

ICPD
2022
JUNE 15 - 17

**18th International Conference on
Production Diseases in Farm Animals**
Madison, Wisconsin



Wednesday, June 15

9:00 – 10:00 am – Opening Session

- 9:00 – 9:15: Welcome from conference chairs
- 9:15 – 10:00: *A Systems-based Approach to Immunity and Health Resilience in Livestock*
Brian Aldridge, University of Illinois, USA

10:00 – 10:30 am – Break

10:30 am – 12:30 pm – Immunity, Microbiome, & Health Theme

- 10:30 – 11:10: *Use of Genomics and Immunology to Help Producers Control Viral Diseases in Pigs*
Joan Lunney, USDA Agricultural Research Service, USA
- 11:10 – 11:50: *Understanding the Diet-Microbiota-Immunometabolic Axis in Gut Health*
Michael Kogut, USDA Agricultural Research Service, USA
- 11:50 – 12:05: *The influence of Mycobacterium avium subsp. paratuberculosis infection on selected biochemical blood parameters* **Jaka Hodnik, University of Ljubljana, Slovenia**
- 12:05 – 12:20: *Age of calves upon arrival at the veal farm: are older calves more robust?*
Francesca Marcato, University of Wageningen, The Netherlands
- 12:20 – 12:25: *Effects of Lactobacillus and Bacillus species supplementation on measures of gut integrity and health in pre-ruminant calves through weaning*
Laman Mamedova, Michigan State University, USA
- 12:25 – 12:30: *Ecological and phylogenetic analyses of the uncultured bacterial group RFP12 revealed its possible contribution to fiber digestion in horse hindgut*
Rintaro Yano, Obihiro University, Japan

12:30 – 2:00 pm – Lunch

2:00 – 3:45 pm – Virology Theme (concurrent)

- 2:00 – 2:45: *Genetic Modification of Pigs for Disease Resistance: Past, Present, and Future*
Bob Rowland, University of Illinois, USA
- 2:45 – 3:30: *Why Do Vaccines Fail?*
Andrew Wargo, Virginia Institute of Marine Science, USA
- 3:30 – 3:45: *Antiviral effects of glycerol monolaurate on African Swine Fever Virus: towards pathogen mitigation and disease prevention* **Charles Elrod, Natural Biologics Inc., USA**

2:00 – 3:50 pm – Metabolism, Nutrition, and Reproduction Theme (concurrent)

- 2:00 – 2:40: *Early Postpartum Hyperketonemia –A Sign of High Production or Reason to Worry?*
Sabine Mann, Cornell University, USA
- 2:40 – 3:20: *What's Food Got to Do with It: The Contrasting Functions of Nutrition on Reproduction in Dairy Cows* **Milo Wiltbank, University of Wisconsin, USA**
- 3:20 – 3:35: *Lipolysis inhibition improves clinical outcomes in the treatment of ketosis in dairy cows: An individually randomized multigroup parallel controlled trial*
Miguel Chirivi, Michigan State University, USA
- 3:35 – 3:50: *Hyperketolactia effects on milk yield in early lactating dairy cows*
Robert Vansaun, Penn State University, USA

3:45 – 4:15 pm – Break

4:15 – 5:00 pm – Fetal Programming Theme

- 4:15 – 5:00: *Stress Before Birth: Role of Glucocorticoids in Developmental Programming*
Alison Forhead, University of Cambridge, UK

Thursday, June 16

8:00 – 10:00 am – Animal / Pathogenic Environment Theme

- 8:00 – 8:45: *Disturbed Milk Ejection at Machine Milking and the Issues Related to Oxytocin Injections in Dairy Cows*
Rupert Bruckmaier, University of Bern, Switzerland
- 8:45 – 9:30: *Novel Antibiotic Alternative Approaches to Control Coccidiosis and Necrotic Enteritis (remote presentation)* **Hyun Lillehoj, USDA Agricultural Research Service, USA**
- 9:30 – 9:45: *Reduction of production diseases requires a change from an inductive to a deductive approach* **Albert Sundrum, University of Kassel, Germany**
- 9:45 – 10:00: *Dibutyl phthalate induces disruption of spermatogenesis in the testes of Japanese quail (*Coturnix coturnix japonica*)* **Musa Zakariah, University of Maiduguri, Nigeria**

10:00 – 10:30 am – Break

10:30 am – 12:30 pm – Animal / Pathogenic Environment Theme

- 10:30 – 11:15: *Next Generation Biosecurity for Animal Agriculture: The Swine Industry Model*
Scott Dee, Pipestone Veterinary Services, USA
- 11:15 – 12:00: *Animal Health, Welfare and Environment – Complex Interactions with Room for Optimization*
Nicole Kemper, University of Veterinary Medicine, Hanover, Germany

12:30 – 2:00 pm – Lunch

2:00 – 3:45 pm – Prudent Antibiotic Use Theme (concurrent)

- 2:00 – 2:40: *Pathways to Prudent Antibiotic Use - Tools and Challenges*
Dolf Kümmerlen, University of Zurich, Switzerland
- 2:40 – 3:20: *Immune Modulation by Antimicrobials and Innate Immune Agonists in Bovine Respiratory Disease Management* **Steven Dow, Colorado State University, USA**
- 3:20 – 3:35: *VCPR.ORG - an open internet-based system for managing veterinary treatment protocols in practice and research* **James Ehrlich, Dairy Veterinarians Group, USA**
- 3:35 – 3:40: *Cell culture and in vivo examination of the mechanism of action of Victrio[®], a DNA-liposome-based innate immune agonist* **Mark Parcels, University of Delaware, USA**

2:00 – 3:45 pm – Heat Stress & Disease Theme (concurrent)

- 2:00 – 2:45: *Heat Stress Impact on Health and Production in Broiler Chickens*
Carl Schmidt, University of Delaware, USA
- 2:45 – 3:30: *Heat Stress Impact on Immune Responses of Dairy Ruminants*
Mariangela Caroprese, University of Foggia, Italy
- 3:30 – 3:45: *Heat stress effects on the mucosa-associated and digesta microbiome in the jejunum of primiparous dairy cows* **Franziska Koch, Research Institute for Farm Animal Biology, Germany**

3:45 – 4:15 pm – Break

4:15 – 5:15 pm – Locomotion Theme

- 4:15 – 5:00: *The Vicious Cycle of Claw Horn Disease, Causes and Interventions (remote presentation)*
Jon Huxley, Massey University, New Zealand
- 5:00 – 5:15: *Lameness and its impacts on dairy herds: the welfare sub-module in the Ruminant Farm Systems model*
Tadeu Da Silva, University of Wisconsin, USA

Friday, June 17

9:00 – 10:00 am – Poster Session (all themes)

10:00 am – 12:00 pm – Precision Livestock Farming Theme

- 10:00 – 10:45: *Precision Livestock Farming: A Misnomer or the Silver Bullet?*
Thomas Norton, KU Leuven, Belgium
- 10:45 – 11:30: *Leveraging Big Data Analytics to Improve Disease Surveillance and Welfare in Livestock*
Guilherme J M Rosa, University of Wisconsin, USA
- 11:30 – 11:45: *Evaluation of dairy cow health at a cow-individual and at herd level using milk MIR-spectra based estimates*
Josef Gross, University of Bern, Switzerland
- 11:45 – 12:00: *Effect of health and estrous expression detected by an automated activity monitoring system on reproductive performance in transition dairy cows*
Lukas Bretzinger, Freie Universitaet Berlin, Germany

12:00 – 12:15 pm – Closing Comments and Announcement of 19th ICPD Location

Afternoon – Group tour of University of Wisconsin research facilities and Lake Mendota cruise