

Opportunities for Independent Studies 2025-26 (updated April 23rd, 2025)

Independent Study Courses in Health Studies (HLTH 595, 491, and 456)*
Independent Study Courses in Kinesiology (KNPE 595, 491, and 456)*

Please submit applications directly to the relevant researcher(s) whose area of research is of interest. There is no deadline for applications, however there are a limited number of positions available. More opportunities may become available closer to the term(s).

HLTH/KNPE 595, 491, and 456 are designed to provide opportunities for students in Kinesiology or Health Studies who may be interested in pursuing research in laboratories or on community-based projects. Students will gain experience with the research process as it applies to the various fields of Kinesiology and Health Studies. This process may include, but is not limited to experimental design, data collection and analysis, literature searches, manuscript writing, and presentation skills.

* Please note that HLTH/KNPE 491 and 456 are 3.0 credit unit courses which can be taken in either fall or winter terms (some summer term opportunities also exist), and HLTH/KNPE 595 is a 6.0 credit unit course which spans across both the fall and winter terms.

Research Summaries for Participating Faculty Members

The following is a summary of research interests for the faculty members within the School of Kinesiology and Health Studies who have indicated their intent to supervise fourth-year independent courses next year. Further information on each faculty member can be found on the SKHS website. Other faculty members may also consider supervising undergraduate students at a later point in time, and this document will be updated accordingly.

<u>Dr. Eun-Young Lee (In Situ Population Health Research Group)</u>

Number of positions: There will be <u>two</u> honours thesis course opportunities (KNPE/HLTH 595/6.0) in the fall.

No longer accepting applications for literature review (KNPE/HLTH 456/3.0) or Special Project (KNPE/HLTH491/3.0).

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 conducting their honours thesis research on 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 use "KNPE/HLTH 595 Honours Thesis Application" in the subject line depending on your selection.

Dr. Jean Côté (Sport Psychology)

Number of positions: **One** student in KNPE 595 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 ic46@queensu.ca (c.c. to watering@queensu.ca) and attach a cover letter, unofficial transcript, and résumé or CV. Including a recent 'headshot' photo would be appreciated as well, to assist with recognition from past undergraduate class discussions. Please title the e-mail 'KNPE/HLTH Independent Study Application' in the subject line.

Dr. Jessica Selinger (Neuromechanics)

Number of positions: **One or two** positions each in KNPE 491 and 595.

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 <u>i.selinger@queensu.ca</u> (c.c. to <u>watering@queensu.ca</u>). Please title the e-mail 'KNPE Independent Study Application' in the subject line.

<u>Dr. Gerome Manson – Sensorimotor Exploration Lab</u>

Number of positions: Two or three positions available in Fall/Winter KNPE 491 and 595

The <u>Sensorimotor Exploration Lab</u> (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. Pouya Amiri (Biomechanics and Ergonomics)

Number of positions: up to two students in KNPE 595.

My research focuses on understanding the underlying cause of movement impairment and applying this knowledge to prevent illness and optimize physical performance. To do this, I combine computational musculoskeletal models and functional experiments to quantify muscle and joint forces and develop subject-specific interventions. I am particularly interested in ACL injuries and knee osteoarthritis, human balance control and fall prevention in the elderly, and lower limb amputation. Possible research projects are:

- Investigating the effect of electrical parameters on muscle strength and recovery after ACL reconstruction
- Initiation of knee osteoarthritis after ACL reconstruction
- Comparison of marker-less and marker-based motion capture systems for clinical applications
- The role of muscle intrinsic properties and co-contraction in human balance control

Interested students should send a cover letter, an unofficial transcript, and their resume to Dr. Amiri at p.amiri@queensu.ca (c.c. to watering@queensu.ca). Please use "KNPE/HLTH 595 Honours Thesis Application" in the subject line.

Dr. Elijah Bisung (Global Health Studies)

Dr. Elijah Bisung will accept applications for independent study positions this year (i.e.: HLTH 456, 491 and/or 595). Fourth-year students will be exposed to a broad range of potential global health research areas. On-going studies include examination of adolescent peer leadership and HIVD/AIDS education in Ghana, the role of trust in health promotion activities among marginalized groups, and "ad hoc" social welfare programs during COVID-19 and their implication for women's health in sub-Saharan Africa.

Interested students should send a cover letter, an unofficial transcript, and their resume to Dr. Bisung

at <u>elijah.bisung@queensu.ca</u> (c.c. to <u>watering@queensu.ca</u>). Please use "Independent Study Application" in the subject line.

Dr. Courtney Szto (Physical Cultures and Intersectional Justice)

Number of positions: up to two students in KNPE/HTLH 456/491/595 for Fall 2025/Winter 2026

Dr. Courtney Szto is looking for up to <u>TWO</u> 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 <u>Dr. Sarah Wald's lab at the University of Oregon</u>, 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

Dr. Elaine Power (Sociocultural Studies) - Positions in HLTH 456/491/595 Fall/Winter 2025-26

Dr. Power's research straddles food studies and public health sociology, with a particular focus on food insecurity, conceptualizations of the right to food, and policy responses to food insecurity, including community food programs, food banks, and basic income. Dr. Power would be pleased to supervise one or two 3rd or 4th year Research Skills Development Practicum students (HLTH & KNPE 352), and/or 4th year independent study projects in these areas, or related areas, including social

determinants of health, public health, food systems, or food studies more broadly. A specific project focus would be to help with some arts-based knowledge mobilization, specifically a zine, to popularize research findings. Students do not need to have a final topic decision before applying; Dr. Power is happy to discuss possible topic areas with students.

Interested students should contact Dr. Power at power@queensu.ca, (c.c. watering@queensu.ca) and attach a cover letter outlining your interest in an independent study course, unofficial transcript, a sample of writing (such as a course paper), and a resume. Please put 'HLTH Independent Study Application' in the subject line of the email.

Dr. Stevenson Fergus (Health Promotion and HIV) - Positions in HLTH 456.

Dr. Stevenson Fergus is happy to supervise 4th-year independent study projects in health promotion, public health, health policy, the social determinants of health, or related areas. Students wishing to study aspects of HIV/AIDS, gender-based violence, substance use, harm reduction, and the opioid overdose crisis are especially encouraged to apply, although other student interests can also be accommodated. There's no need to have a finalized topic identified, as he will help you to identify one. Opportunities are for fall term only and may include a 3-credit literature review (HLTH 456).

Interested students should contact Dr. Fergus at ferguss@queensu.ca (c.c. watering@queensu.ca), and attach a cover letter, unofficial transcript, and resume or CV. Please title the e-mail 'KNPE/HLTH Independent Study 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:

- 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 undergraduate student applicant(s) can work remotely if required/preferred. Interested students should send a cover letter, unofficial transcript, and resume or CV to Dr. Kangmennaang by e-mail at jk191@queensu.ca (c.c. to watering@queensu.ca).

<u>Dr. Amy Latimer-Cheung - The Canadian Disability Participation Project 2.0 - Kinesiology and Health</u> Studies Undergraduate Honours Thesis Research Project Opportunities (KNPE/HLTH 595)

The Canadian Disability Participation Project (CDPP) is a research partnership of 43 academics from across Canada, the United States and England and 31 partners from Canadian sport, exercise and play organizations. The goal of CDPP is to develop, test, implement and nationally disseminate, evidence-based programs that create quality sport, exercise and play participation for children, youth and adults with physical, intellectual, and sensory disabilities.

Dr. Amy Latimer-Cheung, the CDPP 2.0 Principal Investigator, is seeking committed and enthusiastic 3rd and 4th year undergraduate students from the School of Kinesiology and Health Studies to engage as members of a collaborative research team. Our team will undertake research to promote quality participation in disability sport.

Project Description: Quality Participation Enrichment Project (Q-PEP)

Overarching objective: Enhance quality of experience in physical activity programs among persons with disabilities through the application of the quality participation framework.

Research context: Our research team will be working with community organizations who either a) want to develop a new physical activity program for persons with disability or b) want to enhance the quality of an existing program

Research Method:

- September November
- a) Identify organizational needs for quality programming
- b) Identify individual participant needs for quality programming
- c) Co-develop a physical activity program that creates quality experiences for persons with disabilities that meets organizational and individual needs
- November December
- d) Deliver training and education as necessary
- January March
- d) Evaluate the program
- April
- e) Revise and iterate the program

Trainee Engagement:

In the 2025-2026 academic year, we will be working with three organizations to support their programming needs. Each organization will be matched with a trainee working group. Each trainee working group will include: a) two 4th year Kinesiology or Health Studies Students completing undergraduate thesis courses; and b) one 3rd year research intern (KNPE 352). Dr. Latimer-Cheung,

along with 2 graduate students will be overseeing the project.

Qualifications:

- 4th yr standing in a degree program within the School of Kinesiology and Health Studies
- Meets eligibility to enrol in KNPE/HLTH 595
- Lived experience with disability is an asset
- Experience delivering physical activity or recreational programming is desirable
- Experience leading and/or supporting programming for persons with disabilities is desirable

Expectations of Trainees:

I am seeking undergraduate students committed to fully engaging in research. We will be working with community partners – commitment is essential. Fully engaging means committing 10-12 hrs/week (thesis students) and 5 hrs/week (interns) for the entire academic year. Research team meetings 1.5-2.0 hr/wk. Meeting deadlines will be critical. A focus on conducting high-quality research rather than on grade achievement is expected.

How to Apply:

- Please submit the following to Dr. Amy Latimer-Cheung via e-mail amy.latimer@queensu.ca:
 - a brief cover letter highlighting your passion and skill for promoting physical activity for persons with a disability and for research;
 - o a resume; and
 - o an official copy of your transcripts
- Applications will be accepted until suitable candidates are identified.