



Centre for
Heart Lung Innovation
UBC and St. Paul's Hospital

Centre for Heart Lung Innovation Research in Progress (R.I.P.)



**Characterizing the cellular origin of
inflammation in human atherosclerotic
lesions using a novel multiplex imaging
platform**

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Monday, June 12th 2023
9:00 – 10:00 a.m.

James Hogg Conference Centre RM 103
Zoom Video Conference
(Meeting ID: 693 1997 7044; Passcode: 030679)

“Most cardiovascular events are the result of advanced atherosclerotic lesions that start with lipid accumulation in arterial intima. Macrophages have always been the target of therapeutic development as it is believed that they are the predominant source of foam cells and inflammation in lesions. Recent studies demonstrated that at least 50% of foam cells come from SMCs. However, it is not clear whether SMC foam cells stimulate inflammation leading to disease progression and cardiovascular event onset. Conventional staining methods can visualize only three markers per tissue section, which is not adequate to characterize foam cells and inflammation. In my project, I use a novel imaging technology that visualizes multiple markers to determine whether lipid overload in SMCs is associated with increased cell death and inflammation. My future project aims to further investigate how inflammation impairs dead cell removal, which will provide evidence to develop anti-inflammatory therapies for treating cardiovascular disease.”

This event is a Self-Approved Group Learning Activity as defined by the Maintenance Certification Program of the Royal College of Physicians and Surgeons of Canada



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