Design and Testing of a Microfluidic Device for Cancer Cell Studies (*New - Winter 2019*)
Faculty advisor: Prof. Xinyu Liu
In this project, a microfluidic device for dynamic cancer cell culture will be developed, which can culture cells on chip for days and apply combined mechanical and chemical stimulations to them. A multilayer microfluidic device will be designed and fabricated, and cell culture experiments will be performed for proof of demonstration. The candidate will also collaborate with a cancer cell biology group for studying specific biomechanical pathways regulating the cancer cell apoptosis.

Laboratory: Microfluidics and BioMEMS Laboratory
Contact: Prof. Liu, xyliu@mie.utoronto.ca
Research Areas:microfluidics; laboratory automation; bioengineering; cancer cell biology