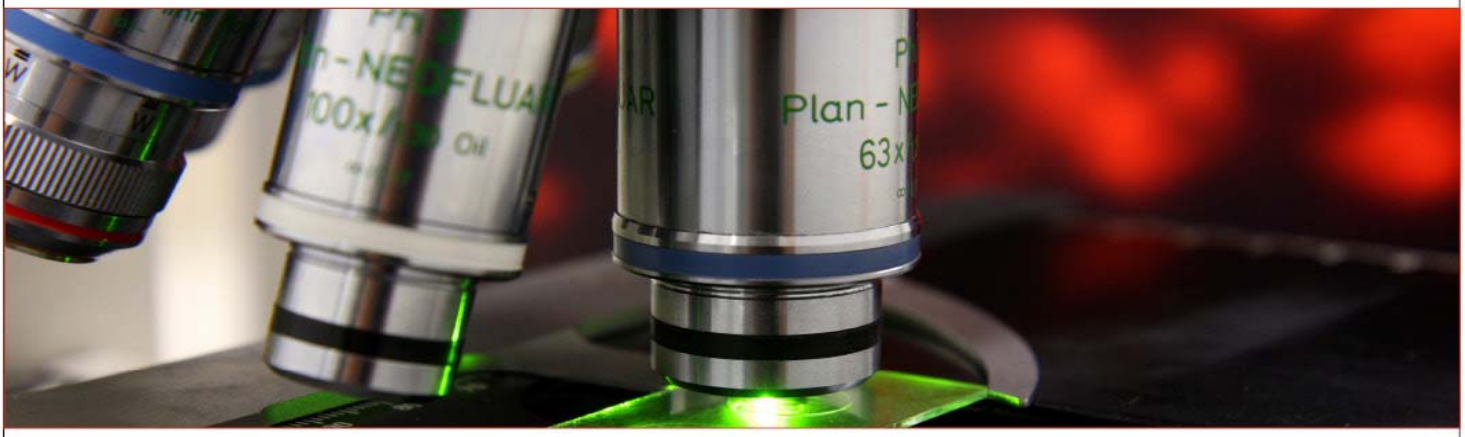
SÉMINAIRES ET CONFÉRENCES



Joshua Currie

Department of Cell and Systems Biology
Department of Biochemistry
University of Toronto

« Spatiotemporal control of progenitor cell recruitment during limb regeneration»

After an injury, cells integrate signals from the wound environment to migrate, proliferate, and remodel the extracellular space to restore lost tissue. The sum total of these cellular "decisions" can have extreme differences. For mammals like us, the outcome is usually a fibrotic scar that fails to restore form or function. But in a few animals like the Mexican axolotl, Ambystoma mexicanum, injuries can heal perfectly and amputations of the tail (including spinal cord) or limb result in a complete regeneration of the structure. Cells couple injury to morphogenesis - converging at the amputation site into a mass of progenitors called the blastema.
Our goal is to understand how molecules, cells, and tissues are coordinated in space and time to build the blastema, a structure that is able to rebuild the limb. We are interested not only in how this process works, but how it is incredibly robust, working perfectly regardless of animal's size or where an injury occurs. At the same time, we want to compare the process in the axolotl with incomplete and fibrotic wound repair in mammals to identify key differences that can targeted for therapeutic improvements in wound healing and regeneration.

Faculté de médecine
Département de biochimie et médecine moléculaire
Université de Montréal

Le lundi 1er avril 2019, 11h30

Pavillon Roger-Gaudry
Salle : G-415

Gerardo Ferbeyre
Tél : (514) 343-7571 courriel : mailto: g.ferbeyre@umontreal.ca