



2019 Conference Meeting

Cardiac rehabilitation throughout the lifespan: from paediatrics to geriatrics

Scientific cafe

Date & Time: Friday, October 25 - 6-8PM

Venue: Concordia University - Engineering and Visual Arts building (EV-1.615 Amphitheatre 1515 Ste.-Catherine West, Montreal, QC H3H 2L5)

Topic: Exercise prescription for cardiovascular health: how close (or how far) are we from getting it right?

Speakers: Juan Manuel Murias (University of Calgary) and Daniel Keir (University of Toronto)

Moderator: Claudine Gauthier (Concordia University)

Brief explanation of the topic

Exercise training interventions are known to produce a multitude of positive effects within the cardiovascular system. Even though this is a well-accepted position, some experimental data have indicated that there might exist responders and no responders to exercise. Against the idea of no responders to exercise, some evidence indicates that participants who engage in sufficiently long or intense exercise always show positive cardiovascular adaptations.

Exercise intensity is a critical component in the prescription of aerobic training. However, the optimal exercise intensity prescription needed to produce positive cardiovascular adaptations remains elusive. Thus, this scientific café aims to discuss different approaches by which appropriate intensity of exercise can be prescribed in order to obtain the desired benefits from an exercises training program.

Speakers' bio/research interests

Juan Murias is an Associate Professor in the Faculty of Kinesiology, at the University of Calgary. Juan's research has to main focuses: 1) Identifying the dose-response relationship of exercise that elicits optimal cardiovascular adaptations to improve cardiovascular function in older individuals, in order to reduce the likelihood of becoming dependent in this population; 2) Establishing exercise intensity boundaries for appropriate exercise prescription to improve cardiovascular fitness for health and performance. Juan leads the Exercise and Aging laboratory, where he is currently the main supervisor of 5 PhD, 3 MSc, and 3 undergraduate students, as well as 1 Postdoctoral Fellow. The lab examines the effects of acute and chronic exercise on the oxygen transport system, with focus on the peripheral re-distribution of blood flow to support a given metabolic demand.

Daniel Keir received his PhD in integrative physiology of exercise from the University of Western Ontario. His research expertise includes measurement, analyses, and interpretation of breath-by-breath pulmonary gas exchange, end-tidal gas pressures and ventilation. His current research applies these techniques to control the partial pressures of blood and tissue O₂ and CO₂, manipulate input to the central and peripheral chemoreceptor reflexes, and investigate their impact on sympathetic, circulatory and ventilatory control in healthy humans and individuals with reduced heart function. He also has a longstanding interest in quantification of aerobic exercise intensity and its application for individualized exercise prescription.

A reception will follow