The foodborne pathogen Campylobacter continues to be an ongoing problem for public health on a worldwide basis. It has been particularly associated with poultry and a number of intervention approaches are currently being explored to develop better ways to reduce contamination both in live bird production as well as processing. While some research successes have been reported over the years the ultimate limitation of Campylobacter dissemination still remains elusive. Part of this is due to lack of understanding of the physiology and ecology of Campylobacter in the avian gastrointestinal tract. This makes the cultivation of Campylobacter also somewhat difficult and can cause problems for culture-based enumeration of Campylobacter from these types of environments. In our studies we have examined the selectivity of various Campylobacter selective media using 16S ribosomal DNA based microbiome sequencing to identify bacterial populations in samples from these sources. In this talk the outcomes of these analyses will be discussed and the implications for estimating Campylobacter in poultry samples.

Recent publications


Biography

Steven C Ricke is the holder of the Donald “Buddy” Wray Endowed Chair in Food Safety and Director of the Center for Food Safety at the University of Arkansas. He is also a Faculty Member of the Department of Food Science and the Cellular and Molecular Graduate program. He served as Co-Founder and former President of the Arkansas Association of Food Protection (AAFP). He was named an AAFP Fellow in 2015 and a Poultry Science Association Fellow in 2017. His research program is primarily focused on virulence and pathogenic characteristics of foodborne Salmonella and Campylobacter. His research projects have emphasized studies on the growth, survival and pathogenesis of these organisms under conditions encountered during food animal production and processing.

sricke@uark.edu