



## “New Technologies to Study Cell Function – Research in the Ma Lab”

**Date & Time:** Wednesday, July 6 | 1:00PM - 2:00PM PT

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

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

School of Biomedical Engineering, Pathology and Laboratory Medicine, Urologic Sciences,  
Centre for Blood Research

**Presented by:** Dr. Hongshen Ma, Pan Deng, Erik Lamoureux, Deasung (Jayden) Jang

The Ma laboratory develops new technologies to study biological systems at the single cell level using approaches such as microscopy, microfluidics, machine learning, and single cell sequencing. Our projects span biomedical challenges in transfusion medicine, immune cell function, and cell therapy. This seminar will highlight three projects from our group:

1. The Release of Neutrophil Extracellular Traps: A Self-amplified Process
2. Assessing Red Blood Cell Deformability using Deep Learning
3. Insulin secretion and phenotype analysis of single pancreatic beta cells using nanowells-in-microwells