



Swine Innovation Porc

What is the microbiome anyway? Gut health and how it impacts pig production

January 7, 2020 – 2:00 pm to 4:00 pm

Alhambra Room – Banff Springs Hotel, Banff Alberta

- 2:00 PM THE GUT MICROBIOME, AND WHY YOU SHOULD CARE ABOUT IT
Dr. Emma Allen-Vercoe, University of Guelph
- 2:50 PM HEALTH BREAK
- 3:00 PM OVERVIEW OF PIG GUT HEALTH CHALLENGES:
FROM BIRTH TO MARKET
Dr. John Harding, University of Saskatchewan
- 3:30 PM THE FUTURE OF PIG GUT HEALTH: RESEARCH TO COME
Dr. Andrew Van Kessel, University of Saskatchewan



This session is free of charge! Register to save your seat by emailing us at info@swineinnovationporc.ca

About the speakers.....



**Dr. Emma
Allen-Vercoe**
University of Guelph

Dr. Emma Allen-Vercoe is Professor and Canada Research Chair at the Department of Molecular and Cellular Biology at the University of Guelph. Research in

Dr. Allen-Vercoe's lab focuses on the study of the normal human gut microbiota, both in disease and in health.

She began her research career with undergraduate and graduate studies at the Central Veterinary Laboratories (now Veterinary Laboratories Agency) and the Centre for Applied and Microbiological Research (CAMR, now the Health Protection Agency) in the UK. She has done postdoctorate work at CAMR as well as at the University of Calgary. In 2004, she won a Fellow-to-Faculty Transition award through the Canadian Association of Gastroenterology. This award allowed her to develop an independent research program aimed at the study of the normal human microbiota and its influence on human health and disease, a program that she brought to Guelph in December 2007.

Since then, Dr Allen-Vercoe has established a world-class anaerobic microbiology facility at Guelph. She has developed a specific platform for the study of whole microbial ecosystems, dubbed 'Robogut', to examine ecosystem function and output in unprecedented detail. Current projects include the study of the gut microbiota in neonatal necrotizing enterocolitis, *Clostridioides difficile* (*C. diff*) infection, diabetes, and inflammatory bowel diseases.

Dr. Allen-Vercoe is also co-founder and CSO of NuBiyota, a company created to develop the concept of bacterial ecosystem therapeutics for the treatment of diseases related to gut microbial dysbiosis.



**Dr. John
Harding**
University of
Saskatchewan

After graduating from the Ontario Veterinary College at the University of Guelph in 1988, Dr. Harding worked in a

mixed animal practice in rural Saskatchewan. Since 1991 he has specialized in pork production, and in 1997 established a swine consultancy practice. In 1997 he also completed a Master of Science degree in Veterinary Medicine, at the University of Minnesota.

Now a full professor at the Western College of Veterinary Medicine, University of Saskatchewan, he and his team of technicians, graduate students, postdoctoral fellows and collaborators conduct research in swine diseases. Current interests include "*Brachyspira hamptonii*", reproductive PRRS, and host genomic resilience to major swine diseases.

Dr. Harding was the recipient of the A.D. Leman Science in Practice Award in 1999, the Pfizer Carl J. Norden Distinguished Teaching Award in 2009, and the Pfizer Animal Health Award for Research Excellence in 2010. He was the founding President of the CASV and Vice-President of the 2010 IPVS Congress. He is the current Scientific Program Chair of the Western Canadian Association of Swine Veterinarians (WCASV), and is a member of the Prairie Swine Centre Board of Directors and the Canadian West Swine Health Intelligence Network. He is a Diplomate of the American Board of Veterinary Practitioners; Swine Health Management specialty. Interests outside of work include outdoor activities including skiing, sailing, canoeing, hiking and woodworking.



**Dr. Andrew
Van Kessel**
University of
Saskatchewan

Dr. Andrew Van Kessel is Professor of Nutritional Physiology and has served as Head of the Department of Animal and Poultry Science,

University of Saskatchewan since 2011. He obtained his BSc at Dalhousie University and went on to complete a PhD in Animal Physiology from the University of Saskatchewan in 1992. After completing a postdoctoral appointment at the Vaccine and Infectious Disease Organization, Dr. Van Kessel rejoined the Department of Animal and Poultry Science and became a faculty member in 2002. He currently serves as a member of the board for both Swine Innovation Porc and Prairie Swine Centre.

His current research interests center on the host: microbial interface in the gastrointestinal tract of animals with particular reference to functional feeds and additives. He has developed expertise in gnotobiotic (germ-free) rearing of poultry and pigs, molecular microbial profiling of intestinal microbiota and analysis of gut mucosal physiology. In 2019, Dr. Van Kessel was very pleased to present the Kees de Lange Lectureship in Animal Nutrition at the Animal Nutrition Conference of Canada.