

## **CLSA Approved Project**

Applicant Dr. Chris Verschoor, McMaster University

E-mail Address cversch@mcmaster.ca

## Project Title

Examining the relationship between blood biomarkers and frailty in older adults

## **Project Summary**

Frail individuals are at a much greater risk of illness, injury and mortality; hence, it is one of the most significant burdens on quality of life for older adults and the Canadian health care system. Although it is well known that frailty increases as we get older, especially in women, why this occurs remains a mystery. The ability to identify individuals at risk of frailty before symptoms occur would be a powerful tool to help us decide whether therapeutic intervention is needed. The primary objectives of our proposal are to: 1) determine the patterns of frailty in men and women, especially with respect to sex-specific health factors, and 2) whether blood biomarkers can be used to detect frailty in older adults. Since these biomarkers are routinely measured at hospitals and easily accessed by primary health care providers, using them for the early diagnosis of frailty is both feasible and practical.

## Keywords

Frailty, biological age, biomarkers, hematology, leukocytes