

Opportunities for Research Placements for 2025-26

Research-Based Practicum in Health Studies (HLTH 352/3.0) and Kinesiology (KNPE 352/3.0)

Application Deadline Monday, March 31st 2025 at 11:59 pm

*Please submit applications **directly to the relevant researcher(s)** and copy (cc) Robert Watering at watering@queensu.ca on each of your e-mailed application(s). Students may submit applications to more than one faculty member. Applications should include a cover letter (either in the body of the e-mail, or as a separate document), unofficial transcript, and résumé.*

KNPE & HLTH 352/3.0 is designed to provide a research-based practicum experience for students in Kinesiology or Health Studies who may be interested in working in the research labs and on research projects of SKHS faculty members. Students will be exposed to the research process as it applies to the research area in which they have chosen to intern. This process may include, but is not limited to, data collection and analysis, literature searches, manuscript writing, presentation skills, etc.

The other primary goal of this course is to expose students to the wide variety of research ongoing within the School of Kinesiology and Health Studies at Queen's University. Therefore, in addition to at least 80 hours of hands-on work in the research environment, this course will include a seminar series covering research topics and methodologies typically utilized in the fields of Health Studies, and/or Kinesiology. These seminars will cover a wide variety of topics relevant to research in general, as well as specific areas of research currently being investigated within the SKHS including:

- Physiology of Exercise
- Biomechanics and Neuromechanics
- Epidemiology
- Health Promotion
- Psychology of Sport
- Physical Activity, Disability and Health
- Socio-Cultural Studies of Sport, Health and the Body
- Physical Activity and Health
- Nutrition

Please note:

1. *KNPE & HLTH 352 is a 3.0 credit unit course, but it spans both the fall and winter terms.*
2. *Students may apply for as many positions as they would like. Please remember to copy (cc.) [Robert Watering](mailto:watering@queensu.ca) on each submission.*
3. *More positions may become available prior to the application deadline, and/or later in the term. A different application deadline may accompany any new positions available, as needed.*

Research Summaries of Supervisors Accepting Students for 2025-26 Academic Year

~ More positions may be added at a later date.

Dr. Jean Côté (Sport Psychology)

Number of positions: **One** student in HLTH/KNPE 352 for 2025-26

Are you interested in being involved in research exploring the elements of positive youth sport experiences? Research in the sport psychology lab at Queen's focuses primarily on the characteristics of the youth sport environment (e.g., coach-athlete relationships, teammate interactions, coach characteristics) that create favourable conditions for excellence and participation in sport. In addition, current projects also relate to group dynamics principles (e.g., cohesion, subgroups) and coaching behaviours (e.g., transformational leadership) in sport.

Those students accepted for these positions will have opportunities to contribute to several ongoing projects and will be working with data derived from observations (e.g., coding videos), interviews (e.g., transcription), and questionnaires (e.g., inputting data). Finally, students typically experience the research process within the field of sport psychology, from data collection (e.g., video-recording sport competition, questionnaire distribution) all the way to data analysis and writing.

Interested students should contact Dr. Jean Côté at jc46@queensu.ca (c.c. to watering@queensu.ca) and attach a cover letter, unofficial transcript, and résumé or CV. Please title the email "KNPE/HLTH352 Research Internship Application" in the subject line.

Dr. Eun-Young Lee (In Situ Population Health Research Group)

The In Situ Population Health Research Group (www.insituPH.ca) explores social and environmental determinants of population health and how health-enhancing (e.g., physical activity) or risk behaviours (e.g., substance use, excessive screen use) potentially modify the relationships. Interns will engage in a dynamic, global research team alongside graduate students and researchers, contributing to literature reviews and knowledge translation activities such as mini reviews, systematic reviews, journal publications, blog posts, and social media management. General research topics include climate change, intersectionality, social and constitutional determinants of health, movement behaviors, and health.

For the 2025–26 academic year, priority will be given to students interested in contributing to and developing research training in one of the following topics:

1. **Double jeopardy:** Associations between gender identity, sexual orientation, and risk-taking and health-enhancing behaviours among Canadian adolescents
2. **Empowering global youth for climate resilience:** promoting physical activity and enhancing mental health through collaborative leadership and capacity building

3. **Is gender-affirming policy a structural determinant of health?** Evaluating the impact of gender diversity policies on student mental health in Alberta and Ontario
4. **Active Healthy Kids Global Alliance's Global Matrix:** What is the link between United Nations Sustainable Development Goals and global physical activity promotion efforts

Interested students should contact Dr. Eun-Young Lee (eunyoung.lee@queensu.ca) with a brief statement of interest (~200 words), unofficial transcript, and a resume/CV (c.c. to watering@queensu.ca). A cover letter should clearly indicate one's interests in one of the research themes outlined on the [lab webpage](#) and their relevant experiences. Please title the email "KNPE/HLTH352 Research Internship Application" in the subject line.

Dr. Michael Tschakovsky (Human Vascular Control Lab)

Number of positions: **up to six** positions

There are between **three and six** research internship positions available in the Human Vascular Control Laboratory under the supervision of Dr. Michael Tschakovsky for the 2025-26 academic year. **Human Vascular Control Laboratory Mission:** To understand the nature of mechanisms controlling blood vessels involved in adjusting exercising muscle blood flow (and thereby oxygen delivery), how disturbances and disease affect this control, and how exercise training can restore/improve this control.

Our tolerance for physical activity plays an important role in our quality of life and depends in part on how well our muscle's demand for oxygen is met. This requires that the cardiovascular system constantly adjusts blood flow to active muscles while maintaining arterial blood pressure. Accomplishing these goals requires integrated control of cardiac output with vasodilation and vasoconstriction of both exercising skeletal muscle and other vascular beds. **Basic Science Research** in our laboratory is aimed at finding answers to the fundamental questions: How is matching oxygen delivery to demand in the exercising muscle achieved? Are there important differences between individuals in the mechanisms involved in this matching and in their effectiveness? Can these mechanisms be improved by exercise training, and if so, does the type of exercise training matter?

Interns will be exposed to the research tools, approach to research question development, study design, and gain experience in data collection and analysis.

Interested students should send a cover letter and unofficial transcript to Dr. Tschakovsky at mt29@queensu.ca (c.c. to watering@queensu.ca). Please title the email "KNPE/HLTH352 Research Internship Application" in the subject line.

Dr. Jennifer Tomasone (Revved Up Research Group)

Number of positions: Up to **two** students in HLTH or KNPE 352 for Fall/Winter 2025-26

Dr. Tomasone is a Co-Director of the [Revved Up Research Group](#), which strives to translate research knowledge about physical activity into practical guidelines and programs that foster full and meaningful participation for all Canadians. In 2024/2025, Dr. Tomasone is seeking up to three internship students to work on two different projects:

1. **CapaCITY/É** – a large team project that aims to understand the implementation of sustainable transportation interventions in nine Canadian cities. The interns will have a variety of tasks, including the transcription and analysis of interviews with city planners/representatives, sustainable transportation intervention advocates, and policymakers across Canada, as well as editing and formatting reports for city representatives/policymakers. More information about the project is available in the [Queen's Gazette](#) and [on the study website](#). Fluency in understanding, reading and writing in both English and French is an asset, but not required. Experience with graphic design is also an asset.
2. **Canadian Disability Participation Project (CDPP) 2.0** – a large research-community partnership that aims to make physical activity a quality experience for all persons with disabilities living in Canada. Dr. Jennifer Tomasone is one of the Co-Directors of the CDPP 2.0 and leads the group's Mentorship Team. By 2030, the Mentorship Team will produce guidelines for creating quality research mentorship for undergraduate and graduate students with a disability. To begin to work towards this goal in 2024/2025, the Mentorship team will begin an environmental scan of Kinesiology undergraduate curricula across Canada to identify gaps in disability-related content. The interns will have a variety of tasks, including the searching for and coding course documents from different institutions, as well as transcribing and analyzing interviews with undergraduate curriculum coordinators from different institutions.

The successful interns will work closely with graduate students and/or post-doctoral fellows from the Revved Up lab.

Interested students should send a cover letter, unofficial transcript and a resume/CV to Dr. Tomasone (tomasone@queensu.ca; c.c. to watering@queensu.ca). Please title the email "KNPE/HLTH352 Research Internship Application" in the subject line.

Dr. Gerome Manson– Fall/Winter KNPE or HLTH 352/491/595

Number of positions: **Two or three** students in HLTH or KNPE 352 for Fall/Winter 2025-26

The **Sensorimotor Exploration Lab** (colloquially known as SMEL) is a neuromechanics lab in the School of Kinesiology and Health Studies at Queen’s University. We study the processes underlying the planning, control, and learning of skilled movement in both neurologically-healthy and neurologically-impaired populations (e.g., spinal cord injury, multiple sclerosis, spinal muscle atrophy). Our scientific work is at the intersection of kinesiology, psychology, engineering, systems neuroscience, and rehabilitation. Our lab thrives because of the diversity and commitment of our members, and we welcome new members from diverse academic and cultural backgrounds.

Interested students should contact Dr. Gerome Manson (gm99@queensu.ca) with a cover letter, unofficial transcript, and a resume/CV (c.c. to watering@queensu.ca). The cover letter should indicate one’s interest in one of the research themes outlined on the [lab webpage](#).

IMPORTANT NOTE: We invest heavily in our undergraduate members and students who have joined the lab previously have moved on to positions in graduate school, medicine, physiotherapy, and occupational therapy (see lab alumni on website). Undergraduate students have also engaged in the publication of research articles and have presented at national (in Montreal and Toronto) and international conferences in France (see lab website). This level of achievement requires a lot of time and dedication associated with learning new skills and techniques. While high marks (e.g., greater than an A or 80%) are possible, they are relatively hard to achieve in this research experience. Please consider this when applying and we look forward to hearing from you.

Dr. Jessica Selinger (Neuromechanics)

Number of positions: **One or two** positions in KNPE 352.

The Neuromechanics Lab (<https://neuromech.queensu.ca>), headed by Dr. Selinger, works to understand the fundamental principles that underlie the neuromechanics of legged locomotion, and the application of these principles to wearable and assistive technologies that can improve human mobility and overall health. To do so, we combine biomechanical and neurophysiological approaches to understand how gait is adapted to changing tasks, environments, and bodies. Ultimately, the purpose of our work is to design novel rehabilitative strategies and wearable technologies to aid those with mobility impairments. Current research themes include:

- Understanding the mechanics and energetics of human locomotion
- Adaptation and learning in exoskeleton assisted walking
- Investigating ecological human movement through wearable tech

Interested students should send a cover letter, resume or CV, and unofficial transcript to Dr. Selinger at j.selinger@queensu.ca (c.c. to watering@queensu.ca). Please title the e-mail ‘KNPE Independent Study Application’ in the subject line.

Dr. Pouya Amiri (Biomechanics and Ergonomics)

Number of positions: **up to three students** in KNPE 352.

My research focuses on understanding the underlying cause of movement impairment and applying this knowledge to prevent illness and optimize health and physical performance. To do this, I combine computational musculoskeletal models, medical imaging, and functional experiments to quantify muscle and joint forces and develop subject-specific interventions (e.g., personalized surgeries) and rehabilitation technologies (gait training devices). I am particularly interested in biomechanical adaptations due to lower limb amputation, mechanics of knee osteoarthritis, and human balance control and fall prevention in the elderly.

Possible research projects are:

- Developing a real-time biofeedback training system for gait rehabilitation of lower limb amputees
- Comparison of marker-less and marker-based motion capture systems
- Investigating the effect of electrical stimulation parameters on muscle forces and pain

Interested students should send a cover letter, an unofficial transcript, and their resume to me at p.amiri@queensu.ca (c.c. to watering@queensu.ca). Please use “KNPE/HLTH 352 Research Internship Application” in the subject line.

Dr. Joseph Kangmennaang (QNS – Black Health and Social Change)

Dr. Kangmennaang’s research explores transnational Black Health (sub-Saharan Africa and North America) and specifically examines how Black health and wellbeing are impacted by social, economic, and demographical changes. Joseph will consider independent study students for the 2025-26 academic year to help with any of the following project areas:

1. **Transnational understanding of diabetes risk among Black and racialized populations:** Example of tasks include conducting literature reviews, transcription, qualitative and quantitative data analysis.
2. **Impacts of climate change on non-communicable disease risks, management and coping mechanisms on people living with NCDs.** Example of tasks include conducting literature reviews, transcription, qualitative and quantitative data analysis.
3. **Promoting childcare equity among racialized populations in USA and Canada:** Examples of tasks include conducting literature review, and data analysis to understand caregivers’ perceptions childcare access in Charlotte North Carolina (USA) and Kingston and London Ontario (Canada).

These projects can be adapted to align with the student's interests and goals. The successful intern(s) can work remotely if required/preferred. Interested students should send a cover letter, unofficial transcript, and resume or CV to Dr. Joseph Kangmennaang by e-mail at jk191@queensu.ca (c.c. to watering@queensu.ca).

Dr. Courtney Szto (Physical Cultures and Intersectional Justice)

Number of positions: **up to two** students in KNPE 352 for Fall/Winter 2025-2026

Dr. Courtney Szto is looking for up to TWO undergraduate students in either Kinesiology or Health Studies to help support a project around naming practices in the outdoors. Inspired by a project hosted by [Dr. Sarah Wald's lab at the University of Oregon](#), I'd like to create a similar website that helps restore Canadian mountains and parks back to their Indigenous names and stories. Students will help research the politics around colonial naming practices, the Indigenous histories of parks and mountains, and create the website. This project also helps to preserve Indigenous languages through the restoration of place names.

Students will have the flexibility to choose which Canadian park(s), mountain peak(s), or trails (e.g., mountain biking/hiking) you would like to research. My hope is that this will become a longitudinal project where students each year will add to this map and update it, eventually creating an Indigenous outdoor recreation map of Canada. The timing of this project is also very flexible; thus, students who would like to start some of their work earlier in the summer or would prefer more of their work to fall during different parts of the term are invited to apply. Aside from meetings, the vast majority of this project will require independent and remote work.

Skills that will be enhanced through this project include: literature review, data sorting, critical analysis, media analysis, writing for an accessible audience, website creation, and/or media creation.

Interested students should send the following documents to c.szto@queensu.ca (please c.c. watering@queensu.ca):

- current resume
- unofficial transcript
- writing sample (ideally with instructor comments/revisions)
- 500-word explanation of their interest in the project and what park/mountain area they might want to research

This website will help support Dr. Szto's ongoing SSHRC Insight Grant:
<https://outdoorcrew.wordpress.com>