



Séminaire / Seminar

26 février / February 26 (12:00)

1001 boul. Décarie, Bloc E, EM1.3509



Rubens
do Monte MSc, DSc

René Rachou Institute—Oswaldo Cruz Foundation at Belo Horizonte, Minas Gerais, Brazil (Fiocruz Minas)

Molecular tool box to tackle leishmaniasis

Despite enormous efforts over the years to tackle leishmaniasis, we are still with no or very few alternatives to treat, diagnose and prevent these diseases. To make it worse, disease urbanization is increasing together with the emergence of drug-resistant strains. There are cases of dermatropic-related species causing visceral leishmaniasis and *vice versa*, *Leishmania infantum* found in cutaneous lesions. Recently, a non-*Leishmania* trypanosomatid was found associated with a fatal form of visceral leishmaniasis in Brazil, revealing how complex is the pathogenicity of the disease. Our lab has focused efforts in three main fronts to tackle leishmaniasis: (I) selection of live-attenuated parasites—by amastigote-essential genes disruption—for the development of first-generation vaccines; (II) *in vitro* and *in vivo* drug screening to find alternatives for leishmaniasis chemotherapy and (III) the development of a LAMP (Loop-mediated isothermal amplification)-based molecular test to detect different *Leishmania* species. We have additionally track the antimony-resistance in *L. braziliensis* field isolates in Brazil.



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