

Applicant

Dr. Maureen MacDonald, McMaster University
Trainee: Emily Dunford

E-mail Address

macdonmj@mcmaster.ca

Project Title

Examining the relationships between sub-clinical vascular measures and functional health in aging Canadians and the impact of inflammatory and metabolic biomarkers on those relationships

Project Summary

Canadians are living longer and it is crucial to understand and identify modifiable risk factors associated with aging for early disease detection. Carotid artery wall thickness (cIMT) and stiffness measure blood vessel health and serve as early indicators of CVD risk with aging. Aging is also associated with functional limitations. There have been no population-based studies examining the relationship between vascular and functional health in aging adults. Our project will leverage collected cIMT ultrasound images to provide a comprehensive analysis of vascular health (cIMT and stiffness). Associations between vascular and functional health and the influence of inflammatory and metabolic biomarkers will be assessed.

Keywords

Carotid intima media thickness, Functional health, Carotid artery distensibility, Mobility, Vascular health, Lipid metabolism, Inflammation, Glucose metabolism