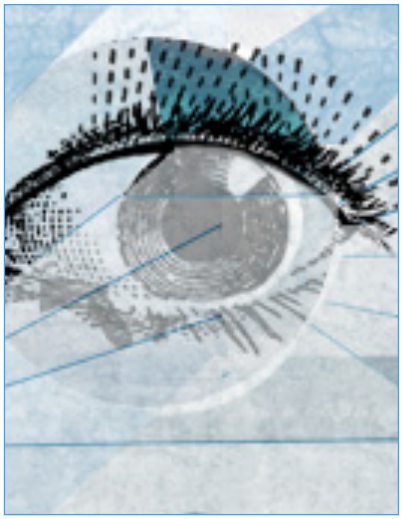
CENTRE FOR SENSORY STUDIES



TALKING SENSE SEMINAR

Dynamic Perception in Human Vision

Aaron Johnson

Friday 23 November 2018
13:00-15:00, Hall Building, room H-1120

A light lunch will be served

Visual perception is often seen as being something that can be measures using tests such as an eye chart. Recently however, researchers have begun to demonstrate that how we sense our visual world is dynamic - changing due to our environment and task demands. In this talk, I will overview some of the research work from the Concordia Vision Labs that attempts to quantify this dynamic change in vision using new testing paradigms based on stimuli which change as a function of the participant's eye position (i.e., gaze-contingent stimuli). I will explain the advantage of this technique over other more traditional measures of vision, and will show some examples of it being implemented in a driving simulator, to demonstrate how performance changes as a function of task demand (e.g., easy vs hard driving conditions) and age (i.e., young adults vs older adults).

Aaron Johnson is an associate professor in the Department of Psychology, and principle investigator in the Concordia Vision Lab since 2006, and is a member of the Centre for Sensory Studies. He is also a researcher at the CRIR/Centre de Réadaptation MAB-Mackay du CIUSSS du Centre-Ouest-de-l'Île-de-Montréal, and the Assistant-Director of Visual Impairment and Rehabilitation Axis of the Réseau de Recherche en Santé de la Vision.
His programme of research investigates human functional vision and visual function in daily life, in health and in age-related decline in vision. His research is funded by multi-year grants from national (NSERC, SSHRC, CIHR), provincial (FRQS, FRQSC), international (Office of Naval Research) funding agencies.

http://centreforsensorystudies.org/