

**Applicant**

Dr. Megan O'Connell, University of Saskatchewan  
Trainee: Karl Grewal

**E-mail Address**

[megan.oconnell@usask.ca](mailto:megan.oconnell@usask.ca)

**Project Title**

Do group differences in cardiovascular risk profiles impact the effect of lifestyle interventions on cognition?

**Project Summary**

Cardiovascular risk factors, and disease of brain-based blood vessels, are tied to cognitive functioning and dementia. Prevalence of cardiovascular disease and risk factors, however, is not uniform across populations. For example, prevalence of high blood pressure is different between East and Southeast Asians. Interventions for cardiovascular disease include healthy lifestyle factors that reduce risk, such as eating a balanced healthy diet and participating in exercise. The more people modify cardiovascular risk factors, the less likely it is that they have global cognitive decline or get diagnosed with dementia. We wish to examine whether participation in healthy lifestyle interventions relates to changes in cognition in various subgroups of the Canadian Longitudinal Study on Aging (CLSA), and whether these changes are impacted by the different cardiovascular risk profiles of the participants from different backgrounds and based on sex.

**Keywords**

cardiovascular risk, cognition, lifestyle