



# BC FOOD PROTECTION ASSOCIATION



## 2019 Annual General Meeting

Featured Speakers: Julie Jean & Yvonne Ma

# Jan 16, 2020

### Italian Cultural Centre

3075 Slocan Street, Vancouver, BC  
Complimentary Parking Available

Visit our website to register and for more information

[www.bcfoodprotection.ca](http://www.bcfoodprotection.ca)

### Schedule:

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|--------------|---|
| 5:00-5:30 PM | Registration & Light Networking   |
| 5:30-5:45 PM | Welcome Remarks & AGM Business  |
| 5:45-6:35 PM | Speaker: Julie Jean, Professor, Dept of Food Science, Université Laval, on "Biofilms Hunting in the Food Industry"  |
| 6:35-7:20 PM | Dinner & Networking   |
| 7:20-7:30 PM | Scholarship Presentation & Awards   |
| 7:30-8:00 PM | Speaker: Yvonne Ma, Lab Manager and Researcher, UBC, on "Isolation and Characterization of Bacteriophages against Verocytotoxigenic <i>Escherichia coli</i> " |
| 8:00-8:15 PM | Closing Remarks & Door Prizes   |

**Register today to attend our AGM! Attendance is FREE for BCFPA Members who renewed for 2020 and for members from 2019!**

**Sustaining Member Display Tables** available on first-come, first-serve basis. Contact us at [info@bcfoodprotection.ca](mailto:info@bcfoodprotection.ca) to reserve a table!

**We are accepting nominations to run in our 2020 Executive Board. If you are interested in volunteering, please talk to us in person or send us an email! We are always looking for volunteers!**



# BC FOOD PROTECTION ASSOCIATION

## 2019 ANNUAL GENERAL MEETING

### FEATURED SPEAKERS



#### **Julie Jean**

*Professor, Department of Food Science, Université Laval*

Julie Jean is full professor at the Department of Food Science, Université Laval, Quebec City, Canada since 2003. Julie received her PhD in Food Science and Technology from Université Laval, Quebec City, and MSc And BSc in the same fields. She also did a post-doctoral fellow at North Carolina State University, Raleigh, NC, USA. She is a regular member of the Université Laval's Institute of Nutrition and Functional Foods (INAF) and is leading the food virology laboratory. With her research group, they have developed new approaches for the detection, inactivation and control of pathogens including enteric viruses in food and environmental samples. She advised more than 30 graduate students and post-doctoral fellows and authored more than 50 scientific publications and book chapters. Julie teaches the undergraduate courses "Food microbiology", "Recent progresses in microbiological analysis of foods" and is also involved in different graduate courses. She is the Director of the bachelor curriculum in Food Science and Technology and the Director of the MSc and PhD programs in Agri-Food Microbiology. In the fall of 2019, she received the prize of excellence from Université Laval for her leadership as a Program Director. During 2015-2016, Julie is detached in sabbatical in which she contributed in stays namely in World Health Organization (WHO), Geneva, CH, Health Canada, Ottawa, CA and Nestlé, Lausanne, CH. Since 2010, she is the president of the Quebec International Association for Food Protection (IAFP) Affiliate, the AQIA (Association Québécoise pour l'innocuité alimentaire). In 2016, she was the first Canadian to receive the prestigious Elmer Marth Award for her outstanding contributions as an educator and the advancement of food safety. She is currently the IAFP Affiliate Council Secretary and the Vice-Chair of the Viral and Parasitic Foodborne Disease PDG.

Julie will present on:

#### **"Biofilms Hunting in the Food Industry"**

Abstract:

The food industry offers a wide range of perishable and semi-perishable products. The microbial contamination can occur at different stages during production, processing and preparation. The presence of microbial contaminants may come from various sources and the origin coming from biofilms is largely underestimated. Biofilms will allow growth and persistence of bacteria on food contact surfaces of equipment. The dispersion or release of microorganisms into the food matrices from a biofilm can either be initiated by bacteria or mediated by external forces such as fluid shearing, abrasion or cleaning. This can result in the presence of spoilage microorganisms in food product which can lead to a loss of quality leading to a reduced shelf life and a risk of contamination by pathogenic microorganisms affecting food safety. The presence of biofilms can also affect the efficiency of processing steps by reducing flow and heat transfer rates in pipelines. They can also promote corrosion of stainless steel surfaces. Established biofilms are difficult to remove during cleaning-in-place (CIP) and can become resistant to sanitizers. All of these constraints associated to biofilms can lead to considerable economic losses in the food industry. This presentation will discuss the current challenges of biofilms in the food industry, as well as the various methods available for their study and finally the strategies proposed to control their formation on surfaces.

# FEATURED SPEAKERS



## Yvonne Ma

*Lab Manager & Researcher, Wang Lab of Molecular Food Safety, University of British Columbia*

During her undergraduate years, Yvonne developed an interest in microorganisms and how they impact the food we eat both positively and negatively. This led her to complete her BSc at UBC, with a major in Microbiology and Immunology, and a minor in Food Science. Following this, she pursued her interest further by getting into research, and recently graduated with her MSc in Food Science from University of British Columbia in September 2019. During her graduate studies, Yvonne received the second place award for the BCFPA 2018 scholarship, and was a recipient of the NSERC CGS-M Award. She is currently the lab manager and researcher at the Wang Lab of Molecular Food Safety at the University of British Columbia.

Yvonne will present on:

**“Isolation and Characterization of Bacteriophages against Verocytotoxigenic *Escherichia coli*”**

### **Abstract:**

Verocytotoxigenic *Escherichia coli* (VTEC) such as *E. coli* O157:H7 and other non-O157 *E. coli* serotypes are pathogens that have been implicated in food outbreaks. Food commodities that have been recently implicated in VTEC outbreaks include romaine lettuce, flour and beef products. Most often acquired from food, consumption of VTEC can lead to life-threatening blood infections. Bacteriophages (phages) have been proposed as an antibacterial agent to reduce unwanted bacteria. Found abundantly in nature, phages are viruses that use bacteria as host cells to replicate, and may disseminate their progeny through lysis and killing of the host cell. In her graduate work, Yvonne isolated and characterized phages that lyse VTEC with the goal to find phages that are suitable for use in the food industry. Characteristics examined included ability of phage to lyse multiple VTEC strains, morphology by transmission electron microscopy imaging, latent period and burst size, and stability at different temperatures and pH. This research provides insights about novel phages for potential use for VTEC biocontrol in the food industry.