Digestive Physiology of Pigs – North America: 16th International Symposium on Digestive Physiology of Pigs

DPP
Lake Geneva '25

From Discovery to Development

Welcome

On behalf of the Organizing Committee, we are happy to welcome you to Lake Geneva, WI , USA for the 16th International Symposium on Digestive Physiology of Pigs. This event has grown to become the premiere event where discussions focus specifically on various aspects of digestive physiology.

The first Symposium was held in Shinfield, Reading (UK) in 1979. Subsequently there have been symposia held triennially in France, Denmark, Poland, The Netherlands, Germany, France, Sweden, Canada, Denmark, Spain, United States of America, Poland, and Australia. This is the second time it will be held in the U.S., and the committee is committed to ensuring the Symposium lives up to the very high standard established by our predecessors.

Our Vision: To serve as the platform for creative dialog and transnational collaboration for promoting innovation in the science of the digestive physiology of the pig.

Our Mission: Maintain a premier international digestive physiology networking opportunity for global subject matter experts, allied industry members, and stakeholders to facilitate innovation, productivity, and sustainability within the pork industry.

The cutting edge scientific program will focus on the digestive tract of the pig, emphasizing physiology, immunology and microbiology. Additionally, this Symposium will review the latest advances in the field of digestive physiology of pigs, providing the basis for future research.

Thomas Burkey (University of Nebraska, Co-Chair)
Ruurd Zijlstra (University of Alberta, Co-Chair)
Andrew van Kessel (University of Saskatchewan, Co-Chair)

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Chief Scientist, Australian Pork Industry

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IRTA, Spain

Prof. Romuald Zabielski
Warsaw University of Life Sciences, Poland

Keynote Speakers

Our distinguished keynote speakers will address our overall theme ("From discovery to development") within five thematic areas, showcasing the latest research and advancements in the field:

Theme I: Functionality of the Intestinal Microbiome and Host Response

- Benjamin Willing, Professor; University of Alberta, Canada
- Hervé M. Blottière, PhD; Research Director, Research Director at INRAE, France

Theme II: Advances in Understanding of Nutrient Digestion and Absorption

- Sonja de Vries, PhD; Wageningen University & Research, The Netherlands

Theme III: Functional Ingredients and Utilization of Feed Resources for Improved Digestive Function and Nutrient Efficiency

- Marie-Pierre Létourneau Montminy, PhD; University of Laval, Canada

Theme IV: Development of Digestive and Absorptive Capacity in the Neonate and Impact of Weaning on Intestinal Function

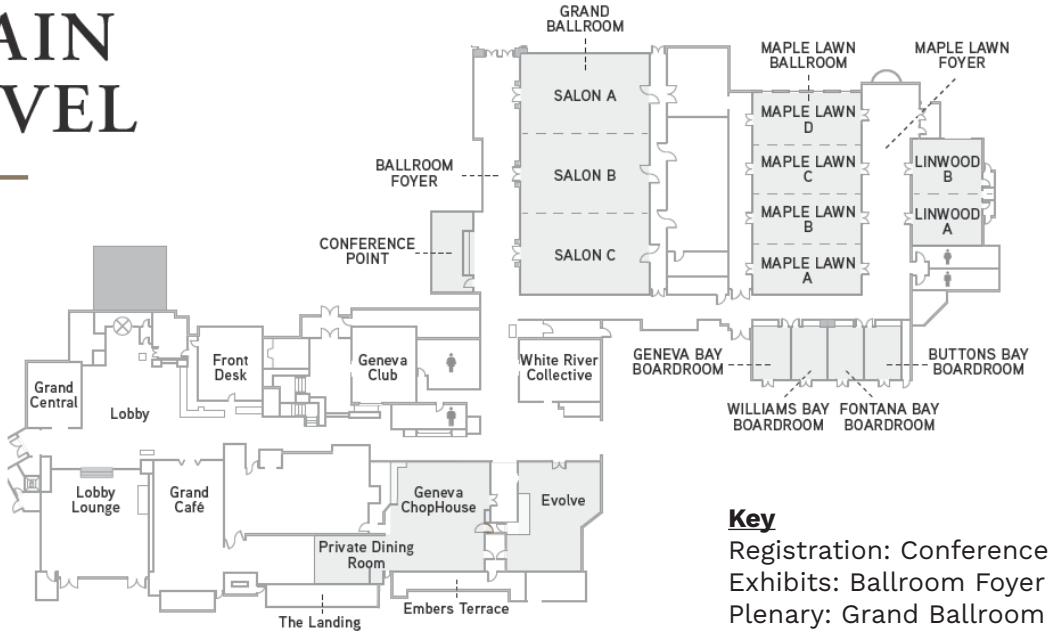
- Martin Beaumont, PhD; INRAE, France
- Huansheng Yang, Professor, Hunan Normal University, China

Theme V: Mucosal Immunity and Pathogenesis and the Role of the Digestive Tract in the Maintenance of Health

- Crystal L. Loving, PhD; Research Immunologist, USDA-ARS-NADC
- Jerrold Turner, MD, PhD; Harvard Medical School, USA

Symposium Floorplan

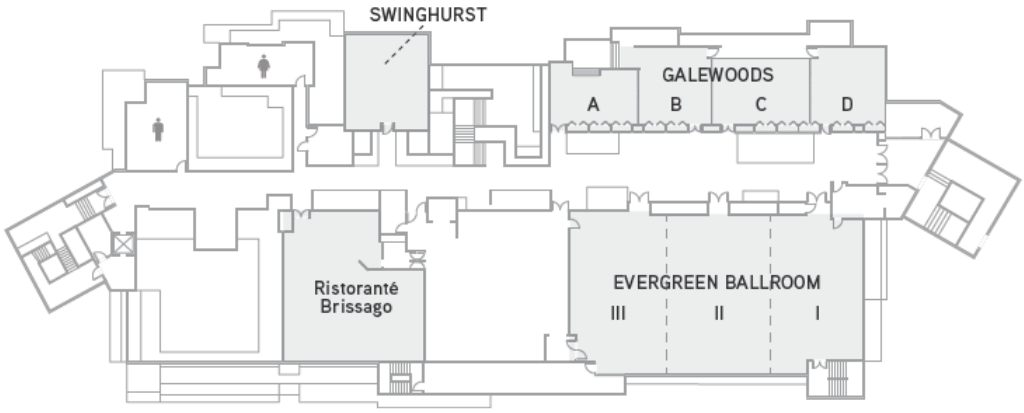
MAIN LEVEL



Key
Registration: Conference Point
Exhibits: Ballroom Foyer
Plenary: Grand Ballroom

Maple Lawn Ballroom: Posters and Meals
Geneva Chophouse: Student Reception

UPPER LEVEL



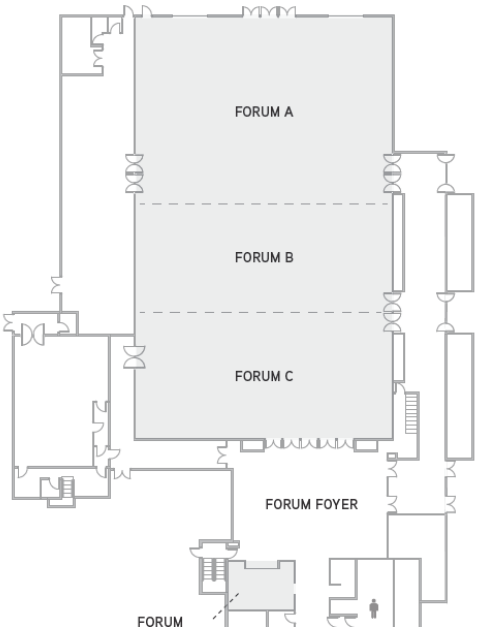
Key
Satellite Symposiums:
Evergreen Ballroom I & II
and Evergreen Ballroom III

Student Program: Galewoods C & D

Symposium Floorplan

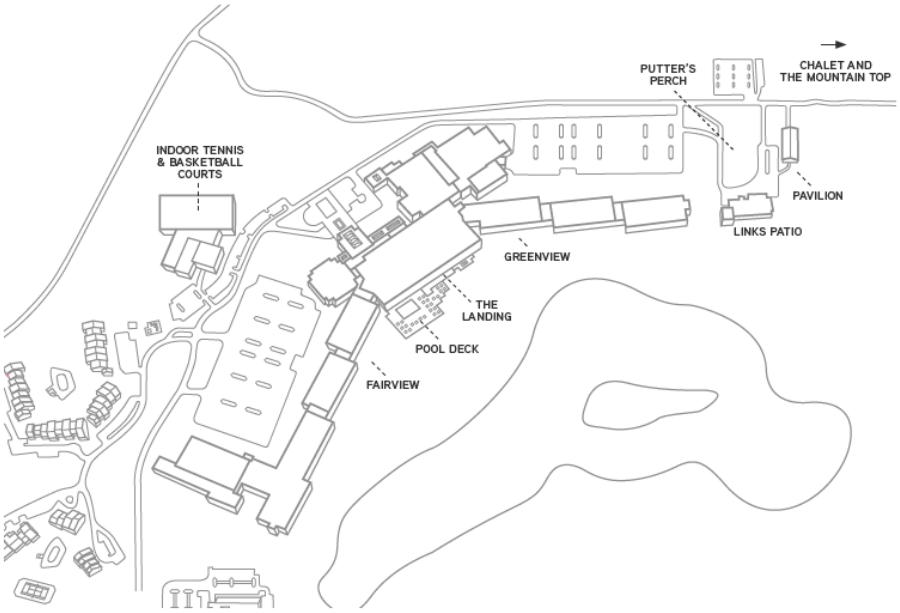
THE FORUM

BUILDING ONE



Key
Gala: The Forum Ballroom

EXPERIENTIAL VENUES



Key
Student Outdoor Reception:
Greenview Lawn

Welcome Reception:
The Landing & Pool Deck

Diamond Sponsor

Gold Sponsors

Gold Sponsors

Monday, May 19

Time	Event	Location
6:00 PM - 10:00 PM	DPP Student Social	Geneva Chophouse

Tuesday, May 20

Time	Event	Location
8:00 AM - 6:00 PM	Registration	
8:00 AM - 9:00 AM	Satellite Symposia Breakfast	Evergreen Foyer
8:30 AM - 12:00 PM	Satellite Symposium 1 *Mineral metabolism: a holistic approach for swine nutrition and health (Sponsor: Animine)*	Evergreen Ballroom III
8:30 AM - 12:00 PM	Satellite Symposium 2 *Advances in nutritional strategies to enhance nutrient utilization, growth and health of pigs (Sponsor: Evonik Nutrition & Care GmbH)*	Evergreen Ballroom I & II
12:00 PM - 1:00 PM	Satellite Symposia Lunch	Evergreen Foyer
1:00 PM - 4:30 PM	Satellite Symposium 3 *Mitigating antimicrobial resistance by promoting gut health in pigs (Sponsor: PIG-PARADIGM)*	Evergreen Ballroom I & II
1:00 PM - 4:30 PM	Satellite Symposium 4 *How to make antimicrobials in pig feed redundant, an Australian approach (Sponsor: DSM-Firmenich)*	Evergreen Ballroom III

Tuesday, May 20

Time	Event	Location
4:00 PM - 6:00 PM	DPP2025 Professional Development Student Workshop Session I: Networking: The key to your success Dr. Crystal L. Levesque, South Dakota State University Session II: Designing microbiome studies in pigs Dr. Benjamin Willing, University of Alberta Session III: Strengths and weaknesses of methods in assessing pig intestinal physiology Dr. Nicholas Gabler, lowa State University Session IV : Direct visualization assays in formalin-fixed tissues Dr. Eric R. Burrough, lowa State University	Galewoods C & D
6:00 PM - 10:00 PM	DPP Welcome Reception	The Landing

Wednesday, May 21

Time		Event	Location
8:00 AM - 12:00 PM		Registration	
6:30 AM		Breakfast	On your own
8:30 AM - 8:55 AM		Opening Remarks and Welcome Thomas Burkey, University of Nebraska	Grand Ballroom
8:55 AM - 12:30 PM		SYMPOSIA AND ORAL SESSIONS **Functionality of the Intestinal Microbiome and Host Response** Chair: Tom Burkey, University of Nebraska Co-chair: Martin Nyachoti, University of Manitoba	Grand Ballroom
8:55 AM		Introduction Tom Burkey/Martin Nyachoti	
9:00 AM	1	**KEYNOTE: Searching for the microbes that correlate with pig health, exploring microbial transfer and testing mode of action.** B.P. Willing*, *Department of Agricultural, Food and Nutritional Science, University of Alberta, Edmonton, Alberta, Canada.*	
9:45 AM	2	**EU Circles project: Machine Learning Approaches to Multi-Kingdom Gut Microbiota Reveal Key Predictors of Piglet Growth During the Nursery Phase.** F. Correa*[1], D. Luise[1], G. Palladino[2], F. Palum[11]bo[1], D. Scicchitano[2], G. Babbi[2], A. Castagnetti[3], M. Soverini[3], S. Rampelli[2], M. Candela[2], P.L. Martelli[2], and P. Trevisi[1], *[1]Department of Agricultural and Food Sciences, University of Bologna, 40127 Bologna, Italy, [2]Department of Pharmacy and Biotechnology, University of Bologna, 40126 Bologna, Italy, [3]Wellmicro srl, 40128 Bologna, Italy.*	

Wednesday, May 21

Time		Event	Location
8:55 AM - 12:30 PM		SYMPOSIA AND ORAL SESSIONS	Grand Ballroom
10:00 AM		Short Break	
10:30 AM	3	**KEYNOTE: Gut Microbiota-host cells interaction in Health and Diseases.** *H. M. Blottière*[*1,2], [1]Nantes Université, INRAE, UMR 1280 PhAN, F-44000, Nantes, France, [2]Université Paris-Saclay, INRAE, MetaGenoPolis, MGP, F-78350, Jouy-en-Josas, France.*	
11:15 AM	4	**Litter Origin is associated with Gut Microbiome Composition During Tail-Biting Outbreaks in Growing-Finishing Pigs.** Sudario Roberto Silva Junior*[1], Courtney Archer[1], Lee Johnston[1,2], Yuzhi Li[1,2], and Andres Gomez[1], [1]*Department of Animal Science, University of Minnesota, St. Paul, MN, USA,* [2]*West Central Research and Outreach Center, University of Minnesota, Morris, MN, USA.*	
11:30 AM	5	**Exploring the Gut Microbiota's Impact on Sow Performance: Links Between Performance, Stage in Reproductive Cycle, and Key Factors in a European Sow Study.** M. Weiss*[1,2], G. A. Vestergaard[2], S. E bohdidi[2], L. H. B. Hansen[2], T. T. M. Knudsen[2], and D.S. Nielsen[1], [1]*University of Copenhagen, Department of food Science, University of Copenhagen, 1958 Frederiksberg, Denmark,* [2]*Novonesis, Novonesis, Animal Biosolutions, Biologiens vej 2, 2800 Kongens Lyngby, Denmark.*	

Wednesday, May 21

Time		Event	Location
8:55 AM - 12:30 PM		SYMPOSIA AND ORAL SESSIONS	Grand Ballroom
11:45 AM	6	**Advances toward commercial use of fecal microbiota transplantation to mitigate weaning stress in pigs.** Paul Oladele, Wenxuan Dong, Brian Richert, and Timothy Johnson*, *Purdue University, West Lafayette, IN, USA.*	
12:00 PM	7	**Carbohydrate and nitrogen requirements for optimizing hindgut microbiome in pigs.** Ehsan Khafipour[1], Sandra Paredes[1], Qiong Hu*[1], Maria Sardi[2], and Ali Naqvi[2], *[1]Cargill Animal Nutrition and Health, Minneapolis, MN, [2]Cargill, Minneapolis, MN.*	
12:15 PM	8	**Fecal filtrate transplantation and dietary fibre supplementation as alternatives to veterinary antimicrobials.** A. Middelkoop*[1], J. Priem1, C. Larsen[2], T. Thymann[2], and F. Molist[1], *[1]Schothorst Feed Research, Meerkoetenweg 26, 8218 NA Lelystad, The Netherlands, [2]University of Copenhagen, Dyrlægevej 68, 1870, Frederiksberg C, Denmark.*	
12:30 PM - 2:25 PM		Lunch and Poster Sessions	Maple Lawn Ballroom
2:25 PM - 5:00 PM		SYMPOSIA AND ORAL SESSIONS	Grand Ballroom
		Advances in Understanding of Nutrient Digestion and Absorption Chair: Crystal Levesque, South Dakota State University, Co-Chair: Pedro Urriola, University of Minnesota	

Wednesday, May 21

Time		Event	Location
2:25 PM - 5:00 PM		SYMPOSIA AND ORAL SESSIONS	Grand Ballroom
2:25 PM		Introduction Crystal Levesque/Pedro Urriola	
2:30 PM	112	**KEYNOTE: Modulators of passage and nutrient absorption kinetics in the digestive tract of pigs.** S de Vries* and WJJ Gerrits, *Animal Nutrition Group, Wageningen University & Research, Wageningen, the Netherlands.*	
3:15 PM	113	**In vitro fermentation potential of undigested dietary protein in growing pigs.** H. Zhang*[1,2], J. Cone[1], A.K. Kies[3], W.H. Hendriks[1], and N. van der Wielen[1,4], *[1]Animal Nutrition Group, Department of Animal Sciences, Wageningen University & Research, Wageningen, The Netherlands, [2]State Key Laboratory of Animal Nutrition, College of Animal Science and Technology, China Agricultural University, Beijing, China, [3]ArieKiesAdvies, Druten, The Netherlands, [4]Division of Human Nutrition and Health, Department of Agrotechnology and Food Sciences, Wageningen University & Research, Wageningen, The Netherlands.*	
3:30 PM	114	**Evaluation of soybean-derived trypsin inhibitor proteins on gastric emptying, luminal pH, and endogenous enzyme activity in late-stage nursery pigs.** MJ Nisley*[1], ER Burrough[1], HB Krishnan[2], and NK Gabler[1], *[1]Iowa State University, Ames, IA, USA, [2]University of Missouri, Columbia, MO, USA.*	
3:45 PM		Short Break	

Wednesday, May 21

Time		Event	Location
2:25 PM - 5:00 PM		SYMPOSIA AND ORAL SESSIONS	Grand Ballroom

4:15 PM 115 **Basal ileal endogenous crude protein and amino acid losses in swine is influenced by age.**
JAL Barbosa*[1], H Moreira Junior[1], JL Brito[1], CEM Bertanha[1], SSS Sousa[1], A Gorrosterrazú[1], MLP Tsé[2], ABS Oliveira[3], F Dilelis[1], and US Ruiz[1], *[1]University of São Paulo (USP), Luiz de Queiroz College of Agriculture, Department of Animal Science, Piracicaba, São Paulo, Brazil, [2]São Paulo State University (UNESP), School of Veterinary Medicine and Animal Science, Department of Animal Production, Botucatu, São Paulo, Brazil, [3]Ingredion, Mogi Guacu, São Paulo, Brazil.*

4:30 PM 116 **Feasibility of using an x-ray fluorescence device for digestibility studies in pigs.**
Y.J.Y. Manaig*[1], E. Gourlez[2], M. Taris[1], A.R. Monteiro[1], and F. De Quelen[2], *[1]Animine, Annecy, France, [2]INRAE, Institut Agro Rennes-Angers, PEGASE, Saint Gilles, France.*

4:45 PM 117 **Fiber Fermentation Kinetics of Wheat and Maize in Weaned Piglets.**
I. Kaikat*[1], L. Blavi[2], M. A. Ton Nu[2], S. Tibble[2], A. Koppenol[2], G. González-Ortiz[3], and J. F. Pérez[1], *[1]Animal Nutrition and Welfare Service (SNiBA), Department of Animal and Food Science, Universitat Autònoma de Barcelona (UAB), 08193 Bellaterra, Spain, [2]AB Neo, PL Fraga, C/ Comunidad de Murcia, parc. LIE-1-03, 22520 Fraga (Huesca), Spain, [3]AB Vista, Marlborough SN8 [4]AN, United Kingdom.*

Wednesday, May 21

Time	Event	Location
6:00 PM - 10:00 PM	*Ticketed Event:* A Night on the Lakes	Boat trip

Join us for an unforgettable evening on Lake Geneva as part of the 16th International Symposium on Digestive Physiology of Pigs. Attendees will be transported from the Grand Geneva Resort & Spa to Lake Geneva Cruise Lines, where they'll board a scenic cruise set against Wisconsin's beautiful lakeside views. Enjoy a welcome drink and an array of appetizers as you network with colleagues from around the world, relax to the gentle lake breeze, and experience the charm of one of Wisconsin's most iconic locations. Don't miss this unique opportunity to unwind and connect as we set sail on "A Night on the Lakes."

Thursday, May 22

Time	Event	Location
6:30 AM	Breakfast	On your own
8:00 AM - 12 :00 PM	Registration	
8:30 AM - 11:50 AM	SYMPOSIA AND ORAL SESSIONS **Feed Resources for Improved Digestive Function and Nutrient Efficiency** Chair: Chengbo Yang, University of Manitoba, Co-Chair: Ruurd Zijlstra, University of Alberta	Grand Ballroom
8:30 AM	Welcome Chengbo Yang/Ruurd Zijlstra	

Thursday, May 22

Time		Event	Location
8:30 AM - 11:50 AM		SYMPOSIA AND ORAL SESSIONS	Grand Ballroom

8:35 AM 118 **KEYNOTE: Approaches for reducing nitrogenous/phosphorus waste excretion in the pig-challenges and opportunities.**
Léa Cappelaere[1,2], Florence Garcia-Launay[3], Patrick Schlegel[2], and Marie Pierre Létourneau Montminy*[1], *[1]Laval University, Quebec, Quebec, Canada, [2]Agroscope, Posieux, Switzerland, [3]INRAE UMR PEGASE, Saint-Gilles, Britanny, France.*

9:20 AM 119 **Improving starch digestion in barley, wheat and maize by xylanase/glucanase, phytase, protease and their combination in an in vitro digestion model.**
X. Liu*[1], B.M. Flanagan[1], E. Roura[1,2], and M.J. Gidley[1], *[1]Centre for Nutrition and Food Sciences, Queensland Alliance for Agriculture and Food Innovation, The University of Queensland, Brisbane, Queensland, Australia, [2]Centre for Animal Science, Queensland Alliance for Agriculture and Food Innovation, The University of Queensland, Brisbane, Queensland, Australia.*

9:35 AM 120 **In vitro evaluation of chicory-induced modulation of intestinal health in weaning piglets: Approach combining in vitro digestion, dialysis, and fermentation with a triple cell culture model.**
T.S. Kulkarni*[1,2], P. Siegien[2], L. Comer[3], A. Richel[2], B. Cudennec[1], C. Dugardin[1], S. Theysgeur[1], A. Lucau[4], N. Everaert[3], M. Schroyen[2], and R. Ravallec[1], *[1]UMR-T 1158, BioEcoAgro, University of Lille, Lille, FRANCE, [2]Precision Livestock and Nutrition Laboratory, TERRA Teaching and Research Centre, Gembloux Agro-Bio Tech, University of Liège, Gembloux, BELGIUM, [3]Nutrition and Animal Microbiota EcoSystems lab, Division of A2H, Department of Biosystems, KU Leuven, Leuven, BELGIUM, [4]Joint Laboratory CHIC41H University of Lille-Florimond-Desprez, Lille, FRANCE.*

9:50 AM 121 **Safe level of soy antinutritional factors in diets of weaned piglets.**
M. A. Ton Nu*[1,2], L. Blavi Josa[2], L. Sobrevia[2], S. Laird[2], S. Tibble[2], and A. Koppenol[2], [1]AB Neo a/s, Videbaek, Midtjylland, Denmark, [2]AB Neo, Fraga, Huesca, Spain.

Thursday, May 22

Time		Event	Location
8:30 AM - 11:50 AM		SYMPOSIA AND ORAL SESSIONS	Grand Ballroom
10:05 AM		Short Break	
10:35 AM	122	**The ratio of cystine to protein as a potential indicator of digestible amino acid concentration in heat-damaged animal byproducts for growing pigs.** J. Y. Sung*[1], M. K. Wiltafsky-Martin[2], and O. Adeola[1], *[1]Purdue University, West Lafayette, IN, USA, [2]Evonik Operations GmbH, Hanau, Germany.*	
10:50 AM	123	**Effect of bakery products and legume seeds in the diet on nutrient digestibility of growing-finishing pigs.** M. van Helvoort*[1] and P. Bikker[2], *[1]De Heus Animal Nutrition, Ede, The Netherlands, [2]Wageningen University & Research, Wageningen Livestock Research, Wageningen, The Netherlands.*	
11:05 AM	124	**A new sustainable grain protein concentrate can replace soy protein concentrate or hydrolyzed wheat gluten in piglet diets.** L.C.M. van Enckevort*, P.T. van 't Veld, and I.M. van As, *Denkavit Netherlands B.V., Voorthuizen, Netherlands.*	
11:20 AM	125	**Probiotic Bacillus subtilis C-3102 improved sow performance and reduced scouring on its progeny.** JB Lacuesta*[1], E Angeles[1], JM Raquipo[1], KJ Gayosa[1], and R Masilungan[2], *[1]Philchema, Inc, Quezon City, Philippines, [2]Phillippines College of Swine Practitioners, Quezon City, Philippines.*	

Thursday, May 22

Time		Event	Location
8:30 AM - 11:50 AM		SYMPOSIA AND ORAL SESSIONS	Grand Ballroom
11:35 AM	126	**The use of protease improves the growth performance of newly weaned piglets fed diets reduced in energy and protein.** O.O Babatunde*, G Tactacan, M.S Vieira, L Lahaye, and M.L de Moraes, *Jefo Nutrition Inc., St-Hyacinthe, QC, Canada.*	
11:50 AM - 1:40 PM		Lunch and Poster Sessions	Maple Lawn Ballroom
8:30 AM - 11:50 AM		SYMPOSIA AND ORAL SESSIONS	Grand Ballroom
		Development of Digestive and Absorptive Capacity in the Neonate and Impact of Weaning on Intestinal Function Chair: Nicholas Gabler, Iowa State University, Co-chair: Nathan Horn, United Animal Health	
1:40 PM		Welcome Nicholas Gabler/Nathan Horn	
1:45 PM	229	**KEYNOTE: Use of organoids to study the role of the microbiota in the early life development of the pig intestine.** M. Beaumont*, GenPhySE, *Université de Toulouse, INRAE, ENVT, Castanet-Tolosan, France.*	
2:30 PM	230	**Maternal dietary live yeast supplementation alters jejunal mucosal proteomes of piglets during suckling and postweaning phases.** Yuechi Fu*[1], Theresa Casey[1], Timothy Johnson[1], Jun Xie[2], Olayiwola Adeola[1], and Kolapo Ajuwon[1], *[1]Department of Animal Sciences, Purdue University, West Lafayette, IN 47907, United States, [2]Department of Statistics, Purdue University, West Lafayette, IN 47907, United States.*	

Thursday, May 22

Time		Event	Location
1:40 PM - 5:00 PM		SYMPOSIA AND ORAL SESSIONS	Grand Ballroom
2:45 PM	231	**Hypothalamic and ileal transcriptomic insights of poorly adapted freshly weaned pigs.** L. Fabà*, T. G. Hulshof, M. O Wellington, and H. M. J. Van Hees, *Trouw Nutrition R&D, Swine Research Centre, Boxmeer, The 8 Netherlands.*	
3:00 PM		Short Break	
3:30 PM	232	**KEYNOTE: Comparison of intestinal development of different pigs reveals PPARα is involved in regulating intestinal villus size and nutrient digestibility.** Q. Wang*[1], L. Yin[1], Z. Wang[1], J. Li[1], Q. Wang[1], J. Li[1], Y. Yin[2], and H. Yang[1,2], *[1]College of Life Sciences, Hunan Normal University, Changsha, Hunan 410081, China, [2]Institute of Subtropical Agriculture, Chinese Academy of Sciences, Changsha, Hunan, 410125, China.*	
4:15 PM	233	**Multi-omics characterization of swine colostrum and association of bioactive compounds with piglet survival and growth.** F. Correa[1], G. Rocchetti[2], P. Trevisi[1], M. Errico[2], B. Polimeni[1], A. Serra[3], M. Mele[3], L. Lucini[2], A. Gallo[2], and D. Luise*[1], *[1]Department of Agricultural and Food Sciences (DISTAL), University of Bologna, Bologna, Italy, [2]Department for Sustainable Food Process, Universita `Cattolica del Sacro Cuore, Piacenza, Italy, [3]Department of Agricultural, Food and Agro-Environmental Sciences, University of Pisa, Pisa, Italy.*	
4:30 PM	234	**Investigating the Impact of Early-Life Gut Microbiota Perturbation on Porcine Physiology and Immune Function.** L. Comer, M. Z. Akram, H. Zhao, and N. Everaert*, *Nutrition and Animal Microbiota Ecosystems Lab, Department of Biosystems, KU Leuven, Heverlee, Belgium.*	
4:45 PM	235	**Sensory additive in creep feed modulates post-weaning immune development and metabolism in piglets.** Z.W. Ng'ang'a[1,2], N. Tous[1], J. Tarradas[1], R. Beltrán-Debón[2], J.J. Pastor[3], S. López-Vergé[3], G. Tedo[3], and D. Torrallardona*[1], *[1]IRTA, Animal Nutrition, Constantí, Catalonia, Spain, [2]Universitat Rovira i Virgili, Tarragona, Catalonia, Spain, [3]Lucta S.A., Cerdanyola del Vallès, Barcelona, Spain.*	
6:00 PM - 10:00 PM		*Ticketed Event:* "Wisconsin: Heartland to the World" Gala	Forum

Celebrate the agricultural heritage and innovations of North America at the "Wisconsin: Heartland to the World" Gala. Set in the elegant surroundings of the Grand Geneva Resort, this evening will highlight Wisconsin's iconic contributions to animal science and agriculture, alongside the rich traditions of North American farming. Indulge in a gourmet, farm-inspired menu that represent the heartland's bounty. With live entertainment, regional flavors, and a focus on the global impact of our work in animal nutrition and physiology, this gala promises a memorable evening of camaraderie, culture, and celebration.

Friday, May 23

Time		Event	Location
6:30 AM		Breakfast	On your own
8:30 AM - 12:05 PM		SYMPOSIA AND ORAL SESSIONS **Mucosal Immunity and Pathogenesis and the Role of the Digestive Tract in the Maintenance of Health** Chair: Kola Ajuwon, Purdue University, Co-chair: Andrew Van Kessel, University of Saskatchewan	Grand Ballroom
8:30 AM		Welcome Kola Ajuwon/Andrew Van Kessel	
8:35 AM	236	**KEYNOTE: The intestinal barrier. Too much of a good thing?** J.R. Turner*, *Laboratory of Mucosal Barrier Pathobiology, Brigham and Women's Hospital and Harvard Medical School, Boston, MA, USA.*	
9:20 AM	237	**Evaluating the impact of F18 Enterotoxigenic E. coli ileum attachment on Notch and Wnt signaling during early disease in nursery pigs.** E. M. Due*[1], K. A. Miller[1], E. R. Burrough[1], E. T. Helm[2], and N. K. Gabler[1], *[1]Iowa State University, Ames, IA, USA, [2]Virginia Polytechnic Institute and State University, Blacksburg, VA, USA.*	
9:35 AM	238	**Enhancing intestinal health and antioxidant defense in weaned piglets treated with organic acids.** S. A. Flores[1], P. H. Pereira[1], I. C. Tavares[1], R. F Chaves[2], S. R. Silva Júnior[3], K. V. Z. Augusto[4], G. Heim[5], C. A. P. Garbossa[6], and V. S. Cantarelli*[1], *[1]Faculty of Animal Science and Veterinary Medicine, Federal University of Lavras, Lavras, Minas Gerais, Brazil, [2]AnimalNutri Ciência e Tecnologia, Patos de Minas, Minas Gerais, Brazil, [3]University of Minnesota, Saint Paul, Minnesota, United States of America, [4]Trouw Nutrition, Campinas, São Paulo, Brazil, [5]Trouw Nutrition, Amersfoort, Netherlands, [6]School of Veterinary Medicine and Animal Sciences, University of São Paulo, Pirassununga, São Paulo, Brazil.*	
9:50 AM	239	**Salmonella-infected myeloid cells express butyrate receptors in the lower porcine intestinal tract.** S.R. Becker*[1] and C.L. Loving[2], *[1]Immunobiology Graduate Program, Iowa State University, Ames, IA, United States, [2]USDA-ARS-National Animal Disease Center, Ames, IA, United States*	
10:05 AM		Short Break	
10:35 AM	240	**KEYNOTE: Interrogating porcine intestinal immune status to enhance disease resilience**. C.L. Loving*[1], J.E. Wiarda[1], S. R. Becker[2], and K.A. Byrne[1], *[1]USDA-ARS National Animal Disease Center, Ames, IA, United States, [2]Immunobiology Graduate Program, Iowa State University, Ames, IA, United States.*	
11:20 AM	241	**Intestinal plasma cells secreting IgA regulate Bacteroides uniformis commensalism and are dysregulated in weaned reaction.** W.J. Tang* and H.F. Wang, *College of Animal Science, Zhejiang University, Hangzhou, Zhejiang, China.*	

Friday, May 23

Time		Event	Location
8:30 AM - 12:05 PM		SYMPOSIA AND ORAL SESSIONS	Grand Ballroom
11:35 AM	242	**The influence of swine dysentery on concentration of short chain fatty acid, weight of intestinal tracts and intestinal morphology in growing pigs fed diets varying in soluble and insoluble fibers from co-products.** G.I. Lee*[1,2], K.E. Bach Knudsen[1], and M.S. Hedemann[1], *[1]Department of Animal and Veterinary Sciences, Aarhus University, Tjele, Denmark, [2]Department of Agricultural Science, Korea National Open University, Seoul, Republic of Korea.*	
11:50 AM	243	**The therapeutic effects of oat beta-glucans in an experimental porcine model of Crohn's disease.** Dominika Szkopek*[1], Lukasz Kopiasz[2], Jaroslaw Wolinski[1], Kinga Majchrzak Kuligowska[3], Kamil Zaworski[1], Katarzyna Dziendzikowska[2], Katarzyna Sikorska[4], Joanna Harasym[5,6], and Joanna Gromadzka-Ostrowska[2], *[1]Laboratory of Large Animal Models, The Kielanowski Institute of Animal Physiology and Nutrition, Polish Academy of Sciences, Instytucka Str. 3, Jablonna, Poland, [2]Department of Dietetics, Institute of Human Nutrition Sciences, Warsaw University of Life Sciences, Nowoursynowska Str. 159C, 02 776 Warsaw, Poland, [3]Department of Physiological Sciences, Institute of Veterinary Medicine, Warsaw University of Life Sciences, Nowoursynowska Str. 159, 02-776 Warsaw, Poland, [4]Centre for Radiobiology and Biological Dosimetry, Institute of Nuclear Chemistry and Technology, Drodna Str. 16, 03-195 Warsaw, Poland, [5]Department of Biotechnology and Food Analysis, Wroclaw University of Economics and Business, Komandorska Str. 118/120, 53 345 Wroclaw, Poland, [6]Adaptive Food Systems Accelerator-Science Centre, Wroclaw University of Economics and Business, Komandorska Str. 118/120, 53-345 Wroclaw, Poland.*	
12:05 PM - 12:20 PM		Closing Comments	Grand Ballroom
12:20 PM		Lunch	Maple Lawn Ballroom