<table>
<thead>
<tr>
<th>Name of Project</th>
<th>Research Tutor</th>
<th>Project Application Name</th>
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<tbody>
<tr>
<td>Health Literacy of New Parents</td>
<td>Dr. Jennifer Abbass Dick &amp; Dr. Manon Lemonde Faculty of Health Sciences</td>
<td>Abbass Dick/Lemonde Project #1</td>
</tr>
<tr>
<td>Identifying school- and student-level factors associated with vaping and tobacco use among secondary school students</td>
<td>Dr. Adam Cole Faculty of Health Sciences</td>
<td>Cole Project #1</td>
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<td>Key elements of successful housing for individuals with developmental disabilities and exceptional behavioural needs: Useful space designs and supportive residential models</td>
<td>Dr. Robert Balogh &amp; Kristin Dobranowski Faculty of Health Sciences</td>
<td>Balogh Project #1</td>
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<tr>
<td>Active Aging</td>
<td>Dr. Shilpa Dogra Faculty of Health Sciences</td>
<td>Dogra Project #1</td>
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<tr>
<td>Exploring the use of OER in a large first year undergraduate course</td>
<td>Dr. Elita Partosoedarso Faculty of Health Sciences</td>
<td>Partosoedarso Project #1</td>
</tr>
<tr>
<td>Systematic Reviews in Birth Research</td>
<td>Dr. Ginny Brunton Faculty of Health Sciences</td>
<td>Brunton Project #1</td>
</tr>
<tr>
<td>Evaluation of the Emergency Department and Rapid Access Addiction Medicine clinic transitions to care</td>
<td>Joanne Gourgouvelis Lakeridge Health</td>
<td>Gourgouvelis Project #1</td>
</tr>
<tr>
<td>Developing and evaluating and online preceptor training module in the Medical Laboratory Science program</td>
<td>Dr. Helene Goulding &amp; Dr. Evelyn Moreau Faculty of Health Sciences</td>
<td>Goulding/Moreau Project #1</td>
</tr>
<tr>
<td>Ontario Shores Projects</td>
<td>Krystle Martin Ontario Shores Centre for Mental Health Sciences</td>
<td>Ontario Shores Projects</td>
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<tr>
<td>Research Title</td>
<td>Investigator</td>
<td>Faculty</td>
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<tr>
<td>Exploring the interaction between cognitive and muscle fatigue on upper</td>
<td>Dr. Nick La Delfa</td>
<td>Faculty of Health Sciences</td>
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<td>limb neuromechanics</td>
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<tr>
<td>The assessment of cardiovascular drug trial outcomes based on gender, race,</td>
<td>Dr. Laura Banks</td>
<td>Faculty of Health Sciences</td>
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<td>and age</td>
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<tr>
<td>Evaluation of Student Performance in First-Year Hybrid Anatomy and Physiology</td>
<td>Dr. Laura Banks</td>
<td>Faculty of Health Sciences</td>
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<td>Nutritional Adequacy as a component of food security in the context of</td>
<td>Dr. Janet McCabe</td>
<td>Faculty of Health Sciences</td>
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<td>individuals with intellectual disability</td>
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<tr>
<td>Abilities Centre Research and Program Evaluation</td>
<td>Dr. Meagan O’Neill &amp; Tara Joy</td>
<td>Abilities Centre</td>
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<td>Knibbe</td>
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<tr>
<td>Motor Behaviour in Children with Disabilities</td>
<td>Dr. Meghann Lloyd</td>
<td>Faculty of Health Sciences</td>
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<tr>
<td>Impact of recurrent neck pain on sensorimotor integration</td>
<td>Dr. Bernadette Murphy</td>
<td>Faculty of Health Sciences</td>
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<tr>
<td>Effectiveness of an educational intervention aimed at improving final</td>
<td>Dr. Nooshin Rotondi &amp; Dr. David</td>
<td>Faculty of Health Sciences</td>
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<tr>
<td>grades for students taking introductory statistics: a randomized controlled</td>
<td>Rudoler</td>
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<td>trial</td>
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<tr>
<td>Advancing Reminiscence Therapy through Virtual Reality Application to</td>
<td>Dr. Winnie Sun</td>
<td>Faculty of Health Sciences</td>
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<tr>
<td>Promote Social Connectedness of Persons with Dementia</td>
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<tr>
<td>The effect of changing neck sensory input on brain plasticity</td>
<td>Dr. Paul Yielder &amp; Dr. Bernadette</td>
<td>Faculty of Health Sciences</td>
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<tr>
<td>Murphy</td>
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<tr>
<td>Mapping school food and nutrition curriculum in Canada</td>
<td>Dr. JoAnne Arcand</td>
<td>Faculty of Health Sciences</td>
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<td>Study Title</td>
<td>Investigator</td>
<td>Project Code</td>
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<tr>
<td>Assessment of dietary adequacy in patients with hypertension</td>
<td>Dr. JoAnne Arcand Faculty of Health Sciences</td>
<td>Arcand Project #2</td>
</tr>
<tr>
<td>Do serious games for nutrition education improve nutrition-related outcomes? A systematic review</td>
<td>Dr. JoAnne Arcand Faculty of Health Sciences</td>
<td>Arcand Project #3</td>
</tr>
<tr>
<td>Exploring the role of a “not-for-profit– university” partnership model for addressing Sustainable Development Goals though simulation augmented health professionals’ education</td>
<td>Dr. Adam Dubrowski</td>
<td>Dubrowski Project #1</td>
</tr>
</tbody>
</table>
Name of Research Tutor: Jennifer Abbass Dick and Manon Lemonde

Number of Possible Positions: 1

Name of Project: Health Literacy of new parents

Project location: This project will take place at Ontario Tech University

Project Description:

Background
Health literacy has many definitions, but it primarily means being able to access, understand & use information to produce a health outcome (Johnston et al, 2015). Health literacy is viewed as a feature of potential users and of particular systems that provide health information. This makes it a key concern for practitioners and policy makers both in and outside of health care (Gillis et al., 2013).

This project will be the development of a scoping review of the literature on health literacy at the transition to parenthood.

Possible Roles for Student:
Student will be involved in:

- Defining the scoping review parameters (establishing the difference with a systematic review)
- Reviewing the literature on health literacy at the transition to parenthood
- Developing tables of relevant evidence
- Synthesizing and analysis to determine the most relevant information and gaps in the literature

Special Requirements: (i.e. Entry Immunization Form, Police Check, specialized skills etc..)

- Scholarly writing skills
- Autonomous and self-directed
- Great organizational skills
- Able to communicate effectively and regularly
<table>
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<tr>
<th>Name of Research Tutor:</th>
<th>Adam Cole</th>
<th>Number of Possible Positions: 2</th>
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<tbody>
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<td>Name of Project:</td>
<td>Identifying school- and student-level factors associated with vaping and tobacco use among secondary school students</td>
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<tr>
<td>Project location:</td>
<td>Oshawa North Campus</td>
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**Project Description:**

One of the greatest accomplishments of public health has been the significant reduction in the prevalence of cigarette smoking. However, despite these gains, cigarette smoking continues to result in significant health care costs. In addition, new “lower risk” tobacco products, like vapes (also referred to as e-cigarettes) and heat-not-burn tobacco products, threaten the tobacco control advances that have been seen thus far. The public health impact of these “lower risk” products is strongly debated within the research and public health community, particularly as they gain popularity among youth. Given the novelty of these products, few longitudinal studies have explored the association between student-level factors and the use of vapes or heat-not-burn tobacco products. Additionally, although it is well established that the school environment influences youth health behaviours, few studies have examined the influence of school and community characteristics on youth use of vapes or heat-not-burn tobacco products.

**Possible Roles for Student(s):**
- conducting literature review
- collecting data
- performing data analysis
- writing manuscript drafts

**Special Requirements: (i.e. Entry Immunization Form, Police Check, specialized skills etc..)**

None
Name of Research Tutor:  
Dr. Robert Balogh & Kristin Dobranowski  

Number of Possible Positions: 1

Name of Project:  
Key elements of successful housing for individuals with developmental disabilities and exceptional behavioural needs: Useful space designs and supportive residential models

Project location: Ontario Tech North Oshawa Campus

Project Description:

A number of adult Ontarians with intellectual and developmental disabilities (IDD) have difficulty finding and maintaining appropriate community residential or living arrangements that address their behavioural needs. These are commonly individuals who exhibit significant challenging behaviour such as aggression, self-injury and destructiveness.

This project aimed to describe successful physical space and design arrangements in housing for Ontarians with IDD who exhibit exceptional behaviours that challenge (BTC).

A multidisciplinary project team (architect, psychologists, nurse, occupational and physical therapists) used different methods to collect and analyze data on housing accommodations. To determine the key elements required for successful housing placements this project adopted a mixed-methods approach consisting of a 1) literature review, 2) semi-structured interviews and 3) case-studies. The qualitative component of this study consisted of semi-structured interviews of 18 individuals who had knowledge or experience regarding residences for persons with IDD who exhibit exceptional BTC. These key informants included a resident, residence staff and administrators, and clinicians.

Collection of data from these semi-structured interviews are complete and it is necessary to prepare results for publication.

Possible Roles for Student(s):

The student will be responsible for:
1. Note taking for team meetings
2. Conducting a literature search on the topic of housing for adults with IDD and environment modifications to address their needs
3. Creating an annotated bibliography and database of the relevant literature
4. Assist in interpreting qualitative data
5. Provide format information for a draft manuscript with potential opportunity to co-author article
6. Other duties as assigned (e.g. social media and other knowledge & translation efforts related to all study components)
7. Potential opportunity to attend local conference

Special Requirements:

The student should have a basic understanding of qualitative research and be familiar with how to use the Ontario Tech library to search for relevant literature. The student should have an interest in the area of intellectual and developmental disability.
<table>
<thead>
<tr>
<th>Name of Research Tutor:</th>
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<tbody>
<tr>
<td>Shilpa Dogra</td>
<td>2-3</td>
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<tr>
<td>Active Aging</td>
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<tr>
<th>Project location:</th>
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<tr>
<td>UOIT, Lakeridge Hospital, Oshawa Senior’s Centre (depends on project discussed)</td>
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</table>

**Project Description:**

Various projects are available in the area of physical activity, sedentary time, cycling, and active transportation in older adults. Projects will either be based in exercise physiology, physical activity epidemiology, or exercise intervention/behaviour change methods. Depending on the project, the student may need to be available to travel to the local hospital or seniors centers. Project details will be discussed and decided upon in person.

**Possible Roles for Student(s):**

Students will be responsible for recruitment of participants, data collection, data analysis, and may be involved with publication.

**Special Requirements: (i.e. Entry Immunization Form, Police Check, specialized skills etc..)**

This will depend upon the project.
<table>
<thead>
<tr>
<th>Name of Research Tutor: <strong>Elita Partosoedarso</strong></th>
<th>Number of Possible Positions: 2</th>
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<tbody>
<tr>
<td><strong>Name of Project:</strong> Exploring the use of OER in a large first year undergraduate course</td>
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<tr>
<td><strong>Project location:</strong> Oshawa North campus</td>
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**Project Description:** Open education resources (OERs) are freely and publicly accessible, openly licensed text, media, and other digital resources that are useful for teaching, learning, and assessing as well as for research purposes. These resources can be reused, reworked, remixed, redistributed, and retained in order to best suit the purposes of specific groups of users (Wiley, undated). Relevant data on the implementation and usage of OERs have been scarce, largely due to lack of consistency in the teaching and learning methods used within courses where OERs have been introduced (Grimaldi, 2019). Additionally, most studies have not had a relevant “control” group nor have they used an appropriate hypothesis as an underlying assumption in their studies. In some studies, the mode of delivery has been altered at the same time that “traditional” (publishing house-based) textbook and resources were replaced with freely available OERs. In other instances, different types of resources were available with a traditional textbook compared to OERs. Often, studies would examine the use of OERs without assessing how previous cohorts of students used traditional textbook and resources in the same course.

Our study will use the access hypothesis which states that that “OER benefits learning by providing access to critical course materials, and therefore predicts that OER should only benefit students who would not otherwise have access to the materials” (Grimaldi, 2019). While most studies in this area assumes that there may a fundamental change in student learning outcomes with the adoption of OERs, however they are measured, the aim of this study is to determine whether these freely available, open resources are at least as good at promoting student learning as resources that students have to pay for.

**Possible Roles for Student(s):**
- Conduct an in-depth literature review
- Review best practices at other institutions
- Collect and analyze data
- Write a draft manuscript

**Special Requirements:** (i.e. Entry Immunization Form, Police Check, specialized skills etc..) None
Name of Research Tutor: Dr. Ginny Brunton | Number of Possible Positions: 2

Name of Project: Systematic Reviews in Birth Research.

Project location: Tutor’s office; OntarioTech Library; Remote as agreed with tutor.

<table>
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<tr>
<th>Project Description:</th>
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<tr>
<td>Several systematic reviews in public health and maternal-child health are planned or are currently under way. These include topics in:</td>
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<tr>
<td>- Women’s, partners’, professionals and policy decision-makers’ perspectives of home birth;</td>
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<td>- Indigenous women’s perspectives and experiences of positive birth;</td>
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<tr>
<td>- Community engagement in health research; and</td>
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<tr>
<td>- Relationships between maternal oxytocic administration in labour and subsequent child autism.</td>
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To conduct these projects, systematic review methods will be used. These include research question formation; stakeholder consultation; protocol preparation; development and testing of eligibility criteria and data extraction tools; reference screening, coding, critical appraisal, data extraction and analysis; report writing and communication with stakeholders.

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<tr>
<th>Possible Roles for Student(s):</th>
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<tr>
<td>Students will have the opportunity to be involved in the systematic review process alongside the Research Tutor, assisting and, where appropriate, taking the lead (with support) on aspects of the review as determined by their skills and interests. Specific tasks include searching multiple databases and websites; downloading identified references into EndNote software; screening of identified references, full text article retrieval, data extraction, critical appraisal, synthesis and communication of results using bespoke systematic review software. Students’ role will be negotiated, based on project needs and student interests/learning needs; and the research outputs produced by students will reflect their research course requirements (e.g. research poster).</td>
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<th>Special Requirements:</th>
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<td>(i.e. Entry Immunization Form, Police Check, specialized skills etc..)</td>
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<tr>
<td>These are projects best suited to students who can demonstrate an interest in research, close attention to detail, and are happy to work on their own while regularly consulting with the Faculty member. A 75+ average in an introductory research or statistics course is required. Students must be able to demonstrate they know how to access and search at least one electronic database (e.g. MEDLINE, CINAHL, ASSIA, etc.). Prior use of EndNote or other citation software is required; training will be given to use specialist systematic review software (EPPI-Reviewer©).</td>
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</table>
Name of Research Tutor: Joanne Gourgouvelis

Number of Possible Positions: 1

Name of Project: Evaluation of the Emergency Department and Rapid Access Addiction Medicine clinic transitions to care

Project location: Lakeridge Health Oshawa

Project Description:
The opioid crisis continues to grow at alarming rates in Canada, with devastating consequences. There are numerous efforts underway to mitigate this crisis, yet services for people using substances continues to be fragmented, treatment wait times are long, and access to evidence-based treatment is limited. Many persons with opioid use disorder (OUD) present repeatedly to emergency departments (ED) due to gaps in care, resulting in high use of the health care system. In Ontario, Rapid Access Addiction Medicine (RAAM) clinics have recently been implemented and represent low barrier, rapid access models of care.

OBJECTIVES: To evaluate the transition to care when patients attend the ED and RAAM clinic for problematic substance use. This program evaluation will assess health outcomes, return on investments and patient satisfaction.

Possible Roles for Student(s):
General research duties such as help with Research Ethics Board application, patient surveys, data collection and analysis.

Special Requirements: (i.e. Entry Immunization Form, Police Check, specialized skills etc..)

To be updated
Name of Research Tutor: Helene Goulding & Evelyn Moreau

Number of Possible Positions: 1

Name of Project:
Developing and evaluating an online preceptor training module in the Medical Laboratory Science program

Project location:
North Campus

Project Description: Clinical preceptors (also referred to as clinical educators) are vital to the students’ success in practicum. They provide ongoing technical and professional training during a 30-week practicum. Medical Laboratory Science programs must provide adequate preceptor training to facilitate a positive and meaningful learning environment in the clinical setting. The aim of this project is to develop and evaluate this online training module. This online module is intended to supplement current on-site training and to provide a ready resource for clinical preceptors throughout practicum. The training modules will be developed in the spring of 2020 and to be piloted during the fall semester of 2020.

Possible Roles for Student(s):
The role of the research student will be to aid in development of the assessment rubrics/tools, to synthesis the raw data and to present the research findings. The student will also be responsible for conducting a literature review of current research involving the evaluation of preceptor training. The student will also be part of obtaining research ethics board (REB) approval if required.

Special Requirements: (i.e. Entry Immunization Form, Police Check, specialized skills etc..)
Excellent written and verbal communication skills required. Excel and APA proficiency. We would also like the ability to interview possible candidates.
<table>
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<tr>
<th>Name of Research Tutor: Dr. Krystle Martin</th>
<th>Number of Possible Positions: 2</th>
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<tr>
<td>Name of Project: TBD</td>
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<tr>
<td>Project location: Ontario Shores Centre for Mental Health Sciences</td>
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**Project Description:**

I currently have several projects that students could join and new opportunities that arise for the next semester. The following represent the types of projects that I typically lead:

- Exploring the subjective sense of restrictiveness among forensic patients
- Conducting a program evaluation of the Forensic Treatment Mall — a model for intervention
- Exploring self-awareness theory and its impact on virtual mental health care
- Examining the use of protective factors in decisions made by the Ontario Review Board
- The use of non-pharmacological strategies to manage anxiety
- Exploring the pre-detention service utilization of individuals found not criminally responsible following a conviction of homicide
- Exploring moral injury in forensic mental health patients
- Understanding resilience in post-secondary students
- Examining the relationship between risk for violence and recovery

**Possible Roles for Student(s):**

Students may be involved in all aspects of the research projects which may include: literature search/review, research ethics application preparation, protocol development, data collection, data analysis, transcription, interpretation of data, manuscript preparation and other knowledge translation activities, etc. Students will be invited to attend other events, meetings, and activities that I participate in such as weekly research team meetings, providing research and evaluation consultations, clinical training initiatives, etc. to observe and learn about conducting research in an applied setting.

**Special Requirements:** (i.e. Entry Immunization Form, Police Check, specialized skills etc.)

- CPIC with Vulnerable Sector Screening
- Immune Status for:
  - Hepatitis B
  - Measles, Mumps, Rubella
- Varicella (Chicken Pox)
- Tetanus, Diphtheria, Pertussis (Tdap) (if known)
- Influenza (or declination)
- TB Results, 2-Step and Yearly
Name of Research Tutor: Dr. Nick La Delfa

Number of Possible Positions: 2

Name of Project: **Exploring the interaction between cognitive and muscle fatigue on upper limb neuromechanics**

Project location: Occupational Neuromechanics & Ergonomics Lab (UAB355)

Project Description:

Both muscle fatigue and prolonged mental exertion are individually linked to deficits in motor performance and strength. However, the combined effects of these exposures are relatively under-explored, which can have tremendous consequences in certain occupations (e.g. dentistry, surgery). Using a neuro-mechanical, laboratory-based approach, this research project will explore the individual and interactive effects of these occupational exposures on upper limb task performance and muscle capacity.

Possible Roles for Student(s):

For this research project, the practicum student(s) will work with a Master’s student to design and test an experimental protocol in the Occupational Neuromechanics & Ergonomics Laboratory. Your main focus will be data collection and analysis for a portion of the study described above. As such, you will be trained in the use of surface electromyography, motion capture and psychological assessment tools. This skill set will also allow you to help with other studies being collected in the lab. Other responsibilities and tasks will include: initial stages of data analysis, literature integration, attending lab meetings and journal club sessions, and participating in manuscript preparation for submission to a peer-reviewed journal.

Special Requirements: (i.e. Entry Immunization Form, Police Check, specialized skills etc..)

The practicum student will need to have successfully completed Occupational Ergonomics (HLSC 4475) with a grade of A- or higher.
<table>
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<tr>
<th>Name of Research Tutor: <strong>Laura Banks</strong></th>
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<td><strong>Name of Project:</strong> The assessment of cardiovascular drug trial outcomes based on gender, race, and age</td>
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<td><strong>Project location:</strong> UOIT (North Oshawa Campus)</td>
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**Project Description:** This independent research project will evaluate the outcomes of currently-published cardiovascular drug trials to determine if differences exist when gender, race, and age are considered.

**Possible Roles for Student(s):** To conduct a review of the literature; To read and collect data based on original research in the area of cardiovascular medicine and science with a focus on randomized controlled trials; To conduct basis data entry and statistical analyses; To assist with abstract and manuscript preparation.

**Special Requirements:** (i.e. Entry Immunization Form, Police Check, specialized skills etc..)

- Experience with conducting online searches for academic journal articles (e.g. PubMed);
- Experience with reading and interpreting data from original research articles;
- Advanced statistical knowledge (asset, but not required);
- Demonstrated academic achievement (Willing to provide unofficial transcript)
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<th>Name of Research Tutor: <strong>Laura Banks</strong></th>
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<td><strong>Name of Project:</strong> Evaluation of Student Performance in First-Year Hybrid Anatomy and Physiology Courses</td>
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<td><strong>Project location:</strong> UOIT – North Oshawa</td>
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**Project Description:**
The purpose of this study is to evaluate student performance on assessment questions (e.g., tests and exams) that are based on materials presented in-class lecture versus online lectures for first and second year anatomy and physiology courses. The hypothesis is that students' performance will be independent of mode of delivery, with no difference in performance on those test questions derived from in-class lecture versus online lecture materials.

**Possible Roles for Student(s):**
The student will have an opportunity to review anatomy and physiology lecture materials. The student will perform basic data collection and analyses and assist in abstract submission.

**Special Requirements:** (i.e. Entry Immunization Form, Police Check, specialized skills etc.)
Students should have demonstrated strong academic performance in HLSC1200 and HLSC1201.
Name of Research Tutor: Janet McCabe
Number of Possible Positions: 1

Name of Project: Nutritional Adequacy as a component of food security in the context of individuals with intellectual disability

Project location: Ontario Tech University

**Project Description:**

Food security encompasses more than the accessibility to food (i.e. economic and physical access) it also includes availability, adequacy, agency, and acceptability. For individuals with intellectual disability economic and physical access to food may be a focus, but what is less understood are the aspects of agency, acceptability, adequacy, and availability. This project looks at food security from a holistic perspective for individuals with intellectual disability who tend to have higher levels of obesity. Working with pilot data that will be collected during the summer of 2020, the student working with this project will assist with fine-tuning an existing survey for future use, continued data analysis, and development of a project that is focused specifically on adequacy from a nutritional perspective.

**Possible Roles for Student(s):**
- Participation in a larger research team
- Data collection and analysis
- Responsibility for collection and analysis of data related to nutritional adequacy in the context of food security

**Special Requirements:** (i.e. Entry Immunization Form, Police Check, specialized skills etc..)
No specific requirements.
Name of Research Tutor: Meagan O'Neill/ Tara Joy Knibbe
Number of Possible Positions: 1

Name of Project:
Abilities Centre Research and Program Evaluation

Project location:
Abilities Centre, Whitby, ON

Project Description:
Abilities Centre will enhance the quality of life for individuals of all ages and abilities through an inclusive environment. Abilities Centre is a fully accessible, state-of-the-art multi-purpose facility that is committed to the development of an inclusive and integrated environment, where respect, understanding, cooperation, innovation, and education form the core values of the facility and the people within.

The Abilities Centre Research and Program Evaluation team is working to provide knowledge on community inclusion, exercise and quality of life for people with disabilities & older adults, family & youth recreation, and community engagement for youth and young adults with autism.

Individuals who are proficient in Microsoft Office products, and pose knowledge of accessibility and accommodation issues is an asset.

Possible Roles for Student(s):
- Assist with research related activities that may include
  - Conducting review of literature
  - Data collection
  - Prepare program evaluation
  - Knowledge translation materials
- Other duties as assigned

Special Requirements: (i.e. Entry Immunization Form, Police Check, specialized skills etc.)
- Vulnerable Sector Check

Position: Research Practicum
Start-End: Fall 2020 – Winter 2021
You Belong Here!
Working as a team, our common goal is to improve quality of life, social and economic inclusion, and health and wellbeing for Canadians of ALL abilities. Together we are shaping the future, constantly looking for ways to improve how we operate, communicate and innovate. Abilities Centre is a workplace where you can learn, develop, be your true self, and have fun, all while realizing your fullest potential.

The Position:
Reporting to the Manager, Research & Program Evaluation the Research Assistant will assist with research related activities focusing on measuring impact of Abilities Centre programs and services.

Responsibilities:
- Assist with research related activities including conducting review of literature, data collection, and preparing program evaluation & knowledge translation materials
- Work with the Manager and program teams to implement program evaluation in specific areas of research that measure social inclusion, physical activity, health and well-being and quality of life for people of all abilities
- Adhere to confidentiality and privacy processes and protocols while participating in research and program evaluation activities
- Cultivate a member-centred environment through exceptional customer service
- Participate in team meetings and community consultations
- Establish rapport and maintain effective relationships with members, staff, volunteers and community partners
- Foster a work environment that values and encourages teamwork and empowerment
- Discuss any questions or concerns with Manager of Research & Program Evaluation
- Other duties as assigned

Qualifications:
- University or college program (undergraduate/graduate) in the area of physical education / recreation / kinesiology / disability studies / education / psychology / health sciences or other related fields
- Work and/or Volunteer experience an asset
- Knowledge of accessibility and accommodation issues an asset
- Proficient in use of Microsoft Office products
- Excellent communication skills
- Strong interpersonal skills with a customer service focus
- Ability to function equally well independently and as part of an effective team

Do you have the all the right background plus the drive to improve lives by bringing people together to explore opportunities, discover passions, and fulfill aspirations? If so, apply now: You Belong Here.

Abilities Centre is an equal opportunity employer committed to diversity and inclusion; we welcome and encourage applications from all qualified candidates. Accommodations are available on request for candidates taking part in all aspects of the selection process. We thank all who apply, however only those selected for an interview will be contacted.

www.abilitiescentre.org/employment
<table>
<thead>
<tr>
<th>Name of Research Tutor: <strong>Meghann Lloyd</strong></th>
<th>Number of Possible Positions: 1-2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Project:</strong> Motor Behaviour in Children with Disabilities</td>
<td></td>
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<tr>
<td><strong>Project location:</strong> Ontario Tech University – St. Gregory’s building (202 Simcoe St)</td>
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**Project Description:**
Children with Autism Spectrum Disorder experience behavioural challenges in addition to poor motor skills. The purpose of this project is to intervene on fundamental motor skills (running, throwing, kicking, catching, etc) and evaluate whether gains are made in both motor skill proficiency but also in areas such as adaptive behaviour and social skills.

**Possible Roles for Student(s):**
- Video coding behavioural data on new NOLDUS behavioural software
- Data entry
- Data analysis
- Participating in pre-testing and post-testing of participants

**Special Requirements: (i.e. Entry Immunization Form, Police Check, specialized skills etc..)**
- Police Check (vulnerable sector)- REQUIRED
- Must be a kinesiology student (i.e. completed Human Growth and Motor Development)
Name of Research Tutor: Bernadette Murphy

Number of Possible Positions: 2

Name of Project: **Impact of recurrent neck pain on sensorimotor integration**

Project location: Ontario Tech Human Neurophysiology lab (North Campus UAB 356)

Project Description: Neck pain and dysfunction is often linked to pain and fatigue in the upper limb. One hypothesis is that the changes in sensory input due to neck dysfunction affects the way the brain processes incoming sensory input from the upper limb leading to altered motor function, which then initiates a cycle of pain and fatigue. The aim of the current study is to understand how treatment of neck dysfunction using spinal manipulation alters sensorimotor integration and motor control.

Possible Roles for Student(s):
Students who participate in this project will assist in recruiting and testing participants, as well as performing data analysis. They will:
1) acquire skills in collecting EMG data.
2) Acquire skills in using TMS to excite the motor cortex to activate muscle and/or skills in using somatosensory evoked potentials (SEPs) to study sensory processing by the brain
3) acquire skills in data analysis of EMG, TMS and/or SEP data
4) build on skills in statistical analysis and data presentation
5) develop skills in communicating with research participants, and explaining the project to obtaining informed consent

Special Requirements: (i.e. Entry Immunization Form, Police Check, specialized skills etc..)
Students in the kinesiology program who have completed Anatomy and Introduction to Movement Science and are enrolled in or completing Motor Control with strong grades are eligible to apply.
Name of Research Tutor: Nooshin Rotondi and David Rudoler

Number of Possible Positions: 1

Name of Project: Effectiveness of an educational intervention aimed at improving final grades for students taking introductory statistics: a randomized controlled trial

Project location: Ontario Tech University

Project Description:

The undergraduate introductory statistics course in the Faculty of Health Sciences is required for all programs and is an important prerequisite for upper-level courses and many graduate/professional degrees. This study aims to evaluate the effectiveness of an e-mail intervention targeting all students enrolled in HLSC 3800U in order to improve final grades. Midway through the course, half of the students will be randomized to receive an e-mail including their predicted final grade (A+ to F) based on their midterm grade and results from previous semesters; the other half will serve as controls. For the intervention group, students with a midterm grade of A- or higher will be encouraged to keep up their efforts; students in the B- to B+ range will be told about their potential to improve; and students at risk of failing (C+ or lower) will be warned of the consequences of low grades and be reminded of available resources for math/stats help.

This research may, at a minimum, improve student engagement in a course that is sometimes difficult and daunting for some students. More importantly, this study may provide a useful motivational tool for students who are at risk of failing the course, and thereby lead to improvements in final grades.

Possible Roles for Student(s):

- Conduct a literature review
- Assist with the implementation of the RCT
- Perform basic data analysis
- Attend regular meetings with the research tutors
- Contribute to co-authorship in a peer-reviewed manuscript
Special Requirements: (i.e. Entry Immunization Form, Police Check, specialized skills etc..)

- Have successfully completed HLSC 3800U (preference given to students with final grade of A- or higher in the course) OR currently taking HLSC 3800U (preference given to students with midterm grade of A- or higher)
- Experience using SPSS for data analysis (e.g., as part of HLSC 3800U)
- Strong writing and communication skills
- Ability to work independently
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<tr>
<th>Name of Research Tutor</th>
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<tbody>
<tr>
<td>Dr. Winnie Sun</td>
<td>1</td>
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<tr>
<th>Name of Project:</th>
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<tr>
<td>Advancing Reminiscence Therapy through Virtual Reality Application to Promote Social Connectedness of Persons with Dementia</td>
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<tr>
<th>Project location:</th>
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<tr>
<td>Ontario Tech University and Ontario Shores Centre for Mental Health Sciences</td>
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**Project Description:**

This project aims at developing an innovative, non-traditional framework prototype to improve the implementation of reminiscence therapy for persons with dementia through customizable, immersive and interactive virtual reality experiences. Reminiscence therapy is a multi-sensory treatment that uses a combination of sight, touch, taste, smell and sound to help persons with dementia (PWD) remember events, people and places from their past lives.

We propose a framework for creating immersive and interactive virtual reminiscence experiences to facilitate the dementia care and management of behaviours and psychological symptoms of dementia BPSD. The framework will be modular and will support immersive virtual reality (VR) using standalone VR head-mounted displays to provide users freedom of movement. At the same time, non-immersive VR will be developed using monitors, television, or projectors to visualize and engage with the content without wearing any device. The evaluation of virtual reminiscence therapy will be conducted using data analytics and physiological measures including facial and eye tracking technology using video-recording to provide quantifiable metrics for evaluation of intervention.

This project will aim at adopting a proactive approach to optimizing the increased usage of reminiscence intervention as an evidence-based, nonpharmacological measure to promote PWD’s social connectedness. At the present, mostly conventional, analog media is being used for reminiscence intervention. Enriching the traditional form of reminiscence therapy with VR can empower the caregivers to customize individualized virtual reminiscence experiences, which is expected to help PWD with maintaining and preserving their personal identity during disease progression and challenging circumstances associated with BPSD.

**Possible Roles for Student(s):**

1. Facilitating focus groups and interviews with persons with dementia and their caregivers.
2. Involving in data analysis of qualitative interviews.
3. Assisting in pilot-testing of VR prototype
4. Collaborating with students from Engineering and IT in evaluating the effectiveness of VR intervention on persons with dementia.
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<th>Special Requirements: (i.e. Entry Immunization Form, Police Check, specialized skills etc..)</th>
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<tr>
<td>- Prior experience or interest in working with vulnerable populations (Persons with Dementia and other cognitive impairment)</td>
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<td>- Prior experience or interest in qualitative research and interviews</td>
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<td>- Prior experience or interest in Health Informatics</td>
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<td>Project location:</td>
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**Project Description:** Neck pain and fatigue affects sensory feedback from the spine to the brain, and can affect the brain’s ability to blend information coming from other senses, affecting coordination and the ability to learn new movements. This research uses a state of the art eye tracking system to measure changes in the way the output of cerebellum is affected by neck pain and fatigue. This work will measure the vestibulo-ocular reflex and hand-eye coordination in individuals with and without neck pain, and before and after neck muscle fatigue. The VOR keeps the eyes on target despite head and/or body movements that include the head, whether these movements are self-produced or externally imposed.

**Possible Roles for Student(s):**

Students who participate in this project will assist in recruiting and testing participants, as well as performing data analysis. They will:
1. acquire skills in collecting eye-tracker data collection and analysis.
2. measuring the accuracy of making eye movements to the perceived location of one’s own hand when it is visually occluded
3. Learn to measure spatial and temporal error in maintaining target fixation throughout head movement.
4. build on skills in statistical analysis and data presentation
5. develop skills in communicating with research participants, and explaining the project to obtaining informed consent

**Special Requirements:** (i.e. Entry Immunization Form, Police Check, specialized skills etc.)

Students in the kinesiology stream who have completed Anatomy and Introduction to Movement Science and are enrolled in or completing Motor Control with strong grades are eligible to apply.
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<tr>
<td><strong>JoAnne Arcand</strong></td>
<td><strong>1</strong></td>
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<tr>
<td>Name of Project:</td>
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<tr>
<td><strong>Mapping school food and nutrition curriculum in Canada</strong></td>
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<tr>
<td>Project location:</td>
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<tr>
<td><strong>Ontario Tech University</strong></td>
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**Project Description:**
The purpose of this project is to identify and characterize the food and nutrition curriculum (Kindergarten to grade 12) across all Canadian provinces and territories. The student will conduct a detailed assessment of curriculums and characterize similarities and differences in the components of education expected. **Importance:** This work will provide foundational knowledge for new interventions being created to support teachers in delivering education and to engage students in learning about healthy eating. This study is funded by an Ontario Research Fund – Research Excellence Grant.

**Possible Roles for Student(s):**
The student will work as part of an interdisciplinary team of graduate students, postdoctoral fellows, and educators. The student will have dedicated desk space available to them to conduct their research at the Centre for Applied Nutrition and Cardiovascular Health Research (CANCHR), which is located at Ontario Tech’s St. Gregory’s location. As part of their participation in the CANCHR, the student will attend weekly lab meetings.

The CANCHR usually receives a high volume of student interest. Therefore, only students with a GPA of 3.7 or higher in the past 2 years will be considered at this time. A student will be successful with this research project if they:

- are detail-oriented.
- are able to think critically.
- are self-directed, take initiative and are resourceful and responsive.
- are professional and have excellent written and verbal communication skills.
- are able to work both independently and as part of a team.

**Special Requirements:** (i.e. Entry Immunization Form, Police Check, specialized skills etc.)

None.
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<td>Number of Possible Positions:</td>
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**Name of Project:**
Assessment of dietary adequacy in patients with hypertension

**Project location:**
Ontario Tech University, travel to Primary Care Clinics in the Durham region may be required

**Project Description:**
The purpose of this project is to understand if patients who have hypertension adhere to Hypertension Canada’s recommendations for diet. This is a sub-study of a larger study being conducted by the Centre for Applied Nutrition and Cardiovascular Health Research at Ontario Tech University. This study will include 200 patients with hypertension, who are currently being recruited from primary care clinics and community centres in the Durham region. As part of the study, patients will complete two 24-hour urine collections, a 3 day food record and the Sodium Calculator web-based questionnaire. This study is funded by the Heart and Stroke Foundation of Canada.

**Importance:**
This sub-study will enable us to understand the health behaviors of patients with hypertension in relation to the dietary patterns and adequacy, and whether or not they adhere with clinical practice guidelines published by Hypertension Canada.

**Possible Roles for Student(s):**
The student will work as part of an interdisciplinary team of graduate students, postdoctoral fellows, family physicians and nurses. The student may have the opportunity to participate in patient recruitment at primary care clinics and will be trained to analyze data collected from the food records which form the basis of analyses to determine dietary adherence. The student will have dedicated desk space available to them to conduct their research at the Centre for Applied Nutrition and Cardiovascular Health Research (CANCHR), which is located at Ontario Tech’s St. Gregory’s location. As part of their participation in the CANCHR, the student will attend weekly lab meetings.
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Special Requirements: (i.e. Entry Immunization Form, Police Check, specialized skills etc..)

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<td>Number of Possible Positions:</td>
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<tr>
<td>Name of Project:</td>
<td>Do serious games for nutrition education improve nutrition-related outcomes? A systematic review.</td>
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<tr>
<td>Project location:</td>
<td>Ontario Tech University</td>
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**Project Description:**
The purpose of this project is to conduct a systematic review to determine if serious games that educate about nutrition lead to improving nutrition-related outcomes. Outcomes of interest are nutrition knowledge, attitudes, behaviours, intermediate health outcomes (glycemic control, blood pressure, blood lipid levels, body weight) or clinical outcomes (reduced hospitalization). Literature will be identified, and the overall quality assessed considering the Cochrane Handbook for Systematic Reviews of Interventions.

**Possible Roles for Student(s):**
The student will work as part of an interdisciplinary team of graduate students, postdoctoral fellows, and educators. The student will have dedicated desk space available to them to conduct their research at the Centre for Applied Nutrition and Cardiovascular Health Research (CANCHR), which is located at Ontario Tech’s St. Gregory’s location. As part of their participation in the CANCHR, the student will attend weekly lab meetings.

The CANCHR usually receives a high volume of student interest. Therefore, only students with a GPA of 3.7 or higher in the past 2 years will be considered at this time. A student will be successful with this research project if they:

- are detail-oriented.
- are able to think critically.
- are self-directed, take initiative and are resourceful and responsive.
- are professional and have excellent written and verbal communication skills.
- are able to work both independently and as part of a team.

**Special Requirements:** (i.e. Entry Immunization Form, Police Check, specialized skills etc..)

None.
Name of Research Tutor: **Adam Dubrowski**  
Number of Possible Positions: 1

**Name of Project:** Exploring the role of a “not-for-profit– university” partnership model for addressing Sustainable Development Goals though simulation augmented health professionals’ education.

**Project location:** Ontario Tech University

**Project Description:** Simulation in health care education is no longer a luxury, but a necessity. This is because of the documented impacts that simulation has on patient safety, health ethics, and health economics. However, despite the World Health Organization’s statement that every human deserves the same level of health care, simulation is not available in most remote regions and developing countries. This, by default, makes these health care systems less safe, less ethical, and more costly. Some of the reasons for current inability to infuse simulation in these contexts are related to expenses related to simulation equipment, complex technologies used, and fit with local educational practices.

We are proposing a solution, where a not-for-profit organization will partner with university’s innovation and research ecosystem (maxSIMhealth.com) to explore new ways to develop and distribute simulation (simulators and related pedagogy) in a way that is affordable and fits with local technologies and educational practices. Such partnership model may provide a scalable and sustainable solution where simulation can become available to health care educational systems in both remote regions and developing countries.

The first steps will be to work with stakeholders at Ontario Tech, remote parts of Canada, and developing countries to explore their perceptions of such not-for-profit – university partnership.

**Possible Roles for Student(s):** The student will do the following:
- Conduct a literature review to look for similar partnership models,
- Prepare a survey/interview guide to be conducted with the stakeholders,
- Prepare ethics proposal to conduct the surveys/interviews with the stakeholders,
- Write a paper to be published in Cureus Journal for Medical Science outlining the partnership

**Special Requirements:** (i.e. Entry Immunization Form, Police Check, specialized skills etc..)  
NA