



BC FOOD PROTECTION ASSOCIATION
presents

2020 VIRTUAL ANNUAL GENERAL MEETING

January 28, 2021

4:30 - 6:00 pm PT

FREE FOR BCFPA MEMBERS

SCHEDULE	
4:30-4:45 PM	Welcome Remarks, AGM Business & Scholarship Award Announcement
4:45-5:15 PM	Virtual Networking Activity
5:20-5:50 PM	Speaker: Tom Brenner, UBC PhD Candidate, on "Formulating a broad-spectrum bacteriophage cocktail against pervasive poultry-associated <i>Salmonella enterica</i> serovars"
5:50-6:00 PM	Closing Remarks

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



BC FOOD PROTECTION ASSOCIATION

2020 Annual General Meeting

FEATURED SPEAKERS



Thomas Brenner

PhD Candidate, Food Science, Faculty of Land and Food Systems, University of British Columbia

Tom previously did his Bachelor of Science (BSc) with a minor in chemistry and Master's of Science (MSc) Integrative Biology at Wilfrid Laurier University in Waterloo, Ontario. After his Master's degree, he was employed as Project Manager/Research Associate under the Canadian Glycomics Network and Salmonella Syst-OMICS where he investigated novel treatments for oral pathogens in 'The Red Complex' and bacteriophages for disrupting *Salmonella* biofilms. Tom now investigates antimicrobial applications of bacteriophages in the poultry industry for his PhD research. His goal is to produce economically feasible and safe alternative antimicrobials for use in Canadian agriculture.

Topic: **Formulating a broad-spectrum bacteriophage cocktail against pervasive poultry-associated *Salmonella enterica* serovars**

Summary:

Illness caused by *Salmonella*, known as salmonellosis, is primarily linked to the consumption of poultry products with annual fiscal losses in North America estimated in the billions of dollars. However, excessive antibiotic usage in agriculture has been linked to increased antimicrobial resistance to important human antibiotics which has resulted in complete and partial bans of antibiotics in livestock feed in Europe and North America, respectively. Bacteriophages are natural bacterial predators which have shown promise as alternative antimicrobials due to their safety, ubiquity, and target specificity. The purpose of my research has been to formulate a phage cocktail with antimicrobial efficacy across poultry-associated *Salmonella* isolates. A broad-spectrum cocktail containing three sewage phages has been successfully produced with high killing efficacy across all tested poultry-associated *Salmonella* isolates in vitro. This research may prove valuable in food industries where antibiotic treatments are being progressively limited as antimicrobial options.