

FKRM Undergraduate Research Awards		
Name	Contact Information	Research
Todd Duhamel	<a href="mailto:Todd.Duhamel@umanitoba.ca">Todd.Duhamel@umanitoba.ca</a>	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.
Cheryl Glazebrook	<a href="mailto:Cheryl.Glazebrook@umanitoba.ca">Cheryl.Glazebrook@umanitoba.ca</a>	Dr. Glazebrook and her students seek to understand how the nervous system integrates sensory information for motor control and learning when one or more of the sensory systems has been disrupted. Ongoing experiments in the Perceptual Motor Integration Lab <a href="https://umanitoba.ca/faculties/kinrec/research/pmillab.html">[https://umanitoba.ca/faculties/kinrec/research/pmillab.html]</a> use behavioural and neurophysiological techniques to understand the underlying neural processes for motor control by helping us understand how to use sensory cues to improve motor learning and performance. Current projects work with diverse neurological populations and include investigating novel sensory stimuli, such as vibration and rhythm cues. Our projects include both lab-based experiments and community collaborations with local organizations.
Fenton Litwiller	<a href="mailto:Fenton.Litwiller@umanitoba.ca">Fenton.Litwiller@umanitoba.ca</a>	The internalization of gender and sexual orientation norms and self-monitoring to fit into gender expectations takes a negative toll on the health of lesbian, gay, bisexual, transgender, and queer (LGBTQ) youth. Recently, scholars have positioned the potential of LGBTQ only spaces as a place of exploration through social support and storytelling. In this community-based research project, adult mentors facilitate a genderplay workshop in Manitoban communities using drag performance (i.e., masculine and feminine enactment) and a (maga)zine-making session that allows youth to explore gender identity (i.e., one's internal sense of gender) and gender expression (i.e., dress, mannerisms, and behavior). The undergraduate student in this research position will carry out the following under the supervision of Dr. Litwiller: support research assistants with knowledge mobilization of project data based on interviews with youth.
Steven Passmore	<a href="mailto:Steven.Passmore@umanitoba.ca">Steven.Passmore@umanitoba.ca</a>	Our research group currently focuses on the following: 1) Perceptual Motor Learning and Control - Focus of attention during complex balance tasks (slackline); and for elite (Olympic/Paralympic) curling athletes. 2) Applied Clinical Motor Learning and Control (MLC) - Applying MLC theories to the quantitative assessment of clinical populations, most specifically those with neck/back pain and spine issues. 3) Clinical integration - exploring the application of clinical practice guideline driven conservative care to spine health populations.

Ayesha Saleem	<a href="mailto:Ayesha.Saleem@umanitoba.ca">Ayesha.Saleem@umanitoba.ca</a> or <a href="mailto:asaleem@chrim.ca">asaleem@chrim.ca</a>	My research focuses on cell-to-cell communication as executed through extracellular vesicles (EVs) and its effect on metabolism using different models of health and diseases. We are looking for undergraduate students who can help with the analysis of EVs from young vs. old organisms, their molecular cargo, and their effect on recipient cells.
Ben Schellenberg	<a href="mailto:Ben.schellenberg@umanitoba.ca">Ben.schellenberg@umanitoba.ca</a>	I study psychological processes in sport (e.g., with athletes, sports fans) and in other leisure activities. Key research topics that I am currently studying include passion, savouring, perfectionism, and self-compassion.
Trisha Scribbans	<a href="mailto:Trisha.Scribbans@umanitoba.ca">Trisha.Scribbans@umanitoba.ca</a>	Dr. Scribbans' Integrative Musculoskeletal Research Lab aims to describe how the nervous, musculoskeletal and fascial systems interact to produce and influence movement and force production of the upper limb in healthy individuals and those with shoulder disorders. Check out the Lab's website here ( <a href="https://umanitoba.ca/faculties/kinrec/research/imsk_lab.html">https://umanitoba.ca/faculties/kinrec/research/imsk_lab.html</a> ) to learn more about some of our cool projects and some of the students in the lab.
Veronica Silva	<a href="mailto:Veronica.Silva@umanitoba.ca">Veronica.Silva@umanitoba.ca</a>	My research relates to the problem of falls in the aging population and how people use vision to keep their balance and walk safely. Vision provides crucial information about our surroundings that allows us to avoid obstacles, navigate on uneven terrains and even walk while engaged in another activity (e.g., talking, texting). The goal of my research is to understand how we use visual information to walk under varying conditions and how that changes as we age. URA students will assist with lab equipment setup, participant recruitment, data collection and analysis, while learning about 3D motion analysis, eye-tracking, visual attention, and aging. During the term of this award, the student will work in a multidisciplinary team of researchers, graduate and undergraduate students. There is also an opportunity to participate in the preparation of a research poster and a journal article. Students in the areas of kinesiology, psychology, and engineering may be particularly interested in this research experience.
Jonathan Singer	<a href="mailto:Jonathan.Singer@umanitoba.ca">Jonathan.Singer@umanitoba.ca</a>	My lab aims to understand how individuals control and maintain upright stability during normal activities of daily living and under situations that pose a considerable balance challenge. We use this information to identify the biomechanical factors that may lead to increased fall-risk among clinical populations, such as older adults and stroke survivors. The long-term goal is to use these findings to inform the development of exercise-based balance rehabilitation programs, targeted at an individual's specific stability control challenges.

Shaelyn Strachan	<a href="mailto:Shaelyn.Strachan@umanitoba.ca">Shaelyn.Strachan@umanitoba.ca</a>	I seek to promote health through a research focus on adherence to health behaviours (primarily physical activity). Within this context, the role of <i>self</i> is recognized as important in understanding health behaviour and its regulation. Through my research, I investigate self-related variables and how these influence self-regulation of health behaviour. In addressing these aspects of health behaviour, I primarily employ social psychological theories, (e.g., identity theory, self-efficacy theory and self-determination theory) as well as constructs (e.g., identity, possible selves, and self-compassion) that pertain to the self.
Sarah Teetzel	<a href="mailto:Sarah.Teetzel@umanitoba.ca">Sarah.Teetzel@umanitoba.ca</a>	Using qualitative research methods, Sarah's research focuses on applied ethical issues in sport. Current research examines the ethics of transgender athlete eligibility in elite sport, the ethics of use whistleblowing methods in anti-doping, and the history of the Winter Olympic Games.
Christine Van Winkle	<a href="mailto:Christine.VanWinkle@umanitoba.ca">Christine.VanWinkle@umanitoba.ca</a>	Festival and Event Management, Emergency management at events, Information and communication technology at events.
Rodrigo Villar	<a href="mailto:Rodrigo.Villar@umanitoba.ca">Rodrigo.Villar@umanitoba.ca</a>	<p>Research Project: Cardiovascular and respiratory adaptations to postural changes and exercise</p> <p>My long-term research goals are to promote health, reduce disability, morbidity, and mortality, to improve people's health, well-being and quality of life. To achieve my goals, my research laboratory is dedicated to (1) development of a comprehensive understanding of the integrative cardiovascular, respiratory and muscular responses and adaptations to exercise and postural challenges; (2) determine how sex, sedentary lifestyle, aging, chronic diseases play a role in cardiovascular, respiratory, and muscular responses to exercise and changes in body position; (3) apply the research knowledge to support early detection of impairments in cardiovascular and respiratory responses to postural challenges and exercise; (4) guide more target intervention strategies focusing on preserve, improve, or regain cardiovascular, respiratory, and muscular health function; and (5) create solutions to improve cardiovascular, respiratory, and muscular function (i.e., external aids). The integrity of cardiovascular, respiratory and muscular systems is crucial for health and quality of life. Despite the evident benefits of exercise, there is still a gap in knowing the underlying mechanisms involved in the integrative cardiovascular, respiratory, and muscular regulation during exercise. More specifically, I use exercise and postural changes as a framework to elucidate the role of perfusion pressure, O<sub>2</sub> availability, vascular conductance/resistance in the regulation of blood flow and O<sub>2</sub> uptake and the implication for the muscular system, especially the muscle pump and muscle metabolism. The undergraduate students participating in my research lab will be trained to work with cardiovascular, respiratory, and muscular measurements (i.e., heart rate, blood</p>

		<p>pressure, cardiac output, oxygen uptake, etc.) using high-tech laboratory equipment (electrocardiogram, blood pressure beat-by-beat, metabolic cart system, etc.). The students also will be responsible for laboratory set-up, participants' recruitment, data collection, and data analysis. Abstract writing and poster preparation and presentation at a scientific conference may become an opportunity for the students.</p>
<p>Kyoung June (David) Yi</p>	<p><a href="mailto:KyoungJune.Yi@umanitoba.ca">KyoungJune.Yi@umanitoba.ca</a></p>	<p>Can't stand inequity in healthy active living opportunities? Can't stand avoidable exclusionary or unethical practices and policies within various physical activity settings (e.g., sport, physical education, recreation)? Want to make societal change so that everyone has fair opportunities to pursue healthy active lifestyles? The first step would be to gather "unheard" and "silenced" stories to shed light on the unfairness and identify the actionable solutions from the perspectives of people experiencing these inequities. My research focuses on listening "for" and represent the stories of individuals who are experiencing difficulties in accessing and enjoying their healthy active lifestyles. They can be people experiencing disabilities, as well as people from Indigenous, newcomer/refugee, low-income, and 2SLGBTQ+ communities. You will have a research opportunity to listen "for" their voices and document their stories in order to urge changes in our society.</p>