Monday, March 2, 2020

POSTER SESSION I
12:30 PM - 1:30 PM
Grand Ballroom Foyer

12:30 p.m. PSI-1  Effects of choline on immune cell function in growing cattle supplemented with guanidinoacetic acid and creatine
Hope D. Auřemberge 1, Madeline S. Grant 1, Barry J. Bradford 1, Laman K. Mamedova 1, Evan C. Titgemeyer 1
1Kansas State University

12:30 p.m. PSI-2  Effects of extended release eprinomectin on heifer performance while grazed on endophyte-infected tall fescue or housed in drylot
Julissa Navarrete 1, Sarah Graham 2, Lucas Neira 2, Joshua C. McCann 2, Daniel W. Shike 2
1Illinois State University, 2University of Illinois

12:30 p.m. PSI-3  Effects of housing cow-calf pairs in drylots vs pasture during the summer on cow performance
Keiffer Sexton 1, Megan Myerscough 2, Wesley Chapple 2, William T. Meteer 2, Keela Trennepohl 1, Joshua C. McCann 2, Daniel W. Shike 2
1Western Illinois University, 2University of Illinois

12:30 p.m. PSI-4  Effects of increasing metabolizable protein on starch digestion in lightweight beef cattle
Cierra N. Crowell 1, Sara Tondini 2, Miles Redden 2, Daniel W. Shike 2, Joshua C. McCann 2
1Southern Illinois University, 2University of Illinois

12:30 p.m. PSI-5  Effects of rest period prior to processing on anthelmintic response during the receiving period in feedlot heifers
Nicole Stafford 1, A J. Tarpoff 1, Miles Theurer 2, Tom Jones 3, Cassandra K. Jones 1
1Kansas State University, 2Veterinary Research & Consulting Services, 3Hy-Plains Feedyard
12:30 p.m.  PSI-6  Effects of rest period prior to processing on vaccine response and blood metabolites in feedlot heifers.
Macie Reeb 1, A J. Taroff 1, Miles Theurer 2, Tom Jones 3, Cassandra K. Jones 1
1Kansas State University, 2Veterinary Research & Consulting Services, 3Hy-Plains Feedyard

12:30 p.m.  PSI-7  Evaluation of beef heifers finished in a bedded hoop barn versus an outdoor feedlot in Mid-Missouri – 2-year summary
Taylor M. Garnett 1, Bruce C. Shanks 1, Jeremia J. Markway 1, Doug Moeller 1, George R. Pettig 1, James D. Caldwell 2
1Lincoln University, 2Delacon USA, Inc.

12:30 p.m.  PSI-8  Evaluation of two burning dates and addition of spices on stocker cattle gains on tallgrass native range
Juliette Toothaker 1, Jaymelynn Farney 1
1Kansas State University

12:30 p.m.  PSI-9  Factors associated with birthing interval and total farrowing duration in sows and gilts within a production setting
Madison Kovarna 1, Jorge Y. Perez-Palencia 1, Crystal L. Levesque 1
1South Dakota State University

12:30 p.m.  PSI-10  Genetic parameters for soybean allergy response in divergently-selected pigs
Yuwen Chen 1, Allan P. Schinckel 1, Terry Stewart 1, Luiz Brito 1, Hinayah Rojas de Oliveira 1, Amanda Alvarenga 1
1Purdue University

12:30 p.m.  PSII-15  Hydrogenation of palm kernel oil, palm oil, and soybean oil on energy and lipid digestibility, and performance when fed to 20 to 40 kg pigs
Sophia Breuer 1, Brian Kerr 2
1Iowa State University, 2USDA-ARS-NLA

12:30 p.m.  PSI-11  Moisture Content Throughout the Pelleting Process and Subsequent Effects on Pellet Quality
Rachel Kort 1, Haley Wecker 1, Chance Fiehler 1, Aundria Ogles 1, Jared Froetschner 2, Charles R. Stark 1, Chad B. Paulk 1
1Kansas State University, 2Elanco Animal Health

12:30 p.m.  PSI-12  Performance and carcass measurements by rabbits offered diets with and without a phytogenic feed additive
Kimberly Wilbers 1, Bruce C. Shanks 1, James D. Caldwell 2, Megan Koppen 2, Kevin Adams 2
1Lincoln University, 2Delacon USA, Inc.
12:30 p.m. PSI-13 **The effect of Advanced Digestive Enhancing Protein Plus Technology on growth performance and fecal score in weaning pigs**
Clare McInerney 1, Kathryn Nelson 1, Baylee Close 1, Jamil Talukder 2, Young Dal Jang 1
1University of Wisconsin - River Falls, 2Vets Plus, Inc.

12:30 p.m. PSI-14 **The effect of creep feed and its nutrient level on growth performance in suckling and weaning pigs**
Paige K. Isensee 1, Sarah Albers 1, Lindsey Wichman 1, Autumn Thoma 1, Young Dal Jang 1
1University of Wisconsin - River Falls

**POSTER SESSION II**
12:45 PM - 1:30 PM
Grand Ballroom Foyer

12:45 p.m. PSII-16 **Comparative digestibility of polysaccharide-complexed zinc and zinc sulfate in diets for gestating and lactating sows**
Julia P. Holen 1, Lee Johnston 1, Pedro E. Urriola 1, Jack E. Garrett 2, Gerald C. Shurson 1
1University of Minnesota, 2QualiTech

12:45 p.m. PSII-17 **Comparison of corn ethanol co-products from Brazil and USA apparent total tract digestibility of nutrients in pigs**
Vinicius R. C. Paula 1, Natália C. Milani 1, Cândida P.F. Azevedo 1, Leury J. Souza 1, Anderson A. Sedano 1, Brian Mike 2, Gerald C. Shurson 3, Urbano Ruiz 1
1University of São Paulo, 2FS Bioenergia, 3University of Minnesota

12:45 p.m. PSII-18 **Dietary Strategy for Gilt Development**
Michael E. Johnston 1, Katherine A. McCormick 1, Grant I. Petersen 1, Chris L. Eden 2
1United Animal Health, 2United Animal Health, Inc.

12:45 p.m. PSII-19 **Effect of inclusion level of synthetic lysine, threonine, methionine, and tryptophan in corn-soybean meal and DDGS based diets for grow-finish pigs on growth performance and carcass characteristics.**
Caleb J. Grohmann 1, Michael Ellis 1, Omarh F. Mendoza 2, Caleb M. Shull 2
1University of Illinois, 2The Maschhoffs, LLC

12:45 p.m. PSII-20 **Evaluation of Different Vitamin Concentrations in a Commercial Wean-to-Finish Program**
Robyn Thompson 1, Brandon Knopf 1, Carine Vier 2, Ning Lu 2, Wayne Cast 2, Uislei Orlando 2
1Carthage Innovative Swine Solutions, 2Genus PIC
12:45 p.m.  PSII-21  The Effect of Feeding a LucraFit® Feed Nursery Program without Lactose on Piglet Performance.
Stacie Crowder 1, Terry Weeden 1, Clayton Hankins 1, Terry Meyer 1, Brenda de Rodas 1
1Purina Animal Nutrition

12:45 p.m.  PSII-22  Trends in Mycotoxin Contamination in United States Corn
Erika Hendel 1, Shelby Ramirez 1, Paige Gott 1, G. Raj Murugesan 1, Ursula Hofstetter 2
1BIOMIN America Inc., 2BIOMIN Holding GmbH

POSTER SESSION III
4:45 PM - 5:45 PM
Grand Ballroom Foyer

4:45 p.m.  PSIII-1  A preliminary study to investigate the contribution of different tenderness factors to beef loin, tri-tip and heel tenderness
Colin Chun 1, Wanjun Wu 1, Amelia Welter 1, Travis O'Quinn 1, Geraldine Magnin 1, Michael Chao 1
1Kansas State University

4:45 p.m.  PSIII-2  Considering a large creep pellet as a means to improve suckling and early weaned pig performance
Shannen T. Mahal 1, Jodi M. Morton 1, Jorge Y. Perez-Palencia 1, Crystal L. Levesque 1, Paul Groenewegen 2
1South Dakota State University, 2Masterfeeds

4:45 p.m.  PSIII-3  Effect of Day of Induction on Sow and Piglet Performance
Miranda R. McGuire 1, Jenelle Dunckelberger 2, John Eggert 3, Allan P. Schinckel 1, Egbert Knol 3
1Purdue University, 2Topigs Norsvin USA, 3Topigs Norsvin

4:45 p.m.  PSIII-4  Effect of Housing System and Supplementation of 25-hydroxicholecalciferol (25-OH-D3) on Performance and 25(OH)D3 Serum Levels of Sows during Gestation and Lactation
Bruno Silva 1, Nathalia Oliveira 1, Cristina Sá-Fortes 1, Wagner Araújo 2, Francine Falleiros 3, Adsos Passos 3, Mateus Gonçalves 1, Flávio Rebordões 1, Iara Ataide 1, Valesca Lima 1, Rafaela Evangelista 1
1Universidade Federal de Minas Gerais, 2IFNMG, 3DSM
4:45 p.m. PSIII-5  Effects of ingredient composition of oral drenches in small piglets post-farrowing on average daily gain and pre-wean mortality
Olivia Harrison 1, Samantha Tauer 2, Brent Frederick 3
1 Kansas State University, 2 Christensen Farms, 3 Christensen Family Farms

4:45 p.m. PSIII-6  Effects of repeated freeze and thaw cycles on serum and plasma metabolite concentrations in beef cattle
Jera L. Monaghan 1, Abigail R. Rathert 2, Allison M. Meyer 2
1 Department of Animal Sciences, University of Wisconsin-River Falls, 2 Division of Animal Sciences, University of Missouri

4:45 p.m. PSIII-7  Evaluating sow colostrum somatic cell count as an indicator for colostrum composition or litter characteristics
Ryan T. Maurer 1, Kiah M. Gourley 1, Theresa J. Rathbun 1, Jason C. Woodworth 2, Joel M. DeRouchey 1, Mike D. Tokach 1, Steve S. Dritz 3, Robert D. Goodband 1
1 Kansas State University, 2 Department of Animal Sciences & Industry, College of Agriculture, Manhattan, KS 66506, 3 Department of Diagnostic Medicine & Pathobiology, College of Veterinary Medicine, Manhattan, KS 66506

4:45 p.m. PSIII-8  Impact of SYNOVEX® ONE GRASS implantation during suckling on pre-weaning calf growth performance
Shane Newton 1, Payton Dahmer 1, Larry Corah 1, Keith Harmoney 1, John Jaeger 1, Cassandra K. Jones 1
1 Kansas State University

4:45 p.m. PSIII-9  Performance by weaned Katahdin lambs offered diets with and without Actifor® Pro
Kandace Edwards 1, Bruce C. Shanks 1, James D. Caldwell 2, Kevin Adams 2
1 Lincoln University, 2 Delacon USA, Inc.

4:45 p.m. PSIII-10  The association of genes involved in mitochondrial function with growth, size, and feed efficiency traits in developing beef heifers
Samantha J. Schmoker 1, Nayan Bhowmik 1, Carl R. Dahlen 1, Kendall C. Swanson 1, Kris A. Ringwall 2, Lauren L. Hulsman Hanna 1
1 North Dakota State University, Department of Animal Sciences, 2 University of Saskatchewan, Livestock and Forage Centre of Excellence
The effect of GALR2 genotype and differing implant strategies on blood metabolite concentrations in finishing steers
Ellie S. Anderson 1, Jerica R. Hall 1, Mara R. Hirchert 2, Kendall C. Swanson 3, Kasey R. Maddock Carlin 1, Carl R. Dahlen 3, Alison K. Ward 1
1North Dakota State University, 2NDSU, 3North Dakota State University, Department of Animal Sciences

The effect of sodium butyrate and benzoic acid on nutrient digestibility and fecal volatile fatty acid concentrations in nursery pigs.
Casey L. Bradley 1, Alisun Watson 2, Kristopher Bottoms 2, Tsungcheng Tsai 2, Charles V. Maxwell 3
1DSM Nutritional Products LLC, 2University of Arkansas, 3University of Arkansas-Fayetteville

The Effects of Corn Gluten Feed and Corn Dried Distillers Grains as a Replacement for Soybean Meal on Boer Type Goat Diets
Samantha Costigan 1, Alison Crane 1, James M. Lattimer 1, Cassandra K. Jones 1
1Kansas State University

The effects of variant auditory stimuli on goat kids’ formant patterns from birth to weaning
Rachael C. Quandt 1, Samantha S. Bartley 1, Thomas A. Burke 1, Brandon Forshey 1
1University of Findlay

POSTER SESSION IV
5:00 PM - 5:45 PM
Grand Ballroom Foyer

Determining the effects of increasing levels of xylanase in nutrient adequate diets on growth performance, carcass characteristics of growing-finishing pigs
Hayden R. Kerkaert 1, Joel M. DeRouchey 1, Steve S. Dritz 2, Robert D. Goodband 1, Mike D. Tokach 1, Jason C. Woodworth 3, Hilda I. Calderon Cartagena 1, Ludovic Lahaye 4
1Kansas State University, 2Department of Diagnostic Medicine & Pathobiology, College of Veterinary Medicine, Manhattan, KS 66506, 3Department of Animal Sciences & Industry, College of Agriculture, Manhattan, KS 66506, 4Jefo

Effects of a functional protein on growth performance of nursery pigs
Henrique S. Cemin 1, Luke A. Swalla 1, Jamie L. Pietig 1, Shariie A. Hansen 1, Ernie L. Hansen 1, Brent W. Ratliff 2, Aaron M. Gaines 2, James Usry 2
1Hubbard Feeds, 2Ani-Tek Group, LLC
Effects of zinc level and calcium source on growth performance of nursery pigs
1Hubbard Feeds

Effects on performance and market weight of DNA 600 Duroc sired pigs when fed diets with a blend of phytonutrients (Lean Fuel) in combination with Narasin (Skycis)
Luis Ochoa, Megan Bible, Kevin Soltwedel, Fredrik Sandberg
1Furst-McNess Company

Evaluation of Enogen® high amylase corn on growth performance and carcass characteristics of finishing pigs
Patricia Ochonski, Fangzhou Wu, Mike D. Tokach, Joel M. DeRouchey, Steve S. Dritz, Robert D. Goodband, Jason C. Woodworth, James M. Lattimer
1Kansas State University, 2Department of Diagnostic Medicine & Pathobiology, College of Veterinary Medicine, Manhattan, KS 66506, 3Department of Animal Sciences & Industry, College of Agriculture, Manhattan, KS 66506

Impact of OutPace® Feed Additive on nursery pig growth performance: A meta-analysis
Benjamin Bass, Stacie Crowder, Terry Weeden, Murali Raghavendra Rao, Brenda de Rodas, Theodore Karnezos
1Land O'Lakes, 2Purina Animal Nutrition

Pellet processing reduces variability of corn soybean meal based diet digestibility in growing pigs
Élisabeth Chassé, Frédéric Guay, Marie-Pierre Létourneau-Montminy
1Université Laval, 2Laval University

Supplemental effects of dietary lysophospholipids in lactation diets on sow performance, milk composition, and intestinal health of piglets
Kibeom Jang, Jerry Purvis, Sung Woo Kim
1North Carolina State University, 2Purvis Farms
POSTER SESSION V
6:15 PM - 7:00 PM
Grand Ballroom Foyer

6:15 p.m.  PSV-1  A Subcutaneous Ear Implant to Deliver an Anaplasmosis Vaccine to Dairy Steers
Andrew K. Curtis 1, Kathryn Reif 1, Michael Kleinhenz 2, Miriam S. Martin 2, Brandt Skinner 1, Sean Kelly 3, Douglas Jones 3, Emily Reppert 1, Shawnee Montgomery 1, Balaji Narasimhan 3, Tippawan Anantatat 1, Majid Jaberi-Douraki 1, Johann Coetzee 2
1Kansas State University, 2Kansas State University College of Veterinary Medicine, 3Iowa State University

6:15 p.m.  PSV-11  Accuracies of genomic prediction for reproductive traits in PRRSV-infected sows
Felipe Hickmann 1, José Braccini Neto 2, Luke Kramer 1, Kent Gray 3, Yijian Huang 3, Jack Dekkers 1, Letícia P. Sanglard 1, Nick Serão 1
1Iowa State University, 2UFRGS, 3Smithfield Premium Genetics

6:15 p.m.  PSV-2  An exploration of sociality among pre-weaned beef calves
Jesse Robbins 1, Rebecca Parsons 1, Grant Dewell 1, Derek Haley 2, Anna Johnson 1, Renée Dewell 1, Suzanne Millman 1
1Iowa State University, 2University of Guelph

6:15 p.m.  PSV-21  Assessment of Undergraduate Research Students in the Animal Science Department
Shana M. Winkel 1, Lisa Karr 2, Thomas Burkey 2
1University of Nebraska - Lincoln, 2UNL

6:15 p.m.  PSV-3  Detection of Bruising in Holstein Slaughter Cows with Infrared Thermography
Ashlynn Kirk 1, Kurt Vogel 2
1University of Wisconsin-River Falls, 2University of Wisconsin - River Falls

6:15 p.m.  PSV-4  Direct-fed microbial program improved survivability of nursery pigs in commercial production
Victor G. Perez 1, Terry Parrott 1, Janet C. Remus 2, Michael Perry 1
1DuPont, 2DuPont Nutrition and Biosciences

6:15 p.m.  PSV-5  Effect of oxygen administration to piglets at birth on post-natal body temperatures
Naomi Cooper 1, Katherine Vande Pol 1, Michael Ellis 1, Yijie Xiong 1, Richard Gates 1
1University of Illinois
6:15 p.m.  PSV-6  Effects of chilled drinking water and cooled floor pads on behavior of lactating sows under heat stress
Yuzhi Li 1, Yunhui Zhu 1, Michael Reese 1, Eric Buchanan 1, Lee Johnston 1
1University of Minnesota

6:15 p.m.  PSV-7  Effects of drying and oxygenation of piglets at birth on rectal temperatures in the early post-natal period.
Katherine Vande Pol 1, Naomi Cooper 1, Andres Tolosa 1, Michael Ellis 1, Richard Gates 1, Yijie Xiong 1, Caleb M. Shull 2, Katie Brown 2, Stephan da Silva 3
1University of Illinois, 2The Maschhoffs, LLC, 3Universidade Federal

6:15 p.m.  PSV-12  Evaluator effect on the prediction of genetic merit using subjective measures of beef cattle temperament
Elfren F. Celestino 1, Jordan K. Hieber 2, Carl R. Dahlen 1, David G. Riley 3, Sarah A. Wagner 1, Lauren L. Hulsman Hanna 1
1North Dakota State University, Department of Animal Sciences, 2Montana State University, 3Texas A&M University, Department of Animal Science

6:15 p.m.  PSV-13  Genetic parameters and quantitative trait loci for heat stress related traits in sheep
Devin R. Jacobs 1, Claudia E. Silvera-Rojas 1, Jennifer M. Bormann 1, Terry A. Gipson 2, Arthur L. Goetsch 2, Robert L. Weaber 1, Megan M. Rolf 1
1Kansas State University, 2Langston University

6:15 p.m.  PSV-14  Genome Centric Approaches to Understand Antimicrobial Resistance in the Rumen Microbiome
Wesley A. Tom 1, Kristin Hales 2, James Wells 3, Samodha Fernando 4
1UNL, 2Texas Tech University, 3U.S. Meat Animal Research Center USMARC, 4University of Nebraska-Lincoln

6:15 p.m.  PSV-15  Genomic basis of reproductive performance in PRRSV-infected sows
Felipe Hickmann 1, José Braccini Neto 2, Luke Kramer 1, Kent Gray 3, Yijian Huang 3, Jack Dekkers 1, Letícia P. Sanglard 1, Nick Serão 1
1Iowa State University, 2UFRGS, 3Smithfield Premium Genetics

6:15 p.m.  PSV-8  Glucocorticoid receptor agonist (GRA): what is the best delivery method to newly weaned pigs?
Hailey Wooten 1, Hwanhee Kim 1, Amanda Rakhshandeh 2, Anoosh Rakhshandeh 1
1Texas Tech University, 2South Plain Collage
6:15 p.m. PSV-16  **Influence of the late gestation maternal rumen microbiome on the calf meconium and early rumen microbiome**
Kelly Woodruff¹, Gwendolynn Hummel¹, Kathleen Austin¹, Travis Smith², Hannah Cunningham-Hollinger¹
¹Department of Animal Science, University of Wyoming, Laramie, ²Laramie Research and Extension Center, University of Wyoming, Laramie

6:15 p.m. PSV-19  **Pasture history and supplementation affects parasite status of naïve lambs in grazing systems**
Braden J. Campbell¹, Jefferson S. McCutcheon², Antoinette E. Marsh¹, Francis L. Fluharty³, Anthony J. Parker¹
¹The Ohio State University, ²The Ohio State University Extension, ³University of Georgia

6:15 p.m. PSV-17  **Pinpointing Differences between Significant QTL of Carcass Traits in Yorkshire and Landrace Pig Populations**
Hanna Wackel¹, Cedric Gondro¹, Donghyun Shin²
¹Michigan State University, ²Chonbuk National University

6:15 p.m. PSV-20  **The effect of differing implant strategies on the galanin receptor 2 genotype on feed intake, efficiency, and feeding behavior of crossbred Angus finishing steers.**
Jerica R. Hall¹, Mara R. Hirchert², Kasey R. Maddock Carlin¹, Carl R. Dahlen³, Alison K. Ward¹
¹North Dakota State University, ²NDSU, ³North Dakota State University, Department of Animal Sciences

6:15 p.m. PSV-9  **The effect of warming and drying piglets at birth under cool or warm farrowing room temperatures on post-natal rectal temperatures.**
Katherine Vande Pol¹, Andres Tolosa¹, Michael Ellis¹, Caleb M. Shull², Katie Brown², Stephan da Silva³
¹University of Illinois, ²The Maschhoffs, LLC, ³Universidade Federal

6:15 p.m. PSV-18  **The role of leptin in feed efficiency and behavior attributes of commercial beef heifers**
Nayan Bhowmik¹, Kris A. Ringwall², Carl R. Dahlen¹, Kendall C. Swanson¹, Jeffrey A. Clapper³, Alison K. Ward⁴, Lauren L. Hulsman Hanna¹
¹North Dakota State University, Department of Animal Sciences, ²University of Saskatchewan, Livestock and Forage Centre of Excellence, ³South Dakota State University, Department of Animal Science, ⁴North Dakota State University
6:15 p.m.  PSV-10  The use of oleic acid during heat stress on lameness and joint health  
Morgan L. Dotson 1, Teagan R. Schnurbusch 1, Bryon R. Wiegand 1, Nichole C. Anderson 1  
1University of Missouri-Columbia

6:15 p.m.  PSV-22  Use of weekly quizzes in a graduate-level physiology course does not enhance student learning but may help regulate study time  
Renee M. McFee 1, Katie Bidne 1  
1University of Nebraska-Lincoln

Tuesday, March 3, 2020

POSTER SESSION VI  
7:30 AM - 8:15 AM  
Grand Ballroom Foyer

7:30 a.m.  PSVI-1  Dietary protease supplementation on growth performance and post-weaning diarrhea of nursery pigs  
Jorge Y. Perez-Palencia 1, David A. Clizer 1, Christian Ramirez-Camba 1, Ryan S. Samuel 1, Crystal L. Levesque 1  
1South Dakota State University

7:30 a.m.  PSVI-2  Dietary supplementation of Bacillus licheniformis derived-protease increased the digestibility of dry matter and crude protein in post-weaned and growing pigs  
Woo Jeong Seok 1, Lei Cheng 1, Thanapal Palanisamy 1, Xiangting Fu 1, In Ho Kim 1  
1Dankook University

7:30 a.m.  PSVI-3  Dietary supplementation with coated omega-3 fatty acids has positive effects on growth performance and nutrients digestibility in weaned pigs  
Woo Jeong Seok 1, Je min Ahn 1, Jing Hu 1, Dexin Dang 1, Yanjiao Li 1, In Ho Kim 1, Jian Ying Zhang 1  
1Dankook University

7:30 a.m.  PSVI-4  Digestible and metabolizable energy content, and standardized ileal digestibility of amino acids in novel corn co-products for swine  
Zhaohui Yang 1, Amanda Palowski 1, Pedro E. Urriola 1, Gerald C. Shurson 1  
1University of Minnesota
7:30 a.m. PSVI-5 Effect of apple and anise flavour supplementation on growth performance, nutrient digestibility, blood profiles and carcass quality in growing-finishing pigs
Woo Jeong Seok 1, Yong Min Kim 1, Je min Ahn 1, Xiao Liu 1, Xiang Ao 1, In Ho Kim 1
1Dankook University

7:30 a.m. PSVI-14 Effect of Dietary Nitrates and Sulfates on Enteric Methane Mitigation in Finishing Cattle
Mohamed Abdelmoteleb 1, Allie Knoell 1, Samodha Fernando 1
1University of Nebraska-Lincoln

7:30 a.m. PSVI-15 Effect of direct-fed microbials on fecal characteristics during an acidosis induction
Kaylie Huizenga 1, Sara Tondini 1, Joshua C. McCann 1
1University of Illinois

7:30 a.m. PSVI-21 Effect of preconditioning pre-shipment and injectable antioxidant trace elements and vitamins on growth, antioxidant status, and plasma metabolites and insulin concentration in weaned beef cattle.
Raul M. Lizarraga 1, Esteban Galarza 1, Guillermo Mattioli 2, Anthony J. Parker 1, Alejandro E. Relling 1
1The Ohio State University, 2Universidad Nacional de La Plata

7:30 a.m. PSVI-6 Effect of reduced dietary protein and amino acid supply imposed in the grower and finisher period or solely in the finisher period on growth traits and carcass protein deposition efficiency in pigs
Bee Giuseppe 1, Claudia Kasper 1, Patrick Schlegel 1
1Agroscope

7:30 a.m. PSVI-23 Effects of a vitamin and mineral supplement and an energy supplement on concentrations of glucose and non-esterified fatty acids in artificially inseminated beef heifers up to d 84 post-insemination
Laura I. Sauer 1, Tammi L. Neville 1, Cierrah J. Kassetas 1, Friederike Baumgaertner 1, James D. Kirsch 1, Sheri T. Dorsam 1, Pawel Borowicz 1, Lawrence P. Reynolds 1, Alison K. Ward 1, J. Christopher Forcherio 2, Ronald Scott 2, Kacie L. McCarthy 3, Carl R. Dahlen 4, Joel S. Caton 1
1North Dakota State University, 2Land O’ Lakes, 3University of Nebraska - Lincoln, 4North Dakota State University, Department of Animal Sciences

7:30 a.m. PSVI-16 Effects of feeding spices on heifer gains and potential as tick management
Jaymelynn Farney 1
1Kansas State University
7:30 a.m. PSVI-17  Effects of increasing doses of trenbolone acetate and estradiol on sera metabolites following implantation during the finishing phase in beef steers
Dathan Smerchek 1, Zachary K. Smith 2
1SDSU Animal Science, 2South Dakota State University

7:30 a.m. PSVI-18  Effects of rumen-protected lysine on performance and plasma amino acid metabolism in early lactation Holstein cows
Geoffrey Carney 1, Phil Cardoso 1, Perry Doane 2
1University of Illinois Department of Animal Sciences, 2Archer Daniels Midland

7:30 a.m. PSVI-19  Evaluating the addition of an alpha-amylase enzyme to two bulk-flake density weights of corn fed to beef finishing steers.
Caleb Lockard 1, Cathy Lockard 1, Wyatt Smith 1, Brian Campbell 2, Jenny Jennings 1
1Texas A&M AgriLife Research, 2DSM

7:30 a.m. PSVI-20  Impact of Saccharomyces cerevisiae fermentation products on in vitro rumen microbial fermentation of new crop corn silage.
Coleman G. Reedy 1, Joan Butler 1, Ilkyu Yoon 1, Tom Oelberg 1, Tracy Werner 1, Ehsan Khafipour 1
1Diamond V

7:30 a.m. PSVI-7  Increased consumption of Methionine as DL-Methionine or OH-Methionine improved pigs growing performance and carcass traits under hot conditions
Caio A. da Silva 1, Marco A. Callegari 2, José Henrique Barbi 3, Naiara Fagundes 3, Cleandro P. Dias 2, Kelly L. Souza 4, Dolores I. Batonon-Alavo 5
1University of Londrina, Animal Science Department, 2AKEI, 3Adisseo Brasil Nutrição Animal, 4Akei, 5Adisseo USA Inc.

7:30 a.m. PSVI-8  Mineral composition of feed grade monocalcium phosphate
Diego A. Lopez 1, Hans H. Stein 2
1University of Illinois, 2University of Illinois at Urbana-Champaign

7:30 a.m. PSVI-9  Mint oil, yeast cell, and γ-tocopherol supplementation in gestation and lactation diets on offspring performance during the post-wean period.
Lily P. Hernandez 1, Jamés L. Dunn 2, Joel Wenninghoff 2, Crystal L. Levesque 1
1South Dakota State University, 2ADM Animal Nutrition
7:30 a.m.  PSVI-10  Mint oil, yeast cell, and γ-tocopherol supplementation in gestation and lactation diets on the antioxidant status of the sow and offspring performance during the suckling period.
Lily P. Hernandez 1, James L. Dunn 2, Joel Wenninghoff 2, Crystal L. Levesque 1
1South Dakota State University, 2ADM Animal Nutrition

7:30 a.m.  PSVI-11  Non-GMO beet pulp and canola meal corn-soybean meal diet has comparable effects as that of GMO corn-soybean meal diet on the performance of sows and piglets
Woo Jeong Seok 1, Huan Wang 1, Sumya Kibria 1, Yanjiao Li 1, In Ho Kim 1
1Dankook University

7:30 a.m.  PSVI-12  Phosphorous digestibility of corn ethanol co-products, from Brazil and USA, in growing pigs
Vinicius R. C. Paula 1, Natália C. Milani 1, Cândida P.F. Azevedo 1, Gabriel A.G. Casarotti 1, Leonardo A. Granja 1, Brian Mike 2, Gerald C. Shurson 3, Urbano Ruiz 1
1University of São Paulo, 2FS Bioenergia, 3University of Minnesota

7:30 a.m.  PSVI-22  Rumen microbiome of beef cattle is modulated by backgrounding systems
Bobwealth O. Omontese 1, Ashok K. Sharma 1, Jason Langlie 1, Joe Armstrong 1, Alfredo DiCostanzo 1, Megan J. Webb 1, Andres Gomez 1
1University of Minnesota

7:30 a.m.  PSVI-13  Sequential feeding with diets varying in amino acid content improves body composition in growing-finishing pigs
Alini M. Veira 1, Luan S. Santos 2, Alica Z. Fraga 3, Marlon M. Oliveira 3, Paulo H. Reis Furtado Campos 4, Luciano Hauschild 3
1São Paulo State University (UNESP), FAPESP Scholarship, 2Federal Rural University of Rio de Janeiro, 3São Paulo State University (UNESP), 4Federal University of Viçosa

POSTER SESSION VII
12:45 PM - 1:30 PM
Grand Ballroom Foyer

12:45 p.m.  PSVII-12  Acceptability of Milne blueberry juice and blueberry puree in horse feed
Michael Y. Halpin 1, Teresa Douthit 1, Caitlin E. Evans 1, Michaela B. Braun 1, Charles R. Stark 1, Chad B. Paulk 1, James M. Lattimer 1
1Kansas State University
12:45 p.m.  PSVII-1  **Carcass weight and quality grade impact the rate of internal temperature decline in beef primals**
Samantha Egolf¹, Lydia Hite¹, Austin Egolf¹, Christina Bakker¹, Amanda Blair¹, J. Kyle Grubs¹, Keith Underwood¹
¹South Dakota State University

12:45 p.m.  PSVII-2  **Differentially expressed genes and their biological function in skeletal muscle of calves born from cows with or without protein supplementation during mid-gestation**
Elisa B. Carvalho¹, Letícia P. Sanglard¹, Karolina B. Nascimento², Javier M. Meneses², Daniel R. Casagrande², Marcio Duarte³, Mateus P. Gionbelli², Nick Serão¹
¹Iowa State University, ²Universidade Federal de Lavras, ³Universidade Federal de Viçosa

12:45 p.m.  PSVII-3  **Effect of feeding finishing steers two different commercially available blends of essential oils with or without benzoic acid on growth performance, carcass characteristics, and meat quality**
Lydia M. Wang¹, Benjamin M. Bohrer¹
¹University of Guelph

12:45 p.m.  PSVII-4  **Effect of Green Grass supplementation of swine diet on pork quality characteristics**
Rebecca Furbeck¹, Josh P. Knapp², Melanie D. Trenhaile-Grannemann¹, Thomas Burkey², Samodha Fernando³, Gary Sullivan¹, Phillip Miller²
¹University of Nebraska - Lincoln, ²UNL, ³University of Nebraska-Lincoln

12:45 p.m.  PSVII-5  **Effect of maternal feed restriction at different stages of gestation on development of gastrointestinal tract of newborn goats**
Luana Santos¹, Thais Costa², Ranyeri Souza², Felipe Moura³, Ivam Oliveira Junior¹, Tathyane Gionbelli¹, Marcio Duarte², Mateus P. Gionbelli¹
¹Universidade Federal de Lavras, ²Universidade Federal de Viçosa, ³University of Nevada - Reno

12:45 p.m.  PSVII-13  **Effect of polyunsaturated fatty acid and methionine supplementation during late gestation on offspring duodenal amino acid and peptides transporters in sheep**
Milca Rosa-Velazquez¹, Fernanda Batistel², Alejandro E. Relling¹
¹The Ohio State University, ²Utah State University

12:45 p.m.  PSVII-14  **Effects of birth characteristics, nursing behaviors, and supplemental milk on piglet pre-weaning growth and survival.**
Courtney Moore Clemons¹, William Flowers¹
¹North Carolina State University
Effects of feeding rumen-protected methionine to mature beef bulls
Carl R. Dahlen 1, Sarah R. Underdahl 2, Kacie L. McCarthy 3, Matt C. Crouse 2, James D. Kirsch 2, Sheri T. Dorsam 2, Cierrah J. Kassetas 2, Trent C. Gilbery 2, Kevin K. Sedivec 2, Joel S. Caton 2

1North Dakota State University, Department of Animal Sciences, 2North Dakota State University, 3University of Nebraska - Lincoln

Effects of genetic selection for early puberty on the hypothalamic-pituitary-ovarian axis in gilts
KaLynn Harlow 1, Allison Renwick 1, Sydney Shuping 1, Jeff Sommer 1, Mark Knauer 1, Casey Nestor 1

1North Carolina State University

Effects of heat stress on proteolysis in dairy cattle skeletal muscle
Melissa S. Roths 1, Megan A. Abeyta 1, Tori Rudolph 1, Brittany Wilson 2, Matthew B. Hudson 2, Robert P. Rhoads 3, Lance H. Baumgard 1, Joshua T. Selsby 1

1Iowa State University, 2University of Delaware, 3Virginia Tech

Effects of zinc chloride supplementation during ovarian cortex vitrification prior to in vitro fertilization on embryo development in pigs
Emma C. Hicks 1, Haley A. Arena 1, Brian Whitaker 1

1University of Findlay

Fatty acid composition of the longissimus muscle from Angus and Wagyu sired cattle at the 6th and 12th rib location
Jerad Jaborek 1, Francis L. Fluharty 2, Alejandro E. Relling 1

1The Ohio State University, 2University of Georgia

Fatty acid profile is not affected by feeding finishing cattle essential oils and/or benzoic acid
Lydia M. Wang 1, Benjamin M. Bohrer 1

1University of Guelph

Fatty acid profiles in subcutaneous adipose and the mammary fat pad of Holstein calves receiving different estradiol treatments
Marina Miquilini 1, Nicole R. Hardy 1, Kellie Enger 1, Phyllis Dieter 1, Alejandro E. Relling 1, Benjamin Enger 1

1The Ohio State University
12:45 p.m. PSVII-20 **Heat stress alters reproductive phenotypic impacts of Zearalenone in pre-pubertal gilts**
Crystal M. Roach 1, Edith J. Mayorga 1, Jason W. Ross 1, Lance H. Baumgard 1, Aileen F. Keating 1
1Iowa State University

12:45 p.m. PSVII-21 **Impacts of various farrowing induction protocols on attended farrowings**
Katharine G. Sharp 1, Kayla M. Mills 1, Larissa Shirley 1, Ricardo M. Garcia 1, Kara R. Stewart 1
1Purdue University

12:45 p.m. PSVII-8 **miRNAs explain the variation in muscle and blood transcriptomes of beef calves born from dams with or without energy restriction during late gestation**
Elisa B. Carvalho 1, Leticia P. Sanglard 1, Moysés Nascimento 2, Philippe Moriel 3, Jeffrey Sommer 4, Melissa Merrill 4, Matthew Poore 4, Marcio Duarte 2, Nick Serão 1
1Iowa State University, 2Universidade Federal de Viçosa, 3University of Florida, 4North Carolina State University

12:45 p.m. PSVII-9 **Post transcriptional modifications may lead to changes in newborn goats’ skeletal muscle proteome as a consequence of maternal feed restriction at different stages of gestation**
Thaís Costa 1, Tiago Mendes 1, Felipe Moura 2, Ranyeri Souza 1, Marta Fontes 1, Mariana Lopes 1, Nick Serão 3, Fabyano Silva 1, Mateus P. Gionbelli 4, Marcio Duarte 1
1Universidade Federal de Viçosa, 2University of Nevada - Reno, 3Iowa State University, 4Universidade Federal de Lavras

12:45 p.m. PSVII-10 **Skeletal muscle transcriptome reveals gene expression differences in newborn goats’ as a result of maternal feed restriction at different stages of gestation**
Thaís Costa 1, Tiago Mendes 1, Felipe Moura 2, Ranyeri Souza 1, Marta Fontes 1, Mariana Lopes 1, Nick Serão 3, Fabyano Silva 1, Mateus P. Gionbelli 4, Marcio Duarte 1
1Universidade Federal de Viçosa, 2University of Nevada - Reno, 3Iowa State University, 4Universidade Federal de Lavras

12:45 p.m. PSVII-22 **Trichostatin A as an aging agent in an oocyte**
Haley A. Arena 1, Emma C. Hicks 1, Brian Whitaker 1
1University of Findlay
Utilizing digital images to evaluate accuracy and repeatability of body condition score in cull sows
William E. Taylor 1, Christopher J. Cassady 1, Steven M. Lonergan 1, Ben D. Peyer 2, Kenneth J. Stalder 1
1Iowa State University, 2Johnsonville Sausage LLC

Assessment of conformational changes across three parities in sows
Melanie D. Trenhaile-Grannemann 1, Ronald M. Lewis 2, Stephen D. Kachman 2, Kenneth J. Stalder 3, Benny E. Mote 2
1University of Nebraska - Lincoln, 2University of Nebraska-Lincoln, 3Iowa State University

Can the fermentation of insoluble corn fiber be improved in the pig? – An investigation into the in vivo mode of action of xylanase
Amy Petry 1, Lucas Koester 1, Stephan Schmitz-Esser 1, Nichole Huntley 2, Mike Bedford 3, John Patience 1
1Iowa State University, 2Mazuri, 3AB Vista

Determination of in vitro DM, N and NDF digestibility and fermentability in novel corn co-products for swine
Amanda Palowski 1, Zhaohui Yang 1, Pedro E. Urriola 1, Gerald C. Shurson 1
1University of Minnesota

Dietary supplementation of Bacillus subtilis altered metabolites in the intestine of weaned pigs
Yijie He 1, Kwangwook Kim 1, Cynthia Jinno 1, Xunde Li 1, Yanhong Liu 1
1University of California, Davis

Effect of coarse wheat bran and crude protein level in nursery diets without zinc oxide on pig performance
Kelsey L. Batson 1, Hilda I. Calderon Cartagena 1, Mike D. Tokach 1, Jason C. Woodworth 2, Robert D. Goodband 1, Steve S. Dritz 3, Joel M. DeRouche 1
1Kansas State University, 2Department of Animal Sciences & Industry, College of Agriculture, Manhattan, KS 66506, 3Department of Diagnostic Medicine & Pathobiology, College of Veterinary Medicine, Manhattan, KS 66506
5:00 p.m.  PSVIII-5  Effect of glycemic and endocrine response to feeding time in pregnant sows
Hayford Manu¹, Lee SuHyup², Samuel Kofi Baidoo²
¹University of Minnesota - Department of Animal Science, ²University of Minnesota - SROC, Waseca

5:00 p.m.  PSVIII-6  Effect of Pellet Die Thickness and Conditioning Temperature During the Pelleting Process on Phytase Stability
Courtney N. Truelock¹, Nelson E. Ward², Jonathan W. Wilson², Charles R. Stark¹, Chad B. Paulk¹
¹Kansas State University, ²DSM Nutritional Products

5:00 p.m.  PSVIII-7  Effects of Bacillus subtilis on colon digesta metabolomic profiles in weanling pigs experimentally infected with a pathogenic E. coli
Kwangwook Kim¹, Yanhong Liu¹
¹University of California, Davis

5:00 p.m.  PSVIII-8  Effects of dietary L-arginine on growth performance, nutrient digestibility, and meat quality in finishing pigs
Woo Jeong Seok¹, Je min Ahn¹, Yong Min Kim¹, Sumya Kibria¹, Huan Shi¹, In Ho Kim¹
¹Dankook University

5:00 p.m.  PSVIII-9  Effects of different sources and levels of dietary iron and selenium on the postprandial net portal appearance of these minerals in pigs
Danyel Bueno Dalto¹, Jacques Matte¹
¹Agriculture and Agri-Food Canada

5:00 p.m.  PSVIII-10  Effects of enzyme supplementation in corn distiller’s dried grains with solubles (DDGS) diets on growth performance in broilers: a meta-analysis
Jae-Cheol Jang¹, Zhikai Zeng², Pedro E. Urriola¹, Gerald C. Shurson¹
¹University of Minnesota, ²Department of Animal Science, University of Minnesota

5:00 p.m.  PSVIII-11  Effects of feeding diets containing corn distiller’s dried grains with solubles (DDGS) on growth performance in broilers: a meta-analysis
Jae-Cheol Jang¹, Zhikai Zeng², Pedro E. Urriola¹, Gerald C. Shurson¹
¹University of Minnesota, ²Department of Animal Science, University of Minnesota

5:00 p.m.  PSVIII-12  Effects of increasing iron dextran dosage at birth on hematological profile, growth performance, and tissue mineral concentrations of pigs in the nursery
Tyler B. Chevalier¹, Harold J. Monegue¹, Merlin D. Lindemann¹
¹University of Kentucky
Evaluation of Cooling Pads on Late Lactating Sows
Larissa Shirley¹, Morgan Burgett¹, Tyler Field¹, Allan P. Schinckel¹, Kara R. Stewart¹, Ricardo M. Garcia¹, Jay S. Johnson², Robert Stwalley¹
¹Purdue University, ²USDA-ARS Livestock Behavior Research Unit

Finishing non-castrated male and female pigs have different response to the lysine to energy ratio
Pau Aymerich¹, Carme Soldevila¹, Jordi Bonet¹, Josep Gasa², Jaume Coma¹, David Solà-Oriol²
¹Vall Companys Group, ²Universitat Autònoma de Barcelona

Impact of altering Lys:energy ratio during gestation on offspring post-wean growth performance
Tiffany Bruhn¹, Hyatt Frobose², Crystal L. Levesque¹
¹South Dakota State University, ²JYGA Technologies, Inc.

Impact of soybean meal inclusion in late gestation on sow productivity and litter performance
Abigail Loucks¹, Dana van Sambeek², Elizabeth A. Hines¹
¹Penn State University, ²U.S. Army Combat Capabilities and Development Command Soldier Center

Parasite prevalence and fecal egg counts on organic pig farms
Yuzhi Li¹, Alexander Hernandez², Rick Carr³, Shelby Dukes³, Maria Lou¹, Diane DeWitte⁴
¹University of Minnesota, ²Kutztown University of Pennsylvania, ³Rodale Institute, ⁴University of Minnesota Extension

Phytogenics reduces medical treatment in nursery pigs affected by post-weaning diarrhea
Kory Moran¹, Tobias Aumiller¹, Klaus Manner², Jurgen Zentek², Jan Dirk van der Klis¹, Andreas Muller¹
¹Delacon Biotechnik GmbH, ²Free University of Berlin

The effects of adding two organic acid blends with or without high levels of zinc or copper, on post-weaning pig performance.
Casey L. Bradley¹, Jon Bergstrom², Jeremiah Nemechek¹, J.D. Hahn²
¹DSM Nutritional Products LLC, ²DSM Nutritional Products
5:00 p.m. PSVIII-22 **Utilization of NUtrack to assess sire influence on pig activity and activity effects on weight**
Lexi Ostrand ¹, Garrett See ¹, Melanie D. Trenhaile-Grannemann ², Ty Schmidt ¹, Eric Psota ¹, Gary Rohrer ³, Benny E. Mote ⁴
¹University of Nebraska, ²University of Nebraska - Lincoln, ³US Meat Animal Research Center, ⁴University of Nebraska-Lincoln

**Wednesday, March 4, 2020**

**POSTER SESSION IX**
7:30 AM - 8:15 AM
Grand Ballroom Foyer

7:30 a.m. PSIX-1 **Altering dietary fiber components mitigates severity of Brachyspira hyodysenteriae challenge**
Emma T. Helm ¹, Nicholas Gabler ¹, Eric R. Burrough ¹
¹Iowa State University

7:30 a.m. PSIX-2 **Amino acid digestibility and digestible indispensable amino acid scores of a few protein isolates and concentrates derived from cereal grains, plant proteins, or dairy proteins**
Hannah M. Bailey ¹, Hans H. Stein ²
¹University of Illinois, ²University of Illinois at Urbana-Champaign

7:30 a.m. PSIX-20 **Antibacterial activity of an essential oil combination against several common enteropathogens in swine production**
Bernat Canal ¹, Luis Mesas ¹, Cinta Sol ¹, Monica Puyalto ¹, Ana Carvajal ², Manuel Gomez ², Juan Jose Mallo ¹
¹Norel SA, ²Universidad de Leon

7:30 a.m. PSIX-4 **Concentrations of digestible and metabolizable energy and digestibility of phosphorus in a new source of high-protein distillers dried grains with solubles fed to growing pigs**
Minoy A. Cristobal Romero ¹, Su A Lee ², Hans H. Stein ²
¹University of Illinois at Urbana Champaign, ²University of Illinois at Urbana-Champaign

7:30 a.m. PSIX-5 **Dietary supplementation of Bacillus subtilis modified fecal microbiome of weaned pigs in comparison to antibiotics**
Cynthia Jinno ¹, Yijie He ¹, Xunde Li ¹, Yanhong Liu ¹
¹University of California, Davis
7:30 a.m.  PSIX-3  Effect of a combination of brown, green and red seaweeds on performance of nursery and growing-finishing pigs, and on carcass characteristics
Hayford Manu 1, Qiang Huang 2, Devi Pangeni 1, Augustine Owusu-Asiedu 3, Jason Sands 4, Samuel Kofi Baidoo 2
1University of Minnesota - Department of Animal Science, 2University of Minnesota - SROC, Waseca, 32Ocean Harvest Technology, Milltown, Galway, Ireland, 4Ocean Harvest Technology

7:30 a.m.  PSIX-6  Effect of dacitic tuff breccia in nursery diets on pig growth performance, blood parameters, and intestinal morphology
Ricardo M. Garcia 1, Jon Ferrel 2, Morgan T. Thayer 1, Julie F. Mahoney 1, Alan W. Duttlinger 1, Clayton S. Chastain 1, Brian T. Richert 1, John S. Radcliffe 1
1Purdue University, 2Azomite

7:30 a.m.  PSIX-7  Effects of a dietary seaweed product on sow progeny performance, fecal consistency, and fecal microbiota during gestation, lactation, nursery and grow-finish periods
Hadley Williams 1, Leandro Del Tuffo 1, Mike D. Tokach 1, Joel M. DeRouchey 1, Jason C. Woodworth 2, Steve S. Dritz 3, Robert D. Goodband 1, Fernanda Laskoski 1, Carine Vier 1, Laura Constance 1, Megan C. Niederwerder 1, Emily Arkfeld 4
1Kansas State University, 2Department of Animal Sciences & Industry, College of Agriculture, Manhattan, KS 66506, 3Department of Diagnostic Medicine & Pathobiology, College of Veterinary Medicine, Manhattan, KS 66506, 4Triumph Foods

7:30 a.m.  PSIX-8  Effects of an algae-clay complex-based feed additive and diet formulation regimen on finishing pig growth performance and carcass characteristics
Hadley Williams 1, Leandro Del Tuffo 1, Jason C. Woodworth 2, Joel M. DeRouchey 1, Steve S. Dritz 3, Mike D. Tokach 1, Robert D. Goodband 1, Jake Erceg 4, Maria Gallissot 4
1Kansas State University, 2Department of Animal Sciences & Industry, College of Agriculture, Manhattan, KS 66506, 3Department of Diagnostic Medicine & Pathobiology, College of Veterinary Medicine, Manhattan, KS 66506, 4Olmix

7:30 a.m.  PSIX-9  Effects of Conditioning Temperature on Pellet Quality of Nursery Pig Diets
Gage E. Nichols 1, Charles R. Stark 1, Aundria Ogles 1, Kara M. Dunmire 1, Chad B. Paulk 1
1Kansas State University
7:30 a.m. PSIX-10  Effects of SID Lysine:Calorie NE ratio on the Growth Performance and Carcass Characteristics of DNA 600 Sired Pigs
Brittany Carrender 1, Hayden E. Williams 2, Mandy Gerhart 3, Kyle Coble 1, Joel M. DeRouchey 2, Mike D. Tokach 2, Steve S. Dritz 4, Jason C. Woodworth 5, Robert D. Goodband 2
1JBS Live Pork, 2Kansas State University, 3JBS, 4Department of Diagnostic Medicine & Pathobiology, College of Veterinary Medicine, Manhattan, KS 66506, 5Department of Animal Sciences & Industry, College of Agriculture, Manhattan, KS 66506

7:30 a.m. PSIX-11 Effects of Spray-Dried Lactococcus-Based Fermentation Products on Growth Performance of Nursery Pigs
Kara M. Dunmire 1, Michaela B. Braun 1, Gage E. Nichols 1, Caitlin E. Evans 1, Marut Saensukjaroenphon 1, Courtney N. Truelock 1, Jason C. Woodworth 2, Jarred Callura 3, Chad B. Paulk 1
1Kansas State University, 2Department of Animal Sciences & Industry, College of Agriculture, Manhattan, KS 66506, 3Intrexon Corporation

7:30 a.m. PSIX-12 Effects of tannin supplementation on zootechnical performance and blood parameters of weaned piglets
Monika Hejna 1, Matteo Dell’Anno 1, Valentina Caprarulo 1, Stefania Sotira 1, Luciana Rossi 1
1Department of Health, Animal Science and Food Safety, University of Milan, Italy

7:30 a.m. PSIX-13 Effects of zinc and copper levels on growth performance of nursery pigs
Henrique S. Cemin 1, Luke A. Swalla 1, Jamie L. Pietig 1, Sharlie A. Hansen 1, Ernie L. Hansen 1
1Hubbard Feeds

7:30 a.m. PSIX-14 Evaluation of high-protein distillers dried grains on growth performance and carcass characteristics of growing-finishing pigs
Zhong-Xing Rao 1, Mike D. Tokach 1, Steve S. Dritz 2, Jason C. Woodworth 3, Joel M. DeRouchey 1, Robert D. Goodband 1, Hilda I. Calderon Cartagena 1, Mallorie Wilken 4
1Kansas State University, 2Department of Diagnostic Medicine & Pathobiology, College of Veterinary Medicine, Manhattan, KS 66506, 3Department of Animal Sciences & Industry, College of Agriculture, Manhattan, KS 66506, 4ICM Inc.

7:30 a.m. PSIX-15 Extrusion of corn-soybean product blends in replacement of soybean meal in weaning pig diets
Natália C. Milani 1, Vinicius R.C. Paula 1, Cândida P.F. Azevedo 1, Anderson A. Sedano 1, Hélio Moreira Junior 1, Raquel S. Fernandes 1, José M. M. Andrade 1, Urbano Ruiz 1
1University of São Paulo
7:30 a.m.  PSIX-16  Growth performance and blood immune parameters of nursery pigs fed canola meal-based diets
Jinsu Hong ¹, Joy Scaría ¹, Tofuko A. Woyengo ¹
¹South Dakota State University

7:30 a.m.  PSIX-17  Investigating the biological activities of sodium cellobionate produced from cellulosic biomass
Lauren Kovanda ¹, Zhiliang Fan ¹, Xunde Li ¹, Yanhong Liu ¹
¹University of California, Davis

7:30 a.m.  PSIX-18  Prediction of urinary P excretion as a tool to assess mineral status of growing pigs
Maria-Pierre Létourneau-Montminy ¹, Theophane de Rauglaudre ²
¹Laval University, ²Université Laval

7:30 a.m.  PSIX-19  The impact of piglet nursing location along the sow udder line on piglet gain and subsequent weaning weight
Shannon L. Dierking ¹, Harold J. Monegue ¹, Merlin D. Lindemann ¹
¹University of Kentucky