# MICROBIOLOGIE, INFECTIOLOGIE ET IMMUNOLOGIE



## CONFÉRENCE

« Conférence prononcée en anglais – Lecture given in English »

### Jean CELLI

Paul G. Allen School for Global Health College of Veterinary Medicine Washington State University

#### Titre de la conférence :

« *Brucella* intracellular pathogenesis: from the cell biology to bacterial effector functions»

#### **RESUME**

Many infectious diseases of global public health concern are caused by pathogens with an intracellular life cycle, during which they remodel cellular compartments to generate a niche of survival, proliferation or persistence. They often do so via delivery of an array of effector proteins or toxins that contribute to the biogenesis of a replication niche and their intracellular growth. The zoonotic bacterium *Brucella abortus* uses a Type IV secretion system (T4SS) to promote a complex intracellular infectious cycle, via delivery of effectors that promote biogenesis of an intracellular vacuole derived from the host endoplasmic reticulum (ER). Here I will discuss studies that have shed light on the cellular functions that *Brucella* exploits during its intracellular cycle and that have recently revealed the molecular mechanisms of T4SS effector-driven processes that promote *Brucella* vacuole biogenesis and intravacuolar growth.

### Jeudi 13 JANVIER 2022 à 11h30 Diffusion en ligne via la plateforme Zoom

https://umontreal.zoom.us/j/86832062229?pwd=UTNMUndKQUhjKzA0Nmg2OFJyTUlwQT09

ID de réunion : 868 3206 2229 Code secret : 017797

Invité par France DAIGLE Tél. 514-343-7396 france.daigle@umontreal.ca