Medical Microbiology and Immunology

MMI 291 Seminar Series

Emerging Challenges in Microbiology and Immunology

Current Theme: Interdisciplinary Research

Luxin Wang, Ph.D.

Assistant Professor

Food Science and Technology

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"One emerging food safety concern: the formation of viable-but-nonculturable and sublethally-injured cells"

Friday, November 2, 2018

Genome and Biomedical Sciences Facility, Auditorium Room 1005

12:10 PM – 1:00 PM

Research work: Dr. Luxin Wang's research focuses on microbial food safety. In particularly, her lab works on bacterial pathogens, including Shiga toxin producing *Escherichia coli*, *Salmonella spp.*, *Vibrio spp.,* and *Listeria monocytogenes*. Her program uses conventional microbiological technologies and molecular techniques to study the behavior of pathogens on food products, evaluate the efficacy of novel intervention strategies, and investigate the formation and spread of antimicrobial-resistant microbes and genes.

Publication references:

Han, D., Hung, Y. C., and Wang, L. 2018. Evaluation of the antimicrobial efficacy of neutral electrolyzed water on pork products and the formation of viable-but-nonculturable (VBNC) pathogens. Food Microbiology. 73, 227-236.

Han, D., Huang, Y. C., Bratcher, C. L., Monu, E. A., Wang, Y., and Wang, L. 2018. Formation of sublethally-injured *Yersinia enterocolitica*, *Escherichia coli* O157:H7, and *Salmonella* Enteritidis cells after neutral electrolyzed oxidizing water treatments. Applied and Environmental Microbiology. Published online on June 29 2018.

Liao, C., Zhao, Y., and Wang, L. 2017. Establishment and validation of RNA-based predictive models for understanding survival of *Vibrio parahaemolyticus* in oysters stored at low temperatures. Applied and Environmental Microbiology. 83(6), e02765-16.