



Donnelly Centre
for Cellular + Biomolecular Research
UNIVERSITY OF TORONTO



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Seminar

"Microfluidics for Virus Detection and Cancer Treatment Monitoring"

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Abstract:

Microfluidics is a field that promises to reach the holy grail of "lab-on-a-chip". In analogy to shrinking a computer from the size of a room in the 1950s to a laptop today, instruments for chemical and biological analyses may be miniaturized into microfluidic devices using modern microfabrication technology. Potential applications of the portable, miniaturized devices include point-of-care testing, environmental monitoring, and detection of pathogens in the field. In this presentation, a brief historic prospective will be given on microfluidics. The focus will be on the development of microfluidic devices for two real-world challenges: (1) detection of mosquito-borne virus (e.g., Zika) and airborne virus (e.g., SARS-CoV-2) at the point of care; and (2) monitoring cancer treatment response or resistance using liquid biopsy.

Friday, May 27, 2022 | 2PM (EST)

James D. Friesen | Cecil C. Yip Red Seminar Room
Second Floor, Donnelly Centre, 160 College St.

Host: Aaron R. Wheeler, PhD