



## **Donnelly Seminar Series**

"Hemodynamics, cardiovascular risk and endothelial phenotype: it's not all about blood pressure"



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Thursday, December 3, 2015 @ 11:00 am
Donnelly Centre Red Seminar Room

## **Objectives:**

- (1) To understand how atherosclerosis can be localized in the vascular tree
- (2) To appreciate mechanisms by which hemodynamics can change endothelial gene expression
- (3) To gain an appreciation for how the frictional forces of blood can affect endothelial epigenetic pathways

## **Abstract:**

Surprisingly, epigenetic pathways play a major role in the control of endothelial cell gene expression. This newer area of studying gene expression has provided a new perspective on how environmental stimuli, such as diet or lifestyle at the organismal level, or exogenous local stimuli at the cellular level, interact with the static DNA code. This talk will address how these concepts are relevant to changes in endothelial gene expression in health and disease, especially the effects of hemodynamic forces.

Host: Michael V. Sefton