

# Scientific/Educational Workshop

# Workshop title

Impact of an audio-visual multimedia tool on older adults' motivation to engage in physical activity

# Workshop organizer

Tim Pauley (West Park Healthcare Centre)

## **Speakers**

Tim Pauley, Manager, Research & Evaluation, West Park Healthcare Centre Jon Ingar Kjenes, CEO, Motitech Dan McEwen (Motitech Canada)

# Workshop goals

This workshop will discuss the barriers and facilitators of implementing an audio-visual multimedia exercise tool into both Long Term Care settings and day treatment centres in Ontario. The workshop will also highlight the physical and cognitive benefits of utilizing this tool among elderly patients. Lastly, the workshop will provide a hands-on opportunity for members to utilize this innovative technology leveraging interactive participation from the audience.

#### **Abstract**

There is increasing interest in physical activity programs that prevent falls and promote functional independence, cognitive fitness, and quality of life among older adults utilizing long-term and community care. Aging is associated with reduced motivation to engage in physical activities, a decline in motor skills, and mobility impairments, resulting in a higher risk of falls. This workshop will discuss an ongoing research study evaluating residents' motivation to engage in a cycling activity when using an audio-visual multimedia system (MOTiview) that simulates cycling trips across various destinations worldwide. This audio-visual tool uses selfselected videos, music, and sound displayed on a TV screen to simulate a cycle trip through various locations around the world in an effort to promote reminiscence and socialization. The workshop will explore preliminary results from the multi-site study, which is being conducted in two contexts across Ontario. A randomized control trial is being conducted with two geriatric rehabilitation day treatment hospitals (DTC) (Bruyère Continuing Care. Ottawa, Ontario and Baycrest Health Sciences, Toronto, Ontario). Additionally, a multi-site, cross-over trial is being conducted with three long term care (LTC) centres (Saint Louis Residence, Ottawa, Ontario; Apotex Centre for Long-Term Care, Baycrest Health Sciences, Toronto, Ontario; and West Park Healthcare Long-Term Care, Toronto, Ontario). In each study design, participants cycle with and without the audio-visual tool to determine the impacts of a novel activity and/or multimedia-enhanced experience on residents' motivation to exercise. The impacts are being evaluated qualitatively (via interviews with residents, carers, and staff) and quantitatively (via cycling duration and distance). This workshop will also include a hands-on demonstration of the MOTiview system. Audience members will have an opportunity to use the MOTiview system and will be provided an in-depth description of how the technology has been researched and designed since its inception in 2012.