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Project Title

Genetic determinants of cardiometabolic disease and its risk factors

Project Summary

Coronary heart disease often occurs along with a host of other diseases that often cluster together, collectively called cardiometabolic disease. One of the major risk factors for cardiometabolic disease is the genes that we inherit from our parents, and we will seek to understand the genetic determinants of cardiometabolic diseases, and their consequences. To do so, we will use a host of methods in the field of genetic epidemiology that seek to identify genes that influence these outcomes, but also test the causal role of risk factors for cardiometabolic disease. This is not a hypothesis-driven study, but rather, we will use the large genomic and other datasets available in CLSA to allow these data to improve our understanding of cardiometabolic disease and risk factors for its occurrence. This knowledge could help us to decrease the risk of one of the most common causes of morbidity and mortality in Canada.

Keywords

genome-wide association studies, GWAS, cardiometabolic disease, Mendelian randomization, polygenic risk