

**Applicant**

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**Project Title**

RAAP: Reversing Atherosclerosis in the Aging Population

**Project Summary**

Atherosclerosis and coronary artery disease (CAD) causes 17 million deaths worldwide; it is both the number one killer and is responsible for the greatest portion of disability and health care costs in Canada. Over 20% of Canadians aged 65 and older live with heart disease. While cholesterol-lowering therapies have greatly reduced CAD burden in the population, patients living with coronary disease emphasize the desire not only to stop the progression of heart disease, but to see their disease improve. Once established, CAD plaques can undergo remodeling and reversal of inflammation and can even reduce in size. However, during aging, cells lose their ability to respond to external cues, and these age-related dysfunctions may impact the capacity for atherosclerotic lesion regression. Our study will examine whether older individuals taking cholesterol-lowering medication have the same degree of atherosclerosis reversal as younger individuals.

**Keywords**

atherosclerosis, coronary disease, inflammation