



BiophysTO Lunchtime Seminar Series

Date

Thursday, Oct 12, 2023
12:00 – 1:00 pm

Location

McLennan Physical
Laboratories, 60 St
George street.
Room: MP606

Dr. Aereas Aung

Institute for Biomedical Engineering
University of Toronto

Modulation of vaccine responses by lymph node proteolysis

Vaccine antigens are structurally intended to mimic viral envelope proteins to induce antibodies that can recognize the actual virus. However, we have limited understanding of how stable these antigens actually are once they have been administered into the body and arrive at the lymph nodes where immune responses are initiated. To this end, we investigated the structural stability of vaccine antigens *in vivo*, and more broadly, the proteolytic activity that exists within lymph nodes. We found that spatially compartmentalized antigen proteolysis modulated both germinal center and antibody responses to different vaccine modalities. This talk will convey our findings in greater detail as well as provide a brief overview of research topics that stemmed from this work and are being pursued within my lab.

Host: Anton Zilman



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