הפקולטה לרפואה
FACULTY OF MEDICINE
كلية الطب

Institute for Medical Research Israel-Canada
INNOVATIONS TOUCHING LIVES

SPECIAL SEMINAR

MODELING HOST-MICROBIAL INTERACTIONS TO UNDERSTAND DISEASE IMMUNE RESPONSES

SEPTEMBER 17, 2025| AT 12 PM
LEVY HALL | BOTNAR BUILDING

DR. NOAM AUSLANDER

THE WISTAR INSTITUTE

ABSTRACT

Our bodies accommodate millions of microorganisms whose interactions with host processes modulate disease immunity and affect patient outcomes. To unravel these mechanisms, we are developing computational methods to systematically study how microbial genes and functions interact with host immunity. These approaches integrate advances in artificial intelligence with genomic, transcriptomic, and clinical data to identify microbial determinants of immune modulation. In parallel, we design algorithms to quantify cellular and molecular microbial components within host tissues, enabling refined prediction of clinical outcomes in cancer and autoimmune diseases. Together, these strategies provide a framework to uncover disease-driving microbe–host interactions and to guide the development of microbiome-based biomarkers and therapeutic interventions.

LIGHT REFRESHMENTS WILL BE SERVED BEFORE THE LECTURE

FOR FURTHER INFORMATION PLEASE CONTACT: KATHIAS@SAVION.HUJI.AC.IL