

2018/2019 Grant-In-Aid Grantees

Adeli, Khosrow (Hospital for Sick Children)

Neuroendocrine mechanisms of hepatic steatosis and VLDL overproduction in insulin resistance

Ainslie, Philip (University of British Columbia)

Cerebral blood flow regulation by nitric oxide in health And aging

Albert, Paul (Ottawa Hospital Research Institute)

Enhancing behavioral and cognitive recovery from stroke

Allen, Bruce (Institut de Cardiologie de Montréal)

MAP kinase-activated protein kinases (MKs) mediate distinct detrimental effects in heart

Auger, Nathalie* (Centre hospitalier de l'université de Montréal)

Women at the intersection of pregnancy and cardiovascular disease: the WRISQ cohort

**Improving Heart & Brain Health for Women Award 2018 recipient*

Bendeck, Michelle (University of Toronto)

Co-PI: Santerre, Paul

N-cadherin and strategies to inhibit smooth muscle cell migration

Brown, Craig (University of Victoria)

Chemogenetic modulation of dis-inhibitory cortical circuits to improve stroke recovery

Bub, Gil (McGill University)

Neurally mediated arrhythmogenesis

Burns, Peter (Sunnybrook Health Sciences Centre)

Ultrasound poration for gene delivery in cardiovascular therapy

Chauhan, Vijay (University Health Network)

Electrogram-based evaluation of atrial myopathy in patients undergoing atrial fibrillation catheter ablation

Chelikani, Prasanth (University of Calgary)

Prebiotic fiber: mechanisms of protection against obesity, stroke and hypertension

Chen, Hsiao-Huei (Ottawa Hospital Research Institute)

Mechanisms to improve stroke recovery

Choy, Jonathan (Simon Fraser University)

Immune and vascular effects of IL-6 in transplant arteriosclerosis

Clavel, Marie-Annick (Institut de cardiologie de Québec)

Sex-dependent pathophysiological mechanisms in aortic valve stenosis: implication of sex hormones and the renin-angiotensin system

Claydon, Victoria (Simon Fraser University)
Mechanisms and management of pediatric syncope

Connolly, Stuart (McMaster University)
Role of silent atrial fibrillation in hospital readmission for heart failure

Conway, Edward (University of British Columbia)
Modulation of vascular function and thrombus formation by CD248

Cregan, Sean (Robarts Research Institute)
Targeting the integrated stress response factor ATF4 for neuroprotection

Cummins, Carolyn (University of Toronto)
The LXR/EPC secretome as a new source of anti-atherogenic proteins

Czubryt, Michael (St. Boniface General Hospital Research Centre)
Role of scleraxis in perivascular fibrosis

Dancause, Numa (Université de Montréal)
A primate-to-human translational platform to optimize repetitive magnetic stimulation protocols after stroke

Dasgupta, Kaberi* (McGill University Health Center Research Institute)
Childhood, youth, and parental outcomes after gestational diabetes mellitus and gestational hypertension - within and across families
**Improving Heart & Brain Health for Women Award 2018 recipient*

Dawson, John (University of Guelph)
Hypertrophic cardiomyopathy: how cardiac actin mutations change contractility

Dowlatshahi, Dar (Ottawa Hospital Research Institute)
Co-PI: Rochon, Elizabeth
RecoverNow: early tablet-based speech therapy for post stroke aphasia

Dumaine, Robert (Université de Sherbrooke)
Role of sodium channels in epilepsy related arrhythmias and sudden death

ElAli, Ayman (CHUL Research Center)
Neurovascular restoration in stroke: role of dickkopf-related protein-1 (DKK1)

Faiz, Maryam* (University of Toronto)
Co-PI: Morshead, Cindi

Reprogramming astrocytes: a tool for stroke recovery
**Improving Heart & Brain Health for Women Award 2018 recipient*

Field, Thalia (University of British Columbia)
Co-PI: Hill, Michael
SECRET - Study of rivaroxaban for CeREbral venous Thrombosis

Foster, Glen (University of British Columbia)
Intermittent hypoxia and cardiovascular disease

Frayne, Richard (Foothills Hospital)
Micro MR angiography (mMRA) — a tale of two approaches

Gagnon, Daniel (Montreal Heart Institute)
Sauna therapy to improve vascular function in middle-aged to older adults with and without heart disease

Ghugre, Nilesh (Sunnybrook Health Sciences Centre)
Iron-mediated cardioprotection in ischemia-reperfusion injury

Giacca, Adria (University of Toronto)
Vascular actions of insulin: 'Selective insulin resistance' revisited

Girouard, Helene* (Université de Montréal)
Neurovascular coupling in hypertension
**Improving Heart & Brain Health for Women Award 2018 recipient*

Gordon, Joseph (University of Manitoba)
Co-PI: West, Adrian
Molecular regulation of cell death by myocardin following myocardial infarction

Gross, Peter (McMaster University)
The ideal ASA dose in dual antiplatelet therapy

Ha, Andrew (University Health Network)
Co-PI: Lee, Douglas
Validation and comparative evaluation of the Bimodal Survival and Implantable defibrillator Shock (BaSIS) risk score

Hamilton, Jill (Hospital for Sick Children)
Impact of gestational diabetes on the epigenome, adiposity, and cardiometabolic risk in early childhood

Healey, Jeff (McMaster University)
Atrial Fibrillation Occurring Transiently with Stress (AFOTS) quantifying the risks of recurrent AF

Hegele, Robert (University of Western Ontario)
Clinical translation of genomic determinants of cardiometabolic risk

Honjo, Osami (Hospital for Sick Children)
Development of mechanical circulatory support system for failing single ventricle fontan physiology

Jung, Mary (University of British Columbia)
The power of choice on exercise adherence and cardiovascular health in prediabetes

Kanelis, Voula (University of Toronto at Mississauga)
Understanding molecular defects and drug correction of KATP channel mutations that cause cardiovascular disease

Kim, Kyoung-Han (University of Ottawa Heart Institute)
*Transcriptional and non-transcriptional functions of *Irx5* in heart disease*

Kubes, Paul (University of Calgary)
The pericardium as a source of repair macrophage

Lavoie, Kim (Hôpital du Sacré-Coeur de Montréal)
Co-PI: Bacon, Simon
Cardiovascular, immune and thrombotic responses to smoking e-cigarettes vs combustible cigarettes under conditions of physical and mental stress

Lettre, Guillaume (Montreal Heart Institute)
The genetics of endothelial functions: impact on coronary artery disease risk

Lillicrap, David (Queen's University)
The role of von Willebrand factor in deep vein thrombosis

Luo, Honglin (University of British Columbia)
Enteroviral control of autophagy: relevance to heart failure

Ma, David (University of Guelph)
Co-PI: Haines, Jess
Impact of sugar intake and non-nutritive sweeteners on cardiometabolic risk factors, and modification by genetic factors, among preschool children in the Guelph family health study

Mak, Susanna* (Samuel Lunenfeld Research Institute of Mount Sinai Hospital)
Co-PI: Granton, John
The role of exercise hemodynamic testing to improve pulmonary hypertension diagnosis in older adults

**Improving Heart & Brain Health for Women Award 2018 recipient*

Mansfield, Avril (Toronto Rehabilitation Institute)

Effect of perturbation-based balance training on physical fitness post-stroke

Marelli, Ariane (McGill University Health Center Research Institute)

Low dose ionizing radiation procedures and cancer in Canada's children with congenital heart disease

Marleau, Sylvie (Université de Montréal)

Co-PI: Ong, Huy

Regulation of macrophage immunometabolism in atherosclerosis by CD36 azapeptide ligands

Mequanint, Kibret (University of Western Ontario)

Roles of elastin and notch in VSMC differentiation for clinically relevant engineered human vascular tissues

Nattel, Stanley (Montreal Heart Institute)

Molecular control of cardiac rhythm in atrial cardiomyopathy

Oh, Paul (Toronto Rehabilitation Institute)

High intensity interval training for people with stroke deficits: optimizing the exercise intervention a randomized clinical study

Oudit, Gavin (University of Alberta)

Targeting ACE2 as a novel therapy for diabetic cardiovascular complications

Pare, Guillaume (McMaster University)

An integrated genomic-biomarker approach for discovery of novel causal mediators of cardio-metabolic diseases

Parker, Thomas (St. Michael's Hospital)

The functional role of the S100 family of EF-hand proteins and their receptors in sepsis-induced cardiovascular pathophysiology

Pasumarthi, Kishore (Dalhousie University)

Molecular and functional characterization of cardiac progenitor cells

Petrella, Robert (University of Western Ontario)

Exercise to improve the hearts and minds of Canadian older adults with hypertension: the heart & mind study

Pinthus, Jehonathan (St. Joseph's Hospital – Hamilton)

Co-PI: Duivenvoorden, Wilhelmina

Cardiovascular risk with androgen deprivation therapy (ADT) for prostate cancer: investigations into the role of follicle-stimulating hormone (FSH)

Proctor, Spencer (University of Alberta)

Efficacy of a novel idiotypic antibody against arterial glycosaminoglycans to inhibit cholesterol retention during atherosclerosis and insulin resistance

Quinn, T Alexander (Dalhousie University)

Role of the intracardiac nervous system in stress-induced arrhythmias with Popdc1 mutation

Radisic, Milica (University of Toronto)

Harnessing the body's inherent molecular defense to develop new antimicrobial and immunomodulatory polymers for cardiac and surgical applications

Robertson, George (Dalhousie University)

Gait preservation by conditional neuron-specific mitochondrial calcium uniporter deficiency in mouse models of hemorrhagic and ischemic stroke

Rose, Robert (University of Calgary)

The impacts of age and frailty on sinoatrial node and atrial structure, function and arrhythmogenesis

Seubert, John (University of Alberta)

Protecting cardiac mitochondria from ischemic injury through a novel eicosanoid Caveolin-1 pathway

Sharpe, Simon (Hospital for Sick Children)

Co-PI: Pomes, Regis

Structural effects of polymorphisms in tropoelastin - molecular basis for increased susceptibility to cardiovascular disease

So, Derek (University of Ottawa Heart Institute)

Co-PI: Goodman, Shaun

A randomized study of novel strategies for antiplatelet therapy in patients with prior myocardial infarction - the rapid tailor extend pilot study

Sorisky, Alexander (Ottawa Hospital Research Institute)

Thymic stromal lymphopoietin: a novel thyrotropin-regulated pro-inflammatory cytokine expressed by human adipocytes

Swartz, Richard (Sunnybrook Health Sciences Centre)

Adherence to risk reduction after stroke/TIA – the role of cognitive impairment and mood symptoms

Thanassoulis, George (McGill University Health Center Research Institute)

Co-PI: Engert, James

Genomics of aortic stenosis

Thompson, Roger (University of Calgary)

Role of asynchronous glutamate release in stroke induced dementia

Wijeysundera, Harindra (Sunnybrook Health Sciences Centre)

Identifying predictors of cumulative health care costs associated with trans-catheter aortic valve implantation in severe aortic stenosis: an inter-provincial evaluation

Woo, Minna (Toronto General Hospital Research Institute)

Dissecting the metabolic and inflammatory role of DJ-1 in atherogenesis

Yang, Guangdong (Laurentian University of Sudbury)

Co-PI: Wu, Lingyun

The regulatory roles of cystathionine gamma-lyase/H2S system in aortic aneurysms

Zariffa, Jose (University Health Network)

Monitoring functional hand use in stroke survivors using wearable technology