

# Special CRE-MSD/AUTO21 Research Day: Measuring Neuromuscular Fatigue at Work

In Conjunction with: 2014 Ontario Biomechanics Conference

Friday March 14<sup>th</sup> 2014 10:30 am -3:30pm

Kempfenfelt Bay Conference Centre

Neuromuscular fatigue at the workplace resulting from prolonged activity has been described as a multidimensional construct, affecting the overall state of the whole organism, which is generally multi-causal with biomechanical, psychological, socioeconomic, and environmental factors. Acutely, neuromuscular fatigue increases discomfort, impairs motor control and performance, and may affect productivity and quality of services or products. Long-term, neuromuscular fatigue is hypothesized to be a precursor to MSDs – work-related musculoskeletal disorders- and may lead to chronic fatigue syndrome and myalgia.

Neuromuscular fatigue may be a relevant biomarker for cumulative exposure to repetitive and/or sustained work, which can be documented by a range of physiological and electrophysiological measurements. Consequently, fatigue may be a useful risk indicator and a design and evaluation tool. However, since fatigue manifests in many forms, a single test to measure a single function might not be a feasible approach.

## Goals of the Day

- Become familiar with multiple definitions and manifestations of neuromuscular fatigue and its measurement
- Understand specific issues in the measurement of neuromuscular fatigue in the workplace
- Apply the knowledge to your own research area/project

## Agenda

9:30 -10:30	Light Breakfast
10:30-10:45	Introduction and Goals for the Day
10:45-12:00	Review of the Findings of the December 2012 Toronto Fatigue Workshop <sup>1</sup>
12:00-1:00	Lunch (and Check-in)
1:00-1:30	Workplace Issues in Measurement
1:30- 2:30	Development of a Battery of Fatigue Measures – Interactive
2:30- 3:15	Application of the Day's Findings to Your Own Research Area
3:15–3:30	Summary and Closing
3:30-	Check-in

<sup>1</sup>Supporting materials to be distributed prior to the meeting



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