

MICROBIOLOGIE, INFECTIOLOGIE ET IMMUNOLOGIE

CONFÉRENCE

Université 
de Montréal

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***Leishmania* after the genome: a multidisciplinary approach for tackling neglected parasites**

Omics approaches represent a major step forward in the discovery and understanding of both modes of action (MOA) and drug-resistance mechanisms (MOAR) in *Leishmania* parasites, the causative agents of the leishmaniases. These are two major aspects when developing new drugs or repurposing already-available ones for chemotherapy against this neglected tropical disease (NTD). While the recent completion of most of the leishmanial genomes has significantly boosted genomic and transcriptomic analyses during the last years, advances achieved in both metabolomics- and proteomics-based technologies have disclosed and validated *Leishmania*-specific metabolic pathways. This conference will present a multidisciplinary vision for confronting parasitic protozoa. The first part will be focused on the problem of NTDs and the successful implementation of a hit-to-lead drug discovery pipeline based on the selective poisoning of the “bizarre” leishmanial DNA topoisomerase IB. The second part will deepen in the use and limitations of different Omics sciences applied to the discovery and validation of both MOA and MOAR, paying special attention to two novel genomic tools, the Cos-seq and the CRISPR-Cas9 gene-editing toolbox.

Jeudi 27 avril 2017 à 11h30
Pavillon Claire-McNicoll, salle Z-210

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