



Opportunities for Independent Studies 2022-23

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 (updated April 14th, 2022)

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.

***Each year some faculty members will be on sabbatical, which may influence their ability to supervise students in either (or both) fall or winter term(s). The ** symbol denotes a faculty members who will be taking sabbatical during the 2022-23 academic year.*

Dr. Mary Louise Adams (Sociocultural Studies) KNPE or HLTH 491/456 Fall Term Only**

Dr. Adams' research investigates everyday movement and recreation cultures as sites where relations of domination are both produced and resisted. Drawing on literatures and theories from feminist studies, cultural studies, and sport studies, and using a range of qualitative, interpretive, and historical methods, she explores embodiment, the meanings of movement, and the relationship between active bodies and their historical and cultural contexts. One of Dr. Adams's current projects involves the political, environmental, and cultural history of a large piece of waterfront parkland in Kingston.

In the fall term of 2022, Dr. Adams is able to supervise one or two independent study students to help with the park project. (All work must be completed in the fall term!) The focus of the project is Kingston's Belle Park, formerly a piece of marshland that was then turned into a garbage dump in the 1950s and then a golf course in the 1970s. The site is slated to be redesigned as a nature park over the next few years.

Independent study students could be involved in historical archival work, literature reviews, policy scans or analysis related to the parkland and its transformation. The project would appeal to students interested in environmental issues at the city level, biodiversity, the history of garbage, the relationship between recreation and environment.

Students who are interested in applying, should send a brief cover letter, an unofficial transcript, a resume, and a writing sample to Dr. Adams (mla1@queensu.ca).

Dr. Stevenson Fergus (Health Promotion and HIV)

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 include a 3-credit literature review (HLTH 456), a 3-credit special project (HLTH 491), or a 6-credit honours thesis (HLTH 595).

Interested students should contact Dr. Fergus at ferguss@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. Eun-Young Lee (In Situ Population Health Research Lab) – Fall/Winter KNPE or HLTH 595 only

See the [In Situ lab's webpage](#) for more information.

In Situ Lab investigates social and environmental inequalities that have impact on human movement behaviours (e.g., physical activity, sedentary behaviour) and population health. On the topics of climate change, intersectionality (race- and gender- focused), movement behaviours and health, interns will work in a dynamic team environment alongside graduate students and researchers around the world, participating in literature reviews and/or various knowledge translation activities (e.g., mini reviews, systematic reviews, journal publications, website blog postings, podcasting).

Interested students should contact Dr. Eun-Young Lee (eunyoung.lee@queensu.ca) with a cover letter, unofficial transcript, an example of written work (e.g., a term paper), and a resume/CV. A cover letter should clearly indicate one's interests in one of the research themes outlined on the [lab webpage](#) and their relevant experiences.

Dr. Lucie Lévesque - Accepting KNPE or HLTH 595 Students for the Fall 2022**

Dr. Lévesque leads the [Community-Engaged Health Promotion Research group](#) in the School of Kinesiology and Health Studies. Her research focuses on program evaluation and implementation science examining community-based physical activity interventions through an ecological approach. A long-time member of the Kahnawake Schools Diabetes Prevention Project (KSDPP) <https://www.ksdpp.org/> research team, and frequent collaborator on Indigenous research initiatives, Dr. Lévesque has extensive experience working with Indigenous communities within a participatory research framework. Her work is founded on community engagement for the production and dissemination of action-oriented knowledge. Dr. Lévesque's research encompasses both Indigenous and mainstream/Western science approaches and has informed the ways in which respectful and relevant research is conducted with Indigenous communities in Canada (e.g., [KSDPP Code of Research Ethics](#); Canada's Tri Council Policy Statement 2: [Module 9 – Research Involving the First Nations, Inuit and Métis Peoples of Canada](#)). In addition to her research with Indigenous communities, she also collaborates with public health researchers in local communities and in Mexico and the Caribbean to conduct program evaluation and research related to physical activity and health promotion. Locally, she is a founding member of Kingston Gets Active <https://kingstongetsactive.ca/> which provides many opportunities for SKHS students to learn about physical activity interventions and evaluation.

Interested students should contact Dr. Lévesque at levesgul@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. Jean Côté (Fall Term Only) and Dr. Luc Martin (Sport Psychology)**

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. Luc Martin at luc.martin@queensu.ca, or Dr. Jean Côté at jc46@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. Kyra Pyke (Cardiovascular Stress Response Lab)

Dr. Pyke will consider applications for independent study positions available in the Cardiovascular Stress Response Lab (CVSRL, Dr. Pyke) for the 2022-23 academic year. The CVSRL research focuses on improving our understanding of basic vascular function including responses to food intake and exercise, as well as understanding the impact of psychological stress on the cardiovascular system. The undergraduate thesis will provide an opportunity to develop, implement and communicate the results of a study – taking on a leadership role. This includes developing the critical thinking, technical and communications skills required to see a study from start to finish. Participation in regular laboratory meetings will provide additional opportunities to learn about study design, cardiovascular physiology, and communication of study findings.

Interested students should send a cover letter, an unofficial transcript, and their resume to Dr. Pyke at pykek@queensu.ca.

Dr. Ian Janssen (Physical Activity Epidemiology Lab)

There are 6-credit honours thesis (HLTH 595) opportunities in the Physical Activity Epidemiology Lab under the supervision of Dr. Ian Janssen. The Physical Activity Epidemiology Lab uses population and public health research approaches to study movement behaviours (i.e., physical activity, sedentary behaviour, and sleep). This includes research that aims to understand the movement behaviour levels of the population, the social environment and physical environment determinants of movement behaviours, and the influence of movement behaviours on physical, mental, and social health outcomes.

Interested students should contact Dr. Janssen at ian.janssen@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. Jessica Selinger (Neuromechanics)

We are interested in the fundamental principles that shape how and why we move the way we do, as well as the application of these principles to improve mobility and overall health. To do so, we combine theoretical modelling, lab-based experiments, and data-driven approaches to study human locomotion and learning. In particular, we seek to understand the neuromechanical control

of human walking and how it 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:

- Understanding energetic cost optimization in human locomotion
- Neural mechanisms and models in locomotor learning
- Biofeedback for improved learning and rehabilitation
- Investigating ecological human movement through wearable tech

Interested students should send a cover letter and unofficial transcript to Dr. Selinger at j.selinger@queensu.ca.

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

Dr. Kangmennaang's research explores the Black experience in the United States and Canada and how Black health and wellbeing are impacted by social, technological, and demographical changes. Joseph will consider independent study students for the 2022-2023 academic year to help with any of the following project areas:

1. **Black Immigrant health and wellbeing:** Example of tasks include conducting literature reviews, transcription, qualitative and quantitative data analysis.
2. **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.

Dr. Gerome Manson (Biomechanics and Motor Control and Development)

There will be a few independent study positions available in the area of Biomechanics research for the 2021-22 academic year. The objective of Dr. Manson's research program is to understand the influence of sensory information on the planning and control of goal-directed actions. In particular, he is interested in the underlying processes that differentiate a movement made toward a target located on the body (i.e., a somatosensory target) versus a movement to an external object. He uses a combination of sensory manipulations, motion tracking, and neuroimaging to answer these questions.

Current research themes include the following:

1. The influence of visual information on the mapping of somatosensory target locations.
2. The role of brain and spinal neural networks in the rapid control of movements to somatosensory targets.
3. Multisensory perception during movements to somatosensory and visual targets.

Interested students should send a cover letter, an unofficial transcript, and their resume to Dr. Manson at gm99@queensu.ca.

Dr. Elijah Bisung (Health Promotion)

There may be different independent study opportunities in the [Center for Environmental Health Equity](#) under the supervision of Dr. Elijah Bisung. In past years, Dr. Bisung has had students work on projects related to:

1. Water security in low-income countries - Example of tasks include conducting literature reviews and quantitative data analysis.
2. Epidemics and health systems preparedness - Examples of tasks include conducting literature review and data analysis to understand individual perceptions of health systems preparedness and inequalities in "post Ebola" settings.

Interested students should send a cover letter, unofficial transcript, and resume or CV to Dr. Elijah Bisung by e-mail at elijah.bisung@queensu.ca.

Dr. Chris McGlory (Molecular Nutrition) – TBC at a later date.

Dr. McGlory is not currently offering independent study positions for undergraduate students, however this may change closer to the term. His research description will be updated at that time.