Biology Seminar

12:30 - 1:30 pm
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BGS 0165

Patrick Moynihan
Assistant Professor
Microbiology and Immunology
Western University

New tools for mycobacterial research from unexpected places

Bacterial cell growth and division rely on enzymes that remodel the cell wall, a process that is especially complex in *Mycobacterium tuberculosis* due to its unique cell wall structure. In the Moynihan group, we aim to discover new enzymes and tools to help us study these processes using microbiology, biochemistry and structural biology. In this talk, I will highlight our recent progress, beginning with our screening approach to identify novel gut-microbe derived glycoside hydrolases that degrade the mycobacterial envelope. I will also discuss how our investigation of the epibiotic predator *Ca. Mycosynbacter amalyticus* has identified a new adhesin that covalently binds the mycobacterial cell wall. Together, these studies reveal new features of mycobacterial cell wall remodeling, with implications for understanding pathogenesis and developing novel antimicrobial strategies.