



PRECONFERENCE SYMPOSIUM

1 pm to 6 pm, May 29, 2012

Conference Center, Keystone, Colorado

(Sponsored by Luca S.A.)

Title: Gut Chemosensing: Integrating nutrition, gut function and metabolism in pigs

Program Aim: To provide a comprehensive overview of the role that gut chemosensing plays on regulating gut function and body metabolism. The scientific program will consist of keynotes from outside, related disciplines to bring a unique view to the context of the presented science including implications for swine species.

Symposium Theme: The discovery of the expression of taste signaling elements in gut mucosa in the mid- 1990's raised the intriguing possibility that the gut is able to "sense" luminal contents. It seems that the intestinal mucosa of pigs is also provided with a chemosensory system that mediates gut functions and conveys information to other tissues regarding its luminal environment. For these reasons, the relationship between gut chemosensing, gut function, and body metabolism emerges as an interesting subject of functional importance.

Pre-Conference Program

Chairs: D. Burrin, USA and I. R. Ipharraguerre, Spain.

Each presentation will last 35 minutes followed by 10 minutes for questions and comments.

To promote further discussion and networking, a reception for all symposium attendees will follow the program.

Review of the gut chemosensory system and the interaction between enteroendocrine cells and visceral afferent nerves. K. Torii, Institute of Life Sciences, Ajinomoto Co, Inc., Japan.

Review of the involvement of gut chemosensing on gut growth, motility, and metabolism. D. Burrin, USDA, ARS, Children's Nutrition Research Center, Department of Pediatrics, Baylor College of Medicine, TX.

Review of the involvement of gut chemosensing on the regulation of mucosal barrier function and defense mechanisms. J. D. Kaunitz, Veterans Affairs Greater Los Angeles Healthcare System, Department of Medicine, School of Medicine, University of California-Los Angeles and Bretwood Biomedical Research Institute, CA.

Review of the involvement of gut chemosensing on the regulation of nutrient absorption and energy supply. O. J. Mace, Prosidion Ltd., United Kingdom.

Review of the involvement of gut chemosensing on the regulation of feed intake and energy homeostasis. R. Steinert, Division of Gastroenterology, Department of Biomedicine, Clinical Research Center, University Hospital Basel, Switzerland.

Applications of gut chemosensing to manage gut integrity, feed intake, and metabolism in pigs. J. E. Pettigrew, Department of Animal Sciences, University of Illinois.