Please complete and return via email only (gdip.hres@utoronto.ca) by September 4, 2018 (forms received after this date will not be posted).

### Supervisor Information

**Name:** Kelly O’Brien  
**Email:** kelly.obrien@utoronto.ca

Degree(s): PhD, BScPT  
SGS Department: IHPME, RSI

Academic Rank: Associate Professor  
Field of Research: Clinical Epidemiology

Research Institution Affiliation (if applicable): University of Toronto

Allocation of student contact time: 3 hours (number of hours per week YOU are available to the student for any concerns or to review progress)
**Project Information** (for posting on GDipHR website)

**Title:** Evaluating a Community-Based Exercise Intervention with Adults Living with HIV

**Description (max 500 words):**

In Canada, HIV is considered a chronic disease. As people are living longer they can experience a variety of health-related challenges associated with HIV and side effects of its treatment, aging and other health conditions. These challenges may be termed disability, which include physical, cognitive, mental and emotional symptoms and impairments, difficulties with day-to-day activities, challenges to social inclusion, and uncertainty about future health. Exercise is one intervention that can lessen the experience of disability and improve the health of people living with HIV (PHAs). Despite the benefits, few PHAs engage in regular physical activity. Community-based exercise (CBE) offers an ideal approach for enhancing health of PHAs within a self-management framework. However, the impact of CBE when translated into the ‘real-world’ HIV community setting, and its sustainability over the long term are unknown.

The purpose of this study is to evaluate a community-based exercise (CBE) intervention for adults living with HIV within the community. We will use a prospective longitudinal mixed methods study design to evaluate a six month CBE intervention with PHAs administered in partnership with the YMCA. Using the RE-AIM Framework, we will evaluate the Reach (extent to which PHAs engage in the CBE intervention); Evaluation (effect of the intervention on health and disability outcomes); Adoption and Implementation (strengths and challenges of implementing CBE from the perspective of fitness instructors, managers, and PHAs) and Maintenance (engagement in exercise after an 8 month follow-up period). We will use mixed methods (fitness assessments, questionnaires, interviews and focus groups) to evaluate the CBE intervention using the RE-AIM Framework. Participants will be followed over 22 months and took part in bimonthly fitness and questionnaire assessments across 3 phases to evaluate the impact of the CBE intervention with people living with HIV. In Phase One (8 months) Baseline Monitoring: participants were asked not to exercise at this time,
but attend bimonthly fitness and questionnaire assessments to obtain a baseline level of health. In Phase Two (6 months) Intervention Phase: participants took part in a 24-week (6 month) CBE intervention that includes aerobic, resistance, balance and flexibility exercise at the YMCA 3 times per week, with weekly supervision by a fitness instructor, and monthly educational sessions. In Phase Three (8 months) Follow-up Phase: participants were encouraged to continue to take part in unsupervised exercise 3 times per week at the YMCA. Participants kept an activity log and used a wireless physical activity monitor to document their adherence and physical activity throughout. Of 120 participants who enrolled in the study, sixty-five participants completed the intervention phase (May 2018). The follow-up phase is still underway. Results will lead to the first known HIV-specific CBE intervention evaluated for impact and translation with the HIV community. Results will guide future implementation of CBE to enhance the overall health of PHAs in Canada. Acknowledgements: This study is funded by the Canadian Institutes of Health Research (CIHR) HIV/AIDS Community-Based Research Program.

If human subjects are involved, have the appropriate Research Ethics Board approvals been obtained?

**YES – University of Toronto HIV/AIDS REB**

☐ NO  ☐ Application Submitted  ☐ N/A

Do you expect this work will be published within the 20 months?

**YES  ☐ NO  ☐ Uncertain**
**Student’s roles and responsibilities (please be as specific as possible):**

- Engage as a member in the Episodic Disability and Rehabilitation Research Lab at the University of Toronto (interacting with other staff, faculty and graduate trainees)
- Participate in Community-Based Exercise (CBE) Team Meetings
- Participate in Community-Based Exercise Study data entry, database management
- Conduct analysis (using secondary data – either quantitative or qualitative) and interpretation of findings;
- Literature reviews
- Write-up of manuscript (lead author on 1 manuscript), presentation of study findings at conferences (UofT, HIV conferences) in poster or oral format.
- Participating in future grant development.

*Please indicate who will serve as the student’s direct report for daily oversight (PI, PhD student, technician, etc...):*

*Kelly O’Brien, Associate Professor, Department of Physical Therapy; Institute of Health Policy, Management and Evaluation, Rehabilitation Sciences Institute.*