



“New Technologies to Study Biology at the Single Cell Level”

Date & Time: Wednesday, June 7 | 1:00PM - 2:00PM PT

Hybrid: Life Sciences Centre Room 1003 (LSC3) & Zoom

From the lab of: Dr. Hongshen Ma, *Associate Professor*

Department of Mechanical Engineering, School of Biomedical Engineering
Centre for Blood Research

Presented by: Emel Islamzada, Erik Lamoureux and Samuel Berryman

The Ma group develops new technologies to study biological systems at the single cell level by leveraging advances in microfabrication, microfluidics, microscopy, machine learning, and single cell sequencing. Our current research aims to address biomedical challenges in transfusion medicine, immunology, diabetes, and cell therapy. This seminar will highlight the following three projects:

1. Deformability-driven circulatory clearance of red blood cells (Emel Islamzada)
2. Evaluating donor red blood cell quality from blood smears using deep learning (Erik Lamoureux)
3. Single cell image cytometry using nanowell-in-microwells (Samuel Berryman)