

MICROBIOLOGIE, INFECTIOLOGIE ET IMMUNOLOGIE

Université 
de Montréal

CONFÉRENCE

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Bacterial Trade: Export and Import of Macromolecular Goods

Bacteria developed numerous ways to adapt to changes in their environment. Transport of macromolecules across bacterial cell envelope is one of the ways bacteria survive and thrive by gaining access to nutrients, releasing by-products, exchanging genes, or secreting toxins. I will present two studies focused on analyses of the mechanism of protein export and DNA import in a model bacterium *Bacillus subtilis*. Using a combination of functional, biochemical, and structural methods, I established molecular details of the novel secretory pathway of ESX protein secretion and zinc-involvement in the development of natural competence state in this model microorganism. These new details, revealed by working with *B. subtilis*, shed light on the mechanism of virulence factor secretion in human pathogens *Staphylococcus aureus* and *Mycobacterium tuberculosis* as well as open a new avenue in studies of spreading of antibiotic resistance genes.

Jeudi 16 mars 2017 à 11 h 30
Pavillon Roger-Gaudry, salle P-310

EN VISIOCONFÉRENCE :

Campus de Saint-Hyacinthe, salle 2115
Campus de la Mauricie, salle U4-418, 4^e Étage du Pavillon d'Enseignement
Hôpital Maisonneuve-Rosemont, salle 11, 1^{er} étage du Pavillon J-A Desève
Hôpital du Sacré-Cœur de Montréal, salle J1115 (Petit salon)
Hôpital Saint-Luc du CHUM, Auditorium PEA

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