University of Maryland, Salisbury, MD, USA

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Comparison of egg quality, oxidative stress and expression of heat shock proteins between conventional and free-range hens
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Irenilza Naãs*, Fernanda Flores, Rodrigo Garcia
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Evaluation of two antibody sera against Salmonella serovars that exhibit a broad range of surface antigens via flow cytometry
Stephanie Roito*, Christopher Baker, Pravin Kaldon, Melinda Miller, Steven Ricke
University of Arkansas, Fayetteville, AR, USA; Viviane Biosciences, Pine Bluff, AR, USA

Interrelationships of fungal and bacteria populations within the gastrointestinal tract of laying hens.
J. Allen Byrd
USDA, ARS, Food and Feed Safety Research Unit, College Station, TX, USA

In ovo DNA vaccination with cytokine adjuvants against Newcastle disease virus
Robert Dunwoody*, Stivalis Cardenas-Garcia, Patti Miller, Claudio Afonso
Southeast Poultry Research Laboratory, USDA-ARS, Athens, GA, USA

Behavioral observations of White Leghorn laying hens in aviary versus cage systems.
Ashley Bigge*, Sheila Purdum, Pamela Eusebio-Balcazar
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Dynamics of House Sparrows (Passer domesticus) in Newcastle disease virus transmission within the avifaunal-poultry interface: An epidemiological modeling approach
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University of Georgia, College of Veterinary Medicine, Athens, GA, USA; USDA-ARS Southeast Poultry Research Laboratory, Athens, GA, USA; USDA-ARS Southeast Poultry Laboratory, Athens, GA, USA

Gelling agent reduces chilling in commercial poultry during spray application of biologics
Jacob Lumi*, Jose Luis Vicente-Salvador, Matthew Faulkner, Ross Wollenden
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Can Bio-economic efficiency be affected by heat stress and early thermal conditioning?
Manoel Garcia Neto*, Mayara Maia Rodrigues, Danilo Gualberto Sandre, Lidiane Fancelli
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Comparison Study between Eubiotic and Antibiotic on Broiler Performance under Induced Challenge
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King Abdulaziz City for Science and Technology, Riyadh, Saudi Arabia; King Saud University, Riyadh, Saudi Arabia
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Bruna Boaro Martins*GS1, Ariel Antônio Mendes1, Márcia Regina Fernandes Boaro Martins1, Édina de Fátima Aquiri4, Bauer Oliveira e Alverenga2, Ivan Lee3, Rinaldo José Ortiz1 1São Paulo State University - UNESP, Botucatu, Brazil; 2BioCamp, Campinas, Brazil; 3BioCamp, Botucatu, Brazil

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Dietary supplementation with complexed zinc and manganese on breast meat quality and myopathies of broiler chickens
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Effect of feeding zinc, copper, and manganese from Mintrex® on broiler performance, carcass traits, and skin traits
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Rapid feed passage: why should we reinterpret the urease activity range in soybean meal?
Nelson Ruiz*. Nelson Ruiz Nutrition, LLC, Suwanee, GA, USA

Sensorial evaluation of chicken meat fed with different inulin concentrations
Maria Juárez Silva*, Rocío Salas Montiel, Shalaiko Carlin Valderrabano Instituto Nacional de Ciencias Médicas Y Nutricion Salvador Zubiran, Mexico City, Mexico

Heart weight of broilers supplemented with vitamin D (25-OHD3)
Ibiara Correia de Lima Almeida Paz, Grace Alessandra Araujo Baldo, Edivaldo Antônio Garcia, Andréa Brito Molino, Rodrigo Garafolo Garcia, Javer Alves Vieira Filho Universidade Estadual Paulista “Julio de Mesquita Filho”, Botucatu, Brazil; Universidade Federal da Grande Dourados, Dourados, Brazil

Digestible energy and nutrient availability of diets containing wheat distillers dried grains with solubles (DDGS) when fed to laying hens
I.M Whiting*, V.R Pirgozliev, A.M Mackenzie, A.M Amerah Harper Adams University, Shropshire, United Kingdom; Danisco Animal Nutrition, Wiltshire, United Kingdom

Programmed Nutrition (PN) feeding strategy on the performance and bone quality of brown pullets
Marquisha Paul*, Anthony Pescatore, Tuoying Ao, Lizza Macalintal, Austin Cantor, Mike Ford, Karl Dawson Alltech-University of Kentucky Nutrition Research Alliance, Lexington, KY, USA

Effects of alternative feedstuffs and dietary enzyme on the performance of alternative breeds of chickens
Taijana Fisher*, Anthony Pescatore, Jacqueline Jacob, Austin Cantor, Michael Ford, Tuoying Ao University of Kentucky, Lexington, KY, USA; Alltech, Inc., Nicholasville, KY, USA

Breast meat quality of broilers fed diets with different levels of digestible lysine from 1 to 21 days of age
Thays Quadros*, Karina Duarte, Carla Domingues, Rafael Marques, Elaine Santos, Sarah Sgavioli, Diana Castiblanco, Juan Alva, Henrique Nogueira, Otto Junqueira Faculty of Agriculture and Veterinary Sciences, Jaboticabal, Brazil; Federal University of Goiás, Jataí, Brazil

Two different oils in feeds for broiler; effects on fat digestion
Sagar Paudel*. Swine and avian research program, Nepal Agricultural Research Council Khumaltar Kathmandu Nepal, Kathmandu, Nepal

Multi-Mycotoxin Screening in Feedstuffs
Verena Stark*, Paula Kovalsky, Karin Nährer, Michael Sulyok BIOMIN Holding GmbH, Austria, Herzogenburg, Austria; BIOMIN Holding GmbH, Austria, Vienna, Austria; University of Natural Resources and Life Sciences, Vienna, Austria; Center for Analytical Chemistry, Department of Agriobotechnology (IFA-Tulln), Vienna, Austria

New direct-fed microbial formulation improves broiler performance
Sally Moore*, Jon Rubach, Greg Mathis, Brett Lumpkins, Mitchell Poss Kemin Industries, Des Moines, IA, USA; Southern Poultry Research, Athens, GA, USA
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Monica Megumi Aoyagi1, José Roberto Sartori1, João Carlos Pinheiro Ferreira1, Rupert Palme2, Paola Gentile Serpa1, Juliana Cristina Ramos Rezende1, Maria Márcia Pereira Sartori1, Vitor Barbosa Fasina1, Guiherme Aguiar Mateus Pasquali1, Eric Portilho Araujo1, Carla Martins Queiroz1 1Faculdade de Medicina Veterinária e Zootecnia - UNESP, Botucatu, Brazil; 2University of Veterinary Medicine, Vienna, Vienna, Austria

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Andrew Magnusson12, Nirun Boonsinchai, Justina Caldas, Karen Vignale, Judy England, Craig Coon University of Arkansas, Fayetteville, AR, USA

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Dried Chlorella vulgaris algae as a feed ingredient for broiler chickens.
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Evaluation of the inclusion of a thermostable xylanase in broiler corn-soy diets
Kyle Brown1, Jake Pieniazek1, Kyle Smith1, Rocky Latham1, Cody Flores1, Frances Yan2, Jonny Lyon2, Jason Lee1 1Texas A&M University, College Station, TX, USA; 2Novus International, St. Charles, MO, USA; 3Verenium Corporation, San Diego, CA, USA

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Juan Jose Mallo1, Monica Puyalto2 1Norel S.A., Madrid, Spain; 2Norel S.A., Barcelona, Spain
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Phuong Nguyen1, Elisabeth Greene1, Geraldine Huff2, Alissa Piekarski1, Annie Donoghue2, Nicholas Anthony1, Walter Botte1, Sami Dridi1 1University of Arkansas, Fayetteville, AR, USA; 2USDA, Fayetteville, AR, USA

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Juan Jose Mallo1, Enrico Gentilini2, Monica Puyalto2,3 Norel S.A., Madrid, Spain; 2OrSell S.L., Modena, Italy; 3Norel S.A., Barcelona, Spain

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Peter Ishola1,2, Elisabeth Greene1, Walter Botte1, Cline Mark2, Elizabeth Gilbert2, Alissa Piekarski1 1University of Arkansas, Fayetteville, AR, USA; 2Virginia polytechnic Institute and State University, Blacksburg, VA, USA

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Bruno Carvalho1,2, Melissa Hannas, Luiz Fernando Albino, Leandro Silva, Matheus Santana, Helvio Ferreira Júnior Federal University of Viçosa, Viçosa, Brazil

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Priscilla Zorzetto1, Wei Zhai1, David Harrington2, Aaron Kiess1, Kelley Wamsley1 Mississippi State University, Mississippi State, MS, USA; 2Chr. Hansen A/S, Hoersholm, Denmark

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José Roberto Sartori1, Fabiana Golin Luiggi1, Ricardo Fasanaro1, Maria Maria Pereira Sartori1, Priscila Cavalc de Araujo1, Monica Megumi Aoyagi1, Ivan Mailinch Gonçalves Pereira de Sourza1, Vanessa Cristina Pelicia1, Aline Montindi Cali Rancanici1 1Faculdade de Medicina Veterinária e Zootecnia - UNESP, Botucatu, Brazil; 2Faculdade de Ciências Agronômicas - UNESP, Botucatu, Brazil; 3Universidade de Brasília - UnB, Brasília, Brazil

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Fernando Perazzo Costa1, Cristina Lima1, Eduardo Nogueira2, Danilo Cavalcante1, Edgar Ishikawa2, Gabriel Pessoa2, Matheus Lima1 1Federal University of Paraiba, Areia, Brazil; 2Universidade do Sul de Bahia, Taíapeira de Freitas, Brazil

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Fabiana Golin Luiggi1, Ricardo Fasanaro1, Vitor Barbosa Fasina1, Maria Maria Pereira Sartori1, Aline Montindi Cali Rancanici2, Everton Moreno Muro2, Natani Cruz Alexandre2, Ana Cristina Stradiotti2, José Roberto Sartori1 1Faculdade de Medicina Veterinária e Zootecnia - UNESP, Botucatu, Brazil; 2Faculdade de Ciências Agronômicas - UNESP, Botucatu, Brazil; 3Universidade de Brasília - UnB, Brasília, Brazil

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Liris Kindlein*, Tamara Zinn Ferreira, Renato Sesterhenn, Sérgio L. Vieira, David Drienmeier, Vladimir P do Nascimento, Roberto D. Sainz
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Fernando Perazzo Costa*, Gabriel Pessoa, Eduardo Nogueira, Edgar Ishikawa, Matheus Lima
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Lizza Macalintal*, Tuoying Ao, Anthony Pescatore, Austin Cantor, Michael Ford, Karl Dawson
1 Alltech, Inc., Nicholasville, KY, USA; 2 University of Kentucky, Lexington, KY, USA

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Relationship of bone homeostasis markers and genetic line to eggshell quality
Justina Caldas, Phiphob Sodsee, Karen Vignale, Nirun Boonsinchari, Monticha Putsakumj, Ethan Holt, Judith England, Craig Coon
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1 The University of Georgia, Athens, GA, USA; 2 Huvepharma, Inc, Atlanta, GA, USA

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Samuel Nahashon*, Ashley Payne, Michael Ivy
Tennessee State University, Nashville, TN, USA

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Ying You*, Yao Li
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Evaluation of Tartrate Resistant Acid Phosphatase & Bone Alkaline Phosphatase as blood markers for breeder hen egg production and quality
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University of Arkansas, Fayetteville, AR, USA

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The Study of Star Anise, Ginger and Salvia Miltiorrhiza on Antioxidant Status and Vitamin Stability
Chongwu Yang*, Zaibin Yang, Shuzhen Jiang
1 College of Life science, Shandong Agricultural University, Tai-an, China; 2 College of Animal science, Shandong Agricultural University, Tai'an, China
Milton L. Dendy Keynote Address
B313
Tuesday, January 27
Noon
Dr. Andrew Read, Pennsylvania State University, State College, PA
Chair: Dr. Mark Jackwood, University of Georgia, Athens, GA

Poster Reception
B308-309
Monday, January 26
4:00 p.m.
Chair: Dr. Mary M Beck, Mississippi State University

USPOULTRY Presentation
B313-314
Monday, January 26
3:30 p.m.
Chair: Dr. John Glisson, USPoultry

SCAD Business Meeting
B-312
Tuesday, January 27
1:00 p.m.
Chair: Dr. Monique Franca, UGA

SPSS Business Meeting
B-313
Tuesday, January 27
1:00 p.m.
Chair: Dr. Stacey Roberts, Akey Nutrition
2014 SPSS Student Awards:

Nutrition
Karen Vignale, University of Arkansas
Simeen Johal, Cal Poly San Luis Obispo
K.J. Meloche, Auburn

Environment Management
Juan Latorre, University of Arkansas

Processing and Products
Marouj Al-Aljeela, Texas A&M University

Physiology
Adedayo Sokale, Mississippi State University

Posters
Drew Morris, University of Georgia

Don R. Sloan Undergraduate Research Award Recipient
Amy Mayer, Pennsylvania State University

Don R. Sloan Honorable Mention
Jenna Scott, North Carolina State University
Corissa Steimling, Pennsylvania State University

Undergraduate Research Award Participants
Gustavo Perdoncini, Fed. U. of Rio Grande do Sul
Amy Mayer, Pennsylvania State University
Corissa Steimling, Pennsylvania State University
Nayara Pelici, Mississippi State University
Midian Nascimento, Mississippi State University
Rosana Hirai, Mississippi State University
Robert Sellers, Mississippi State University
Hunter Walters, Texas A&M University
Marta Vigue, Cal Poly San Luis Obispo
Christopher Eagleson, University of Arkansas
Jenna Scott, North Carolina State University
Kyle Smith, Texas A&M University
Tucker Allcorn, Texas A&M University

Alltech Student Manuscript Award
A. Menconi, University of Arkansas

2014 SCAD Student Awards:

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Julia McElreath, UGA

Best Oral Presentation
A. Menconi, University of Arkansas

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D. Wages
P. Miller
O. Faulkner
Dr. Lisa Bielke
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<th>Year</th>
<th>Chairman</th>
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<td>1931-32</td>
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<td>1980-81</td>
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