



Conférence

Centre de recherche du CHU de Québec-Université Laval



Dr Peter Zandstra

Professor, Biomedical Research Centre, Faculty of Medicine
University of British Columbia, Vancouver

Invité par le Comité étudiant
regroupement cancer

Date : 23 octobre 2020

Heure : 12 h

Lieu : Zoom

Contactez marie-pier.morin@crchudequebec.ulaval.ca afin d'obtenir les accès.

Titre : « Engineering stem cell fate and function »



AXE ONCOLOGIE



Our vision is to understand, at a fundamental level, the mechanisms by which complex tissues develop from pluripotent stem cells (PSC), and to use this understanding to advance new cell therapies and regenerative medicines.

Our approach is based on three complementary thrusts. First, we are developing computer simulations of normal and diseased human tissue development. These simulations allow us to connect the regulatory coding inside PSC to the environment or niche that influences cell growth and differentiation. Second, guided by our computational modeling, we are rewiring the regulatory code in PSC and engineering the environment around the cells, to understand the key requirements of tissue development, and to develop ways to efficiently and effectively specify the emergence of target cell and tissue types. Third, with our partners, we are moving promising discoveries towards the clinic using advanced models of disease and ultimately first-in-man clinical trials.

In this presentation I will focus on our recent data patterning pluripotent stem cells into gastrulation-like tissue structures (gastruloids), and guiding the subsequent formation of blood and lymphoid cells derived from these tissues using artificial thymic tissue-like synthetic niches.

Note :

Prière d'aviser vos étudiants gradués et stagiaires postdoctoraux afin d'avoir la participation de tous.

Visioconférence