

Applicant

Dr. Luciana Macedo, McMaster University

E-mail Address

macedol@mcmaster.ca

Project Title

Relationship between biomarkers and musculoskeletal pain and falls in older adults - an analysis of the Canadian Longitudinal Study on Aging

Project Summary

Musculoskeletal (MSK) pain, risk for falls and the presence of inflammatory biomarkers (substances found in blood) in older adults have been identified as potential measures for functional decline (loss of movement), including frailty, quality of pain and severity of disability. There has been an increasing number of studies aiming to evaluate the relationship of biomarkers with both MSK pain and falls and the inter-relationship between the two. Most studies have focused on smaller 'pieces of the puzzle' such as inflammatory biomarkers or measures of body composition alone. The proposed study will use the dataset of the Canadian Longitudinal Study on Aging (CLSA) to evaluate multiple biomarkers associated with MSK pain and falls, while controlling for known psychosocial factors (e.g., age and depression). The purpose of this study is to analyze the associations between biomarkers and a) MSK pain and b) falls in older adults as well as the interrelation between pain, falls, biomarkers.

Keywords

Biomarkers, Musculoskeletal pain, Falls, Lifestyle, Frailty