Molecular Clinical Microbiology and Infectious Diseases

Day and Time: weekly on Wednesdays from 9:30-12:30 (starting January 15, 2020)

Location: MaRS

The goals of this course are to:

• Educate on genomic/proteomic applications for the diagnosis, control, and management of infectious diseases.
• To provide knowledge of both practical and theoretical aspects of the specialist area of medical microbiology and the necessary skills to undertake individual and collaborative research in this field.
• Focus on new methods including next-generation sequencing, high resolution proteomics, and bioinformatics.

Each class will be comprise one 3h session each week consisting of two lectures with topics covered including:

• Next-generation sequencing strategies applied to pathogen discovery, epidemics, and microbiomics
• Emerging technologies in microbial diagnostics
• Molecular tools for discovering and monitoring emerging pathogens of public health concern
• Molecular techniques for studying the emergence, evolution, and dissemination of antimicrobial resistance
• Vaccine and antimicrobial development and impact on infectious diseases
• Special topics in applied mycology, parasitology, virology and bacteriology

Course Co-ordinators:
Nahuel Fittipaldi (PhD, Public Health Scientist) and Roberto G. Melano (PhD; Public Health Scientist)

For more information: http://www.lmp.utoronto.ca/course/lmp2120h