CLSA Approved Project

Applicant
Dr. Aravind Ganesh, University of Calgary
Trainee: Ryan Muir

E-mail Address
aganesh@ucalgary.ca

Project Title
Mediation of the relationship between age and cognition by stroke and vascular risk factors: an analysis of the Canadian Longitudinal Study on Aging

Project Summary
Dementia is one of the largest public health crises of our time. With increasing age, memory and thinking problems become prevalent. Cognitive decline can arise for many reasons. Stroke is an abrupt vascular injury to the brain that increases the risk of cognitive decline. Many risk factors like high blood pressure and diabetes increase the risk of stroke. However, we do not know what proportion of age-related cognitive decline is explained by stroke and its risk factors. We will answer this question using data from the Canadian Longitudinal Study on Aging. Many participants have risk factors for stroke, and some have had strokes. Many of them have also had cognitive decline over three years. We will evaluate what proportion of cognitive decline among participants due to age is mediated by stroke and vascular risk factors. This analysis will inform patients and clinicians how much age-related cognitive decline can be reduced through stroke prevention efforts.

Keywords
stroke, cognition, cognitive decline, vascular cognitive impairment, dementia, vascular risk factors, aging