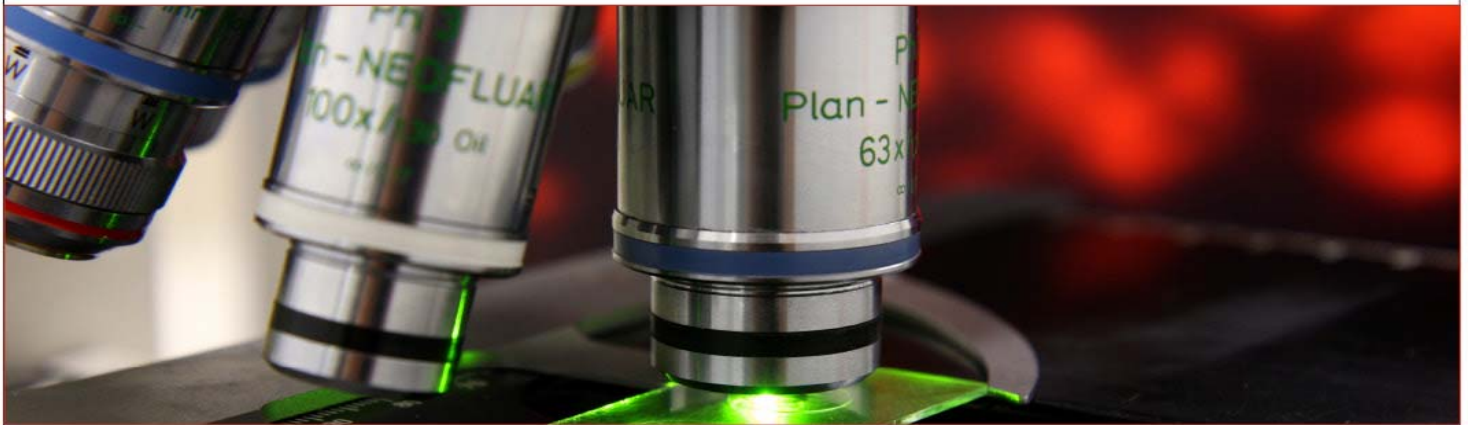


# SÉMINAIRES ET CONFÉRENCES

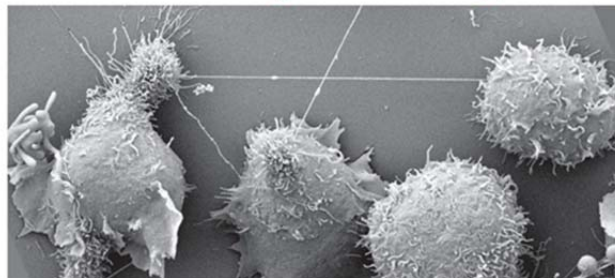


Candidat au poste de directeur du département de biochimie et médecine moléculaire

## Denis Corbeil

Biotechnology Center, Center for Molecular and Cellular Bioengineering  
Technische Universität Dresden

«**Prominin-1 (CD133) or organization and dynamics of plasma membrane protrusions: From cell biology and diseases to regenerative therapy**»



We study the organization and dynamics of the plasma membrane protrusions. We use distinct cellular models; stem (cancer stem) cells, epithelial cells and photoreceptor cells that have in common the expression of the cholesterol-binding pentaspan membrane glycoprotein prominin-1 (CD133). Prominin-1 has gained an enormous interest in the medical field since its cell surface expression enables the immune-isolation of somatic stem cells originating from various tissues notably brain and blood, and remarkably highlights cancer initiating cells. Mutations in the PROM1 gene are associated with retinal diseases. Today, I will highlight the recent progress particularly the identification of novel prominin-1's interacting partners that modulate the organization of microvilli, filopodia and primary cilia and the release of prominin-1+ extracellular vesicles. This knowledge might help us define prominin-1's role in proliferation vs differentiation of stem cells and cancer initiating cells as well as the mechanisms of intercellular communication involving extracellular vesicles and tunneling nanotubes.



Faculté de médecine  
Département de biochimie  
et médecine moléculaire

Université   
de Montréal

**Le lundi 28 janvier 2019, 11h30**

**Pavillon Roger-Gaudry**

**Salle : G-415**

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