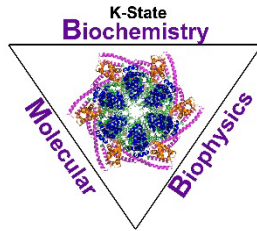


Ackert Hall, Room 120
Wednesday, January 24, 2024
4:00 P.M.



Coffee and Cookies
Chalmers Hall, Room 168
3:45 P.M.

Biochemistry
&
Molecular
Biophysics

Seminar

Understanding Microbial Communities for Food Safety and Food Quality

Valentina Trinetta

Animal Sciences and Industry
Kansas State University

In this seminar Dr Valentina Trinetta will give an overview of the three main research areas explored in her laboratory:

- **FOODBORNE PATHOGENS BIOFILMS:** the ability of bacteria to form biofilms is predicted to be a strategy to increase persistence and survival. Biofilm formation is a dynamic process and represents threat for food safety. Dr. Trinetta's research has been aimed to explore and validate effective systems to control biofilms in food premises.
- **MICROBIAL RESISTANCE AND ADAPTATION:** Dr. Trinetta's team is trying to understand patterns and potential risk factors of foodborne pathogens, such as *Salmonella enterica* monophasic from feed to fork. This pathogen has recently become one of the most identified serotypes in pigs, pork, and humans worldwide.
- Microbial community dynamics and changes in metabolite production is another important topic of Dr. Trinetta's recent research effort. The use of fermented foods has been recorded for thousands of years and continues to be of global importance to this day. Nevertheless, often fermented products are unsuitable for people with wheat allergy, gluten sensitivity, or Celiac disease. Dr. Trinetta has been addressing the use of alternative fermentation substrates to characterize microbial dynamics and the effect of different processing parameters on flavor and nutritional properties of the final products.