2019 PSA Symposia Program

The 2019 PSA Annual Meeting (July 15-18, 2019) will present eleven symposia, lectures and workshops of current interest to the international poultry industry and poultry science community. Below is the focus on the symposium taking place on: **Thursday, July 18, 2019 at 8:00 AM**

**Symposium:**
**Mycotoxin Risk Management and Gut Health in Poultry, Importance in Modern Poultry Production and Innovative Solutions to Support It**

**Chair:** Danièle Marzin, Olmix Group

This symposium will investigate the importance of the immune system and gut health in the current context of poultry production and updating the poultry community on mycotoxin risk and its effects on poultry gut health and immunity. It will investigate the latest available diagnostic technologies to monitor animals’ exposure to mycotoxins and markers for gut health, approach the notion of risk level, review prevention methods, immune system modulation to support productivity, from a good monitoring of its status to the use of innovative and natural in-feed solutions to support it.

8:00 am  **Development of the immune system in poultry**
Bernd Kaspers, University of Munich  
*The avian immune system presents some unique features that are genetically determined. Post hatch environmental conditions and bacterial colonization of the gut play an important role in the maturation of the immune system whereas the role of nutritional factors remains poorly understood.*

8:40 am  **Cost of impaired immunity and implication in the field**
Filip van Immerseel, Ghent University  
*Nowadays, the rating of the important organs is changing; the gut has become increasingly important, partly because of its implication in immune functions. To have a good performance, it is necessary to quantify both the cost of impaired immune response and the cost of activating the immune system.*

9:20 am  **Mycotoxin toxicity: notion of risk level and interaction between fusariotoxins at the intestinal level**
Isabelle Oswald, INRA  
*Among mycotoxins, fumonisin B1 and deoxynivalenol have a great impact on zootechnical parameters. These mycotoxins are not only locally toxic for the intestine, but also dysregulate many intestinal functions and impair the local immune response. This results in systemic toxicity leading to many symptoms. Feed contamination with mycotoxins also impair the barrier function of the intestine, leading to translocation of bacteria across the intestine and thus intestinal and systemic infections.*

10:00 am  **Break**

10:30 am  **Managing mycotoxins at the speed of light: Application of the NIR technology for mycotoxin analysis**
Carlos Augusto Mallmann, Federal University of Santa Maria
Mycotoxin analysis is a key tool in mycotoxin risk management in the feed. The control of raw materials must be accurate and quick to be an efficient decision-making tool. Recently, the fast, simple and low-cost technology for the detection of mycotoxins that employs near-infrared spectroscopy – NIR is developed and is a very promising alternative for the feed industry.

11:10 am  **Mycotoxin detoxification strategies of feed in Europe, a review**  
Julia Laurain, Olmix Group  
One strategy for reducing animals’ exposure to mycotoxins is to decrease mycotoxin bioavailability by incorporating various mycotoxin-detoxifying agents in the feed. Facing the abundance of available candidate detoxifying agents, screening methods are needed to evaluate their efficacy and select appropriate materials. A wide variability of results is observed, depending on the method and mycotoxin used.

11:40 am  **Roundtable Discussion**

Meeting rates will go up on June 1, 2019. If you have not yet registered to attend, make sure to register for the meeting before this date to save on registration rates. Visit the [PSA Annual Meeting website](http://www.psaa.org) for more information.