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**Programme en maladies infectieuses et immunité en santé mondiale**
**Infectious Diseases and Immunity in Global Health Program**
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# Séminaire / Seminar

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1001 boul. Décarie, Bloc E, EM1.3509

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## It's a Fungal World: from fungal infection to translocation and non-AIDS events

Fungi are ubiquitous in nature and found on and in our bodies as constituents of the human microbiome (i.e. the mycobiome). Of the estimated 5.1 million different species of fungi in the world, only around 300 cause disease regularly in humans. Fungal infections today are among the most difficult diseases to diagnose, with diagnosis often relying on detection of fungal antigens and cell wall components. 1,3 β-D glucan (BDG) is a fungal cell wall polysaccharide produced by ascomycete fungi including Candida albicans and other fungal species that are predominant in the human gastrointestinal tract mycobiome. Recently it has been shown that in the absence of an invasive fungal infection blood BDG levels may serve as a marker of microbial translocation in patient populations with hypoperfusion of the gut and those with persistent inflammation, including patients with HIV infection. In HIV infection, blood BDG levels have been shown to correlate with other biomarkers of microbial translocation and immune activation and predict cardiopulmonary morbidity, and neurocognitive impairment. Preliminary findings even suggest that BDG represents a potential therapeutic target for preventing non-AIDS events.