

**Applicant**

Dr. Danielle Bouchard, University of New Brunswick

Trainee: Brianna Leadbetter

**E-mail Address**

[Danielle.bouchard@unb.ca](mailto:Danielle.bouchard@unb.ca)

**Project Title**

Impact of weather conditions on injurious fall rates across Canada: Canadian Longitudinal Study on Aging cohort

**Project Summary**

Falls become very common in old age and pose a considerable threat to older adults' health and wellbeing. This can be due to age-related changes in gait, balance, muscle strength, and the increased challenge of environmental factors. For example, adverse weather conditions such as snow, ice, and freezing rain may be linked to increased risk of slips, trips, and falls with injury. The long-term impact of weather conditions on falls is unclear, however it is possible that adverse weather conditions may be linked to decreased gait speed and stability, which could potentially increase fall risk for older adults. The proposed project aims to use the CLSA cohort to investigate the effect of adverse weather on falls with injury. We aim to look at whether a demographically matched cohort of people in Canadian provinces with the highest snowfall experience more falls than those living in provinces with the lowest snowfall, and whether this is partly due to gait differences.

**Keywords**

CLSA, weather, falls, gait