



BC FOOD PROTECTION ASSOCIATION

presents

Spring Speaker's Evening Webinar Series

Sponsored by

4:30 - 5:30 pm PT

FREE FOR BCFPA MEMBERS

\$20 FOR NON-MEMBERS



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| DATES | VIRTUAL WEBINAR SERIES SCHEDULE |
|-----------------------------|--|
| MAY 20, 2021 | Are <i>Escherichia coli</i> on Beef Becoming More Resistant to Biocides? Speaker: Xianqin Yang, Research Scientist, Lacombe Research and Development Centre, Agriculture and Agri-Food Canada |
| JUN 17, 2021 (Tentative) | Sanitation Topic TBA Speaker: Claire Nolan & Nikola Jovic, Sani Marc |
| JULY 2021 TBA | TBA |

For more information and to register, visit our website: www.bcfoodprotection.ca

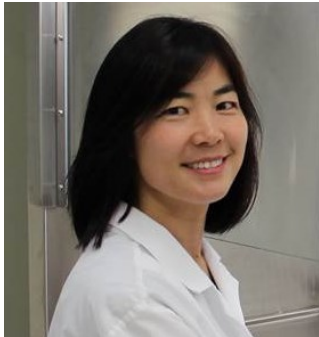
BCFPA Members are welcome to send in their questions to our webinar speakers ahead of time - you can email your questions to us at info@bcfoodprotection.ca or post your questions in the chat during our virtual Zoom webinar!



BC FOOD PROTECTION ASSOCIATION

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FEATURED SPEAKERS



Xianqin Yang

Research Scientist, Meat Microbiology, Lacombe Research and Development Centre, Agriculture and Agri-Food Canada

Xianqin Yang obtained her doctor of philosophy degree in 2007 from the Biology Department of the University of Waterloo, with a focus on microbiology. Since then, she has been working at Agriculture and Agri-Food Canada Lacombe Research and Development Centre. Her research has been primarily focusing on reduction of microbiological contamination of meat during the primary production and distribution process, i.e. from slaughtering of animals to steaks on the plate, including identification, tracking and control source of contamination, mechanisms of survival and persistence of *E. coli* in meat processing environments, effective intervention strategies for controlling enteric pathogens, and shelf-life extension of meat.

Topic: *Are Escherichia coli on Beef Becoming More Resistant to Biocides?*

Abstract: Shiga toxin-producing *Escherichia coli* (STEC) are significant human pathogens, with cattle being a primary reservoir. To reduce the contamination of beef with STEC and the spread of the organism in the environment, many approaches focusing on different areas along the beef production chain have been examined. For the post-harvest stretch, many meat plants in North America have incorporated multiple decontaminating treatments, including carcass pasteurization with hot water or steam, and washing carcasses with organic acids into their HACCP-based preventative control plan. Consequently, the microbiological condition of chilled beef carcasses has greatly improved in recent years, and there is also a downward trend in the incidence of human infections with *E. coli* O157:H7/NM in Canada. On the other hand, studies have shown that a substantial fraction of *E. coli* on beef cuts and trimmings are from processing equipment surfaces, and some strains have been repeatedly recovered from the same facility. Not surprisingly, some researchers have raised concerns that the use of decontaminating treatments in meat plants may increase the risk to consumers, by selecting for pathogen strains that are resistant to existing hurdle technologies. Some recent work has looked into whether this is the case and explored the mechanisms through which those bacteria persist. To further improve the safety of beef and storage stability of beef, effective cleaning and sanitization of meat processing equipment and related environment are of paramount importance.