

Research Affiliates interested in supervising for the Undergraduate Student Awards 2020



There are many opportunities for undergraduate students to get involved in research on aging. There are projects on both the Fort Garry and Bannatyne campuses and in many different disciplines. Below are a few opportunities for 2020.

If you are interested in a project, please contact the researcher directly. Contact information is below.

Principal Investigator	Contact Information	Research Area(s)
Ruth Barclay Associate Professor	Department of Physical Therapy College of Rehabilitation Sciences, Rady Faculty of Health Sciences ruth.barclay@umanitoba.ca	The primary focus of my research is on community ambulation (walking outside of the home) in older adults and people with stroke and its association with wellbeing, health-related quality of life and physical function. This is being studied in a variety of ways: through a multi-centre randomized controlled trial, qualitative studies, secondary analysis of a large database, an observational study, and systematic reviews with meta-analyses. Students will have the opportunity to work on aspects of these studies and new studies resulting from past work. More information about the research can be found here. umanitoba.ca/rehabsciences/media/Ruth-Barclay.pdf

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Amine Choukou Assistant Professor	Department of Occupational Therapy, College of Rehabilitation Sciences amine.choukou@umanitoba.ca	A review of ambient assisted living technologies for older adults with cognitive and physical impairments Emerging technologies such as internet of things, artificial intelligence, sensors, cloud computing, wireless communication technologies, and assistive robotics have given the vision to develop various ambient or active assisted living approaches for supporting an older adult to live independently and safely in their living environment and participate in the activities of their choice within their community activities, as well as supporting them to maintain their physical and mental health, and quality of life. The aim of this project is to review the literature about Ambient Assisted Living for older adults with physical, cognitive impairments, and their social participation. Number of positions: 2
Todd Duhamel Associate Dean (Research and Graduate Studies)	Faculty of Kinesiology and Recreation Management todd.duhamel@umanitoba.ca	My research examines physical activity and health. We are currently running the WARM Hearts study, which will use cutting-edge, non-invasive techniques to help develop new methods to better identify women who have elevated cardiovascular disease risk.
Christine Kelly Assistant Professor	Community Health Sciences, Rady Faculty of Health Sciences christine.kelly@umanitoba.ca	Come join my research team! We presently have a study exploring directly-funded, or self-managed, home care in Canada. In directly-funded care, people receive funds to arrange their own home care services. We are using qualitative methods to explore this important policy topic across the country. I have secondary research activities related to intersectionality in qualitative research, disability movements, and disability art. Students attend weekly meetings with graduate students and staff where you will be exposed to all stages of the research process, and your opinions will be greatly valued.
Celine Latulipe Associate Professor	Department of Computer Science celine.latulipe@umanitoba.ca	Investigation of Older Adults using the University Student Systems. This research will entail running a user study of older adult students and potential older adult students, to understand what barriers they might face in using the University digital systems (such as Aurora, Jump, UMLearn, etc.).
Hai Luo Assistant Professor	Faculty of Social Work Hai.Luo@umanitoba.ca	I am currently conducting research about medical assistance in dying (MAID), mental health and substance abuse among older adults in Home Care, and Indigenous aging, as well involved in several interdisciplinary teams to study nursing home and discharge team in hospital.
Bob McLeod Professor	Electrical & Computer Engineering, Faculty of Engineering robert.mcleod@umanitoba.ca	Interested in developing Serious Games for Smartphones to help detect Mild Cognitive Impairment through Machine Learning Analytics. Research will focus on techniques to generate synthetic data through reinforcement learning emulating various levels of cognitive decline, and develop artificial neural network techniques to classify game play.

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Richard Milgrom Associate Professor	Department of City Planning, Faculty of Architecture richard.milgrom@umanitoba.ca	Evaluation of communities and regions to determine the degree to which they meet age-friendly characteristics. Analysis of how demographic profiles of regions are changing and the impacts this will have on aging populations and the services and amenities available and accessible to older adults. Analysis of how existing policies and initiatives in cities support active aging.
Ayesha Saleem Assistant Professor	Faculty of Kinesiology and Recreation Management ayasha.saleem@umanitoba.ca The Children's Hospital Research Institute of Manitoba asaleem@chrim.ca	My research focuses on cell-to-cell communication as executed through extracellular vesicles (EVs) during endurance exercise and during conditions where metabolism is altered such as aging, obesity, diabetes and cancer. Undergraduate students will be involved in studies evaluating the: 1) alterations in EV-based communication during frailty in females aged 55+ with a high risk of developing cardiovascular disease, and 2) changes in EV cargo components with age using mice, monkey or human samples.
Kathryn Sibley Assistant Professor	Department of Community Health Sciences and Centre for Healthcare Innovation kathryn.sibley@umanitoba.ca	Dr. Sibley is an Associate Professor in the Department of Community Health Sciences and her research program is focused on improving the health of Canadians by promoting the translation of research findings into health care practice, primarily in the context of fall prevention and balance. Some of her current research projects involve carrying out knowledge translation interventions in geriatric rehabilitation and exploring and developing framework for community-based rehabilitation care services. Dr. Sibley welcomes correspondence from students with mutual interests, who will have the opportunity to work on multiples research projects.
Jonathan Singer Assistant Professor	Faculty of Kinesiology and Recreation Management jonathan.singer@umanitoba.ca	Research Interests: Biomechanics/neuromechanics; Mechanisms underlying the control of static and dynamic balance and avoidance of falls among older adults; Improvement of mobility; Development of new measures of balance control
Sandra Webber Associate Professor	Department of Physical Therapy, College of Rehabilitation Sciences sandra.webber@umanitoba.ca	My research focuses on measuring physical activity, ambulation and sedentary behaviour in older adults and people with chronic disease. Many of my studies incorporate the use of technology (e.g., pedometers, accelerometers) to provide objective measures of activity performance (what people do in their everyday lives). Current projects include measuring exercise parameters when people play sports and using GPS devices to characterize outdoor mobility patterns in older adults.

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Shauna Mallory-Hill Associate Professor	Faculty of Architecture S.Mallory-Hill@umanitoba.ca	Dr. Mallory-Hill undertakes research work in the area of understanding the impact of building design on occupant health, wellness and productivity. Students employed under the undergraduate research award will have the opportunity to work alongside other graduate research assistants in organizing, collecting, and analyzing data related to one of two active research projects: aging-in-place ergonomic kitchen design or pre- and post-renovation design evaluation of persons living with Alzheimer's and related dementia.

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