

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



Evaluation of Lipoprotein Fractions And Macrophage-Smooth Muscle Cell Interactions in Foam Cell Development

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Monday, June 5th 2023 9:00 – 10:00 a.m.

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

"Atherosclerosis is the leading cause of vascular death. A key step in atherosclerosis is the development of foam cells, which are defined as cells with excessive cholesteryl ester storage originating from macrophages and vascular smooth muscle cells (SMCs). While fasting low-density-lipoprotein cholesterol was traditionally considered the major risk factor of atherosclerosis, recent clinical research has suggested that non-HDL lipoprotein cholesterol in the nonfasting plasma is a better cardiovascular risk predictor. Therefore, I will evaluate the atherogenicity of fasting and non-fasting lipoprotein fractions at inducing foam cell formation in human macrophages and SMCs. In the second part of the talk, I will explore the crosstalk between macrophages and SMCs and identify the potential soluble factors that may be important in driving foam cell development. A better understanding of the foam cell development process will validate the current diagnostic standard and identify therapeutic targets to slow down atherosclerosis progression."

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





