



UNIVERSITY OF CALGARY
FACULTY OF VETERINARY MEDICINE

Positions (2): Undergraduate Research Assistant

Positions start date: May 01, 2025

Positions end date: August 31, 2025

Project title: Bacteriophages genomics and application

Bacteriophages are viruses that specifically infect bacteria. They are natural biological agents of bacteria and a leading alternative to antibiotics for treating infectious disease in humans. Our research interest focuses on 1) characterizing diversity of bacteriophages using genomics and bioinformatics; 2) developing phage-derived products for biocontrol of zoonotic pathogens. We are currently looking for 2 dynamic research-oriented undergraduates to complement a team of graduate students, postdoc and research assistant for a summer of intense research fun. Further information about our Lab's research direction and team members can be found in website <https://www.phagebiotech.ca/>.

Role of trainees

- The undergraduate will be assigned a separate project and/or assist with experiments of one or more graduate students;
- Assist isolation and activity screening of bacteriophages to control antimicrobial resistant microorganisms;
- Bacteriophage DNA extraction, sequencing and genome annotation;
- Assist characterize bacteriophage induced immunological response in cell lines.
- Help evaluate therapeutic efficacy of phages in mice studies

Essential Qualifications

- Background/ knowledge with microbiology and/or biology;
- Training and experience is help but not necessary;
- English Essential;
- Experience operating computer programs to organize and edit data;
- Knowledge of teamwork and interactive communication;
- Adaptability;
- Diligence, attention to detail;
- Initiative;

Conditions of Employment

- Willingness to work in laboratory teamwork;
- Diligence and attention to detail, for accurate generation and recording of scientific data.

Interested individuals should submit a current curriculum vitae, transcript and an outline of their areas of research interest with the names of two references to Dr. Dongyan Niu, dongyan.niu@ucalgary.ca before January 15, 2025.