

Applicant

Dr. Matthieu Boisgontier, University of Ottawa

E-mail Address

matthieu.boisgontier@uottawa.ca

Project Title

Individual, social, and environmental determinants of physical activity: a machine learning and temporal network approach

Project Summary

Physical inactivity is associated with a higher risk of disability, disease, and mortality, especially in vulnerable and older populations. Despite the known benefits of physical activity, most Canadians remain physically inactive according to national guidelines. Given the prevalence of physical inactivity, it is important to understand which factors predict inactivity as well as how these factors interact with one another over time.

This research will use three waves of data from the Canadian Longitudinal Study on Aging (CLSA) to model the individual, social, and environmental level determinants of engagement in physical activity. Specifically, we will compare the ability of several machine-learning models to predict physical activity. A secondary analysis will model how physical activity determinants interact with one another over time using a network science approach. Our analysis will focus on older adults living with frailty.

Keywords

physical activity, environment, frailty