clsa élcv
Canadian Longitudinal Study on Aging
Étude longitudinale canadienne sur le vieillissement

# CLSA Approved Project

**Applicant**
Dr. Paul Mick, University of Saskatchewan

**E-mail Address**
paul.mick@usask.ca

**Project Title**
Do genetic and social factors modify associations between sensory impairment and cognitive decline? An analysis of the Canadian Longitudinal Study on Aging

**Project Summary**
Vision and hearing loss are correlated with cognitive decline, above and beyond what is expected due to aging. The reason(s) remain uncertain, and not everyone is affected equally. Our research aims to understand if genetic and/or social factors affect the degree to which hearing and vision are associated with cognitive decline. The results may help clarify underlying mechanism(s), and identify individuals with sensory loss who are most at risk, who might be targeted for interventions that aim to slow cognitive declines. We will determine if the associations might be explained by mutations in the apolipoprotein E gene (which can affect both sensory and cognitive function), and/or by social isolation, which can be a consequence of sensory loss and a risk factor for cognitive decline. The study will use data from the Canadian Longitudinal Study on Aging, which includes 30,000 participants from across the country who have health measures collected every 3 years.

**Keywords**
Hearing loss, Vision loss, Sensory loss, Cognitive decline, Social isolation, APOE, Apolipoprotein