



Epidemiology, Biostatistics & Occupational Health
EPIDEMIOLOGY SEMINAR SERIES
Summer 2014

****THE DEPARTMENT OF EPIDEMIOLOGY, BIostatISTICS AND OCCUPATIONAL HEALTH, - SEMINAR SERIES IS A SELF-APPROVED GROUP LEARNING ACTIVITY (SECTION 1) AS DEFINED BY THE MAINTENANCE OF CERTIFICATION PROGRAM OF THE ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF CANADA****

Dr. George Thanassoulis

**Director, Preventive and Genomic Cardiology, FRQ-S Clinician-Scientist/Chercheur-Boursier
Clinicien, Assistant Professor of Medicine, McGill University**

**When Nature is the Trialist – Insights into Cardiovascular Disease
Prevention**

**Monday, 2 June 2014
4:00 pm - 5:00 pm - Purvis Hall,
1020 Pine Ave. West, Room 25**

ALL ARE WELCOME

SYNOPSIS:

Provide an overview of how genomics and mendelian randomization can be used to identify drug targets to prevent cardiovascular disease, using aortic valve disease as an example, and then discuss the design of proof-of-concept randomized trials that can provide biological confirmation of drug-drug target combinations.

OBJECTIVES:

- 1.** To describe how genomics and Mendelian Randomization can provide evidence in support of preventive interventions and therapeutic targets
- 2.** To review the role of lipoprotein(a) and other lipoproteins in the development of valve disease
- 3.** To review how small proof-of-principle randomized trials using biological outcomes can support the development of novel therapeutic targets

BIO:

Dr. Thanassoulis is the Director of Preventive and Genomic Cardiology at the MUHC and an Assistant Professor of Medicine at McGill University. He completed his MD from the University of Toronto, his medical and cardiology training both at the University of Toronto and McGill University and his MSc

in Epidemiology and Biostatistics at McGill University. He completed a clinical fellowship in echocardiography at the Jewish General Hospital and a post-doctoral fellowship in Genomic and Cardiovascular Epidemiology at the National Institute of Health's Framingham Heart Study, where he remains affiliated as a member of the NHLBI's Cardiovascular Genomic Epidemiology Research Group. His major clinical and research interest is in cardiovascular prevention with the goal of using genomic and molecular epidemiology to better inform preventive strategies for the general population, as well as identifying personalized preventive strategies to maintain cardiovascular health in high risk groups. Most recently, he led with colleagues from Harvard, Johns Hopkins and the University of Washington, the first genome wide association study for aortic valve disease which identified an unusual form of cholesterol known as lipoprotein(a) as one of the first causal factors for the development of aortic valve disease. He is currently the principal investigator of a CIHR-funded randomized trial to translate this discovery to clinical practice. The Early Aortic Valve Lipoprotein(a) Lowering (EAVaLL) trial will test whether pharmacological Lp(a) lowering in individuals genetically predisposed to high Lp(a) can reduce the progression of aortic valve disease. Dr. Thanassoulis has a methodological interest in Mendelian randomization and in randomized trials using genomics. He is currently an Associate Editor for the journal *Trials*.