

UNIVERSITY
of GUELPH

COLLEGE of
BIOLOGICAL SCIENCE

DEPARTMENT OF MOLECULAR
AND CELLULAR BIOLOGY

Seminar SPEAKER SERIES

2019 - 2020

MAR **WED** **11** **10** **30**
AM

Summerlee
Science Complex
SSC 2315

DR. MELANIE WILLS

DIRECTOR, G. MAGNOTTA LYME DISEASE RESEARCH LAB
ASSOCIATE GRADUATE FACULTY, UNIVERSITY OF GUELPH

Untangling Lyme Disease: Navigating Pathogens, Proteins, and Politics to Mitigate an Escalating Public Health Crisis

Lyme disease is the most common vector-borne infection in the northern hemisphere, where it poses an escalating threat to the health of Canadians. Despite over four decades of investigation into the disease and the causative pathogen, *Borrelia burgdorferi*, fundamental knowledge gaps remain that impact diagnostic testing, treatment, and outcome, and render Lyme one of the most polarized and politicized diseases of the 21st century. The G. Magnotta Lab was established to help bridge these gaps using basic and patient-centred research that translates to clinical practice. Our multi-pronged strategy includes community-based studies that are generating new epidemiological, biochemical, and microbiological insight into controversial and ill-defined patient cohorts, host-pathogen modeling and diagnostic platform design work that has identified novel approaches for detecting *Borrelia* in clinical specimens, and comprehensive omics-level interrogation of diverse Lyme *Borrelia* in search of biomarkers and mechanistic clues. This seminar will therefore explore roadblocks to progress, and the development of an interdisciplinary research program to confront challenges of biology and medicine.



All welcome to attend
Light refreshments will be served

More information on MCB's website:
www.uoguelph.ca/MCB