



# BIOCHEMISTRY DEPARTMENT

## SEMINAR

### Michel Cayouette, Ph.D.

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Institut de recherches cliniques de Montréal (IRCM)

#### “Temporal patterning and asymmetric cell divisions in the developing mouse retina”

We are generally interested in the cellular and molecular mechanisms operating in neural progenitor cells to help produce the wide diversity of cell types observed in the central nervous system. To address these questions, we use the mouse retina as a model system, mainly because of its accessibility and simplicity.

While much was discovered in recent years about how individual neuronal cell types differentiate, little is known about how vertebrate neural progenitors in a given spatial domain change their identity over time. In this seminar, I will discuss our recent findings showing that a transcriptional cascade conserved from *Drosophila* appears to regulate temporal identity transitions in mouse retinal progenitor cells. Additionally, I will provide evidence that altering spindle orientation in dividing retinal progenitors is crucial to regulate symmetric and asymmetric outcomes at terminal divisions of retinal lineages.

Wednesday, April 8, 2015 at noon

Martin Amphitheatre, Room 504

McIntyre Medical Sciences Bldg | 3655 promenade Sir William Osler

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Biochemistry Lecture Series  
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