



Department of Anatomy & Cell Biology



Neuroimmune crosstalk in vascular disease

Dr. Mike Sapiuha

**Associate Professor
University of Montreal
Biochemistry & Molecular Medicine**

Retinal vasculopathies such as diabetic retinopathy (DR), retinopathy of prematurity (ROP), and age-related macular degeneration (AMD) are the most common causes of vision loss in the industrialized world. Recent studies on DR, ROP and AMD have revealed the paramount role for neurons and neuronal guidance cues in disease progression. During retinal embryogenesis, coordinated interplay between neurons, blood vessels and immune cells is critical for proper retinal development. Although neurovascular and neuroimmune crosstalk shapes vascular development in the retina, it has received limited attention in disease etiology. A better understanding of this crosstalk may provide novel drugable targets to counter vasodegenerative and vasoproliferative eye disease. We will discuss new evidence suggesting that neuronal metabolism and guidance cues secreted by neurons such as retinal ganglion cells and photoreceptors have an inherent ability to influence vascular and immune responses in retinal disease.

Wednesday, November 2, 2016

11:30 am

**Strathcona Anatomy Building
3640 University Street
Room 2/36**

www.mcgill.ca/anatomy/seminars
anatomysec.med@mcgill.ca