## Kathryn Lambert - University of Alberta

**Project:** *Developing an evidence based motor imagery training program for persons with Parkinson´s Disease through collaboration with patients and therapists*

**Biography**

Kathryn is a born and bred Edmontonian who obtained a BA in Psychology and MSc in Occupational Therapy, both from the University of Alberta. She first studied motor imagery as an undergraduate student when she investigated the neural mechanisms of imagery performance through electroencephalographic recordings.

A long standing interest in Parkinson's Disease led her to consider how motor imagery may be used in rehabilitation of movement disorders. She later piloted a small scale motor imagery training program for persons with Parkinson's Disease during her master's degree. Currently, Kathryn is a first year PhD student in the Faculty of Rehabilitation Medicine at the University of Alberta under the supervision of Drs. Ada Leung and Anthony Singhal. She is also a registered occupational therapist and continues to practice clinically at an acute care hospital in Edmonton. Her research aim is to explore patient and clinician perspectives on motor imagery training and incorporate these perspective into a larger scale, accessible motor imagery training program for persons with Parkinson's Disease.

**Project Summary**

Persons with Parkinson's Disease experience a worsening of motor symptoms and decline in function as their disease progresses. This deterioration has a significant negative impact on

quality of life. As Parkinson's Disease has no known cure, it is essential to explore treatments that may slow the functional declines accompanying its advancement.

Motor imagery refers to the imagining of one's body moving in the absence of actually performing said movement. It is a low cost, low risk tool that persons are able to complete in their own homes without a therapist present. Although promising findings exist for patients recovering from stroke, comparatively few studies have investigated motor imagery in Parkinson's Disease and none report incorporating patient or therapist views into intervention development.

The proposed project will develop a motor imagery training program that builds upon a motor imagery training program previously developed by Ms. Lambert for her master's thesis. Both persons with Parkinson's Disease and occupational and physical therapists trained in neurodegenerative disorders will be recruited to participate in semi structured interviews. These interviews will explore their perspectives on rehabilitation, motor imagery, and at home therapy programs.

Thematic analysis will be used to examine patient and therapist identified priorities, strategies, and potential barriers regarding imagery training. The information collected from these interviews will then inform the development of a user friendly, patient oriented motor imagery training program. Once established, this program will be run in a large, randomized control trial through a local rehabilitation hospital to examine intervention effectiveness.