Are you looking to Improve Sustainable Food Production in a MSc with impact?

Discover Diverse Plant & Meat Protein Interactions- Join a dynamic research team with this new MSc opportunity

Project Overview

Our research laboratory focuses on understanding the functionality of different meat proteins and their interactions with various plant proteins. We employ different physical, chemical, biochemical, and optical methods to gain insight into the structure formation and its relation to texture and water binding (both essential for producing acceptable food products). Besides fundamental research, we also conduct applied research projects together with some industry partners.

Stipend of $20,000 per year for 2 years. Opportunity to apply for other scholarships and teaching assistantship.

When & Where

Starting in Sept 2022

Work located largely at University of Guelph. A federally inspected meat laboratory is available on campus and the student will also be trained in working at this industrial type setup.

Advisor

Dr. Shai Barbut:
Shai’s research focuses on factors affecting meat quality, proteingelation with an emphasis on structure function relationships, rheological properties and food safety.

Click here for his Faculty Page
Opportunities

Along with the opportunity to co-author peer-reviewed scientific publications, and present your research at scientific conferences and industry events, numerous professional development and networking opportunities will be available.

Project Partners: Meat and meat analogue producers, includes industry partners like ingredient suppliers to the food industry, and other partners like the Ontario Ministry of Food and Agriculture.

Requirements

- Domestic student
- Holding a BSc. degree in a relevant field such as food science, food biophysics, animal science, biochemistry
- Demonstrating good academic achievements
- Capable of working in a team and as an independent critical researcher
- Open to think and work interdisciplinary
- Capable to present research results at project meetings / conferences
- Eager to publish in peer-reviewed journals and deliver timely reports in English
- Keen to integrate in a dynamic research team

Background

The appointed student will be involved in ongoing research on the structure formation of hybrid meat and plant proteins, and interactions these proteins undergo during processing (e.g., hydration, heat induced gelation). This is a fast growing research field that is still not fully understood. Some examples of techniques that will be used are: texture analysis, dynamic rheology, microscopy, and sensory evaluation.

Click here to contact Dr. Barbut