

2000/2001 Research Trainees

* Applicant who are funded via the fund/HSFC Partnership Challenge Fund.

- **Abu-Abed, Mona** (Banting & Best Department of Medical Research, University of Toronto)
Structural analysis of cytoplasmic domains of sarco(endo)plasmic reticulum Ca²⁺ -ATPase.
Supervisor: MacLennan, David H.
- **Adhihetty, Peter J.** (Kinesiology and Health Science, York University)
Expression and function of cytochrome oxidase subunit IV in contracting cardiac myocytes.
Supervisor: Hood, David A.
- * **Ahmed, Sara** (Epidemiology & Biostatistics, McGill University)
The development of a quality of life measure for stroke.
Supervisor: Mayo, Nancy E.
- **Akhavan, Armin** (Physiology, McGill University)
Identification and characterization of proteins interacting with the C-terminal tail of HERG.
Supervisor: Shrier, Alvin
- **Arikawa, Emi** (Pharmacology & Toxicology, University of British Columbia)
Role of endothelin-1 in the development of diabetic cardiovascular and renal complications.
Supervisor: McNeill, John H.
- **Barbot, Lionel** (Physiologie, Université de Montreal)
Etudes des tachykinines et de leurs récepteurs dans les mécanismes périphériques de régulation cardio-vasculaire.
Supervisor: Couture, Réjean
- **Borradaile, Nica M.** (Medicine and Biochemistry, University of Western Ontario)
Regulation of apolipoprotein B metabolism by citrus flavonoids.
Supervisor: Huff, Murray W.
- **Briand, Sandie I.** (Pharmacologie, Université de Sherbrooke)
Phosphorylation du récepteur AT4 des cellules endothéliales d'aorte de boeuf.
Supervisor: Guillemette, Gaetan
- **Brown, Kelly L.** (Microbiology & Immunology, University of British Columbia)
Molecular mechanisms that control CD44 binding to hyaluronan in monocytes.
Supervisor: Johnson, Pauline
- **Brown, Robert J.** (Lipoprotein & Atherosclerosis Research Group, University of Ottawa Heart Institute)
Functional analysis of the carboxyl terminus of human hepatic lipase.
Supervisor: Yao, Zemin
- **Buscemi, Ninetta** (Physiology, Queen's University)
Effect of PAK on cardiac muscle contractility and its molecular mechanism of action.
Supervisor: Van Eyk, Jennifer E.
- **Chan, Jason R.** (Laboratory Medicine and Pathobiology, University of Toronto)
Integrin affinity modulation during leukocyte recruitment.
Supervisor: Cybulsky, Myron
- **Chauhan, Vinita** (Laboratory of Immunology, University of Ottawa Heart Institute)
Binding of lipoproteins to the low density lipoprotein receptor.
Supervisor: Milne, Ross W.
- **Con, Andrea H.** (Educational Psychology, University of Calgary)
Psychosocial predictors of pain and functional impairment in patients recovering from coronary

artery bypass graft surgery.

Supervisor: Harpur, Lisa

- *** Coombes, Brian K.** (Pathology & Molecular Medicine, McMaster University)
Cellular and molecular mechanisms of chlamydia pneumoniae in atherosclerosis.
Supervisor: Mahony, James B.
- **Cooper, Conan B.** (Pharmacology & Therapeutics, University of Calgary)
Molecular determinants of G-protein binding to N-type Ca channels.
Supervisor: Zamponi, Gerald W.
- **Corbett, Elaine F.** (Biochemistry, University of Alberta)
Endoplasmic reticulum in the heart.
Supervisor: Michalak, Marek
- *** Cronin, Lisa** (Cardiology, McMaster University)
Development and validation of risk models for prognosis and patient management in unstable coronary artery disease.
Supervisor: Yusuf, Salim
- **Crowley, Christine** (Pharmacology & Therapeutics, University of British Columbia)
Novel extracellular calcium store in human blood vessels.
Supervisor: Van Breemen, Casey
- **Cunningham, Charles H.** (Medical Imaging, University of Toronto)
Multislice imaging of the coronary arteries with magnetic resonance.
Supervisor: Wood, Michael L.
- **Dai, Ken-Shwo** (Laboratory Medicine, University of Toronto)
Identification and characterization of zinc finger protein genes in human cardiovascular system.
Supervisor: Liew, C.C.
- **Davidoff, Allen W.** (Medicine, University of Calgary)
Excitation-contraction coupling in rats with failing hearts.
Supervisor: ter Keurs, Henk E.D.J.
- **Dempsey, Adam A.** (Laboratory Medicine, University of Toronto)
Identification and characterization of differentially expressed genes during murine cardiogenesis.
Supervisor: Liew, C.C.
- **Denis, Maxime** (Cardiovascular Genetics Laboratory, CRIM)
Molecular and cellular regulation of cholesterol efflux.
Supervisor: Genest, Jr., Jacques
- **Ding, Hong** (Pharmacology & Therapeutics, University of Calgary)
Role of nitric oxide/prostacyclin-independent mechanisms in endothelium-dependent vasorelaxation.
Supervisor: Triggle, Christopher R.
- **Drolet, Benoit** (Centre de biomédecine, Hôpital du Sacré-Coeur de Montreal)
Pharmacologie du syndrome du long QT acquis: évaluation électrophysiologique.
Supervisor: Turgeon, Jacques
- **D'Souza, Sandra** (Laboratory Medicine, Hospital for Sick Children)
Molecular mechanisms underlying protein trafficking of GABA-A receptors.
Supervisor: Wang, Yu Tian
- **Dunn, Jeremy** (Molecular Biology, University of Calgary)
Characterization of the sodium/calcium exchanger isoform function and localization.
Supervisor: Lytton, Jonathan

- **Fadel, Marc** (Medical Biophysics, University of Toronto)
The role of calreticulin in cardiac development.
Supervisor: Opas, Michal J.
- **Feeney, Christopher J.** (Pharmacy, University of Toronto)
Free radical-induced damage in cultured rat hippocampal astrocytes.
Supervisor: Pennefather, Peter
- * **Ferri, Catharine** (Physiology, Queen's University)
Transient outward potassium current mediates neuroprotection in PVN.
Supervisor: Ferguson, Alastair
- * **Fitzpatrick, Tania** (Anatomy & Cell Biology, Queen's University)
Effect of oxygen on human trophoblast proteolytic enzyme systems: relevance to preeclampsia.
Supervisor: Graham, Charles H.
- **Foltz, Warren D.** (Medical Biophysics, Sunnybrook Health Sciences Centre)
MR oximetry for ischemic heart disease.
Supervisor: Wright, Graham
- **Gillis, Todd** (Kinesiology, Simon Fraser University)
Molecular mechanism for temperature dependent calcium sensitivity in the cardiac contractile protein tropin C.
Supervisor: Tibbits, Glen
- **Girouard, Hélène** (Physiologie, Université de Montréal)
Role des radicaux libres dans l'hypertension artérielle.
Supervisor: de Champlain, Jacques
- **Granville, David** (Pathology, St. Paul's Hospital)
Endothelial and smooth muscle cell apoptosis and its role in transplant vascular disease.
Supervisor: McManus, Bruce M.
- * **Gwadry-Sridhar, Femida** (Clinical Epidemiology & Biostatistics, McMaster University)
Trial of education and concordance in heart dysfunction (TEACH).
Supervisor: Guyatt, Gordon H.
Co-supervisor: Arnold, Malcolm J.
- **Hao, Jianming** (Physiology, St. Boniface Hospital Research Centre)
TGF-beta signaling pathway during the development of cardiac fibrosis.
Supervisor: Dixon, Ian M.
- **Hurtado, Cecilia** (Physiology, St. Boniface Hospital Research Centre)
Role of Na⁺/Ca⁺⁺ exchange in ischemic-reperfusion injury to the heart.
Supervisor: Pierce, Grant N.
- **Janssen, Ian M.** (Physical & Health Education, Queen's University)
Independent effects of intramyocellular lipid and visceral fat on insulin resistance.
Supervisor: Ross, Robert M.
- * **Ju, William** (Laboratory Medicine, Hospital for Sick Children)
Neuroprotective roles of PI3-kinase in ischemic neuronal injury.
Supervisor: Wang, Yu Tian
- * **Kassiri, Zamaneh** (Medicine, University of Toronto)
Genetic composition of transient outward K⁺ current (I_{to}) and its role in development and progression of heart disease in murine model.
Supervisor: Backx, Peter H.

- **Kelemen, Linda** (Medicine, McMaster University)
Evaluation of diet-gene interactions on CHD outcome in genetically susceptible populations.
Supervisor: Yusuf, Salim
- **Khalife, Karim** (Physiology, University of Montreal)
Microanatomy and functional properties of the AV node.
Supervisor: Billette, Jacques
- * **Khan, Rajal Y.** (Medicine, University of Toronto)
Epigenetic regulation and allelic diversity in the endothelin converting enzyme-1 (ECE-1) gene.
Supervisor: Marsden, Philip A.
- * **Kotecha, Suhass A.** (Physiology, University of Toronto)
Metabotropic glutamate receptor modulation of NMDA receptors.
Supervisor: MacDonald, John F.
- **Larrivée, Bruno** (Pathology and Laboratory Medicine, St. Paul's Hospital)
Role of VEGF and its receptors in endothelial cells differentiation and growth.
Supervisor: Karsan, Aly
- **Lau, Connie H.Y.** (Cardiovascular Research Division, Hospital for Sick Children)
Identification and characterization of RNA-binding proteins regulating elastin mRNA stability.
Supervisor: Keeley, Fred W.
- * **Lear, Scott A.** (Pathology & Laboratory Medicine, University of British Columbia)
Extensive lifestyle management following cardiac rehabilitation.
Supervisor: Frohlich, Jiri J.
- **Leary, Scot C.** (Biology, Queen's University)
Redox-sensitive signaling pathway is responsible for cytochrome-oxidase loss during bioenergetic stress.
Supervisor: Moyes, Christopher D.
- **Lemieux, Isabelle** (Centre de recherche sur les maladies lipidique, Centre Hospitalier de l'Université Laval)
Taille et densité des lipoprotéines de faible densité (LDL) : complications métaboliques et risque de cardiopathie ischémique.
Supervisor: Després, Jean-Pierre
- **Lessard, Andrée** (Physiologie, Université de Montréal)
Rôle des tachykinines et de leurs récepteurs dans les mécanismes centraux de régulation cardiovasculaire.
Supervisor: Couture, Réjean
- **Li, Bo** (Psychiatry, University of British Columbia)
Effects of Calbindin on NMDA receptors: implication for stroke.
Supervisor: Raymond, Lynn A.
- **Losito, Vito A.** (Physiology, University of Toronto)
Metabolic regulation of L-type calcium channels: molecular, structural and functional characterization of allosteric regulation by ATP.
Supervisor: Backx, Peter H.
- **Maj, Mary C.** (Biochemistry, McMaster University)
Enzymatic mechanism and structure-activity studies on mammalian adenosine kinase.
Supervisor: Gupta, Radhey S.
- * **Manske, Stephen R.** (Adult Education, University of Toronto)
Modelling knowledge utilization among health promotion agencies: The case of the national smoking

prevention resource improving the odds.

Supervisor: Leithwood, Kenneth A.

- **Marxen, Michael** (Medical Biophysics, Sunnybrook Health Science Centre)
An analysis of perfusion by means of MRI.
Supervisor: Henkelman, Mark
- * **Mawji, Imtiaz A.** (Laboratory Medicine & Pathobiology, University of Toronto)
The post-transcriptional regulation of human preproendothelin-1.
Supervisor: Marsden, Philip A.
- **McDonald, Paul C.** (Pathology, St. Paul's Hospital)
Proteoglycan regulation in vascular smooth muscle cells: role in transplant vascular disease.
Supervisor: McManus, Bruce M.
- **McDonough, Jason** (Physiology, Queen's University)
Molecular mechanisms of myocardial ischemia/reperfusion injury.
Supervisor: Van Eyk, Jennifer E.
- **McManus, Daniel C.** (Pathology, University of Ottawa Heart Institute)
Structure: function relationships of apoA-I in vivo studied by recombinant adenovirus gene transfer.
Supervisor: Marcel, Yves L.
- **Melnyk, Peter** (Pharmacology, McGill University)
The spatial distribution of cardiac ion channels: a basis for functional specialization.
Supervisor: Nattel, Stanley
- **Mielke, John G.** (Laboratory Medicine & Pathobiology, University of Toronto)
Mechanisms mediating depression of AMPA receptor mediated neuronal excitation by insulin.
Supervisor: Wang, Yu Tian
- **Millette, Esther** (Pharmacie, Université de Montréal)
Mécanismes intracellulaires impliqués dans les altérations de la réactivité coronaire causées par l'hypertension, étudiés sur le modèle de cœur isolé, complétés par des techniques biomoléculaires.
Supervisor: Lamontagne, Daniel
- **Mohan, Ravi M.** (University of Laboratory Physiology, University of Oxford)
Nitric oxide and heart rate control: effect of exercise training and ischemia.
Supervisor: Paterson, David
- **Moore, Heidi M.** (Pharmacology, Dalhousie University)
A voltage-sensitive release mechanism for cardiac contraction: regulation by protein kinases.
Supervisor: Ferrier, Gregory R.
- **Moses, Audric** (Medicine, University of Alberta)
Structural analysis of the active apolipoprotein complex in tyrosyl radical-oxidized HDL.
Supervisor: Francis, Gordon A.
- * **Mungrue, Imran** (Laboratory Medicine and Pathobiology, Toronto General Hospital)
Regulated over-expression of inducible nitric oxide synthase (iNOS) in the cardiovascular system of transgenic mice.
Supervisor: Husain, Mansoor
- * **Newton, Derek C.** (Medicine, University of Toronto)
The relevance of human neuronal nitric oxide synthase to cerebrovascular and cardiovascular health and disease.
Supervisor: Marsden, Philip A.
- **Noga, Anna** (Biochemistry, University of Alberta)
The role of phosphatidylethanolamine N-methyltransferase derived phosphatidylcholine in very low

density lipoprotein secretion.
Supervisor: Vance, Dennis E.

- **Noria, Sabrena F.** (Vascular Research Laboratory, Toronto Hospital Research Institute)
Shear stress-related tyrosine phosphorylation in endothelial cells.
Supervisor: Gotlieb, Avrum I.
- **O'Leary, Deborah** (Kinesiology, University of Waterloo)
Arterial baroreceptor control of heart rate and vascular responses in elderly women.
Supervisor: Hughson, Richard L.
- **Pelletier, Stephane** (Pharmacology, University of Montreal)
Role of JAK/STAT pathway in the hypertrophic/chemotactic action of Angiotensin II on vascular smooth muscle cells.
Supervisor: Meloche, Sylvain
- *** Poepping, Tamie L.** (Medical Biophysics, John P. Robarts Research Institute)
Investigation of flow in the stenosed carotid bifurcation.
Supervisor: Holdsworth, David W.
- **Prescott, Gary** (Molecular Biology, CRIM)
Characterization and function of renin uptake in the heart and other tissues.
Supervisor: Reudelhuber, Timothy L.
- *** Ramsamy, Tanya A.** (Pathology & Laboratory Medicine, University of Ottawa Heart Institute)
Hepatic lipase, proteoglycans and lipoprotein metabolism.
Supervisor: Sparks, Daniel L.
- **Rashid, Shirya** (Medicine, Toronto General Hospital)
Investigation of the mechanism of HDL-cholesterol lowering in hypertriglyceridemic states.
Supervisor: Lewis, Gary F.
- **Rezvani, Mojgan** (Medical Science, University of Toronto)
Identification and characterization of cardiovascular genes involved in cardiovascular development and disease.
Supervisor: Liew, C.C.
- *** Rhéaume, Caroline** (Médecine, Université Laval)
La relation entre la sensibilité à l'insuline et le débit sanguin des muscles squelettiques chez des sujets normotendus et hypertendus.
Supervisor: Cléroux, Jean
- *** Robb, G. Brett** (Medicine, University of Toronto)
Post-transcriptional regulation of human endothelial nitric oxide synthase (eNOS) gene expression: contribution of the 3'-untranslated region.
Supervisor: Marsden, Philip A.
- **Rocnik, Edward** (Medicine, John P. Robarts Research Institute)
Studies of a novel collagen-binding molecular chaperone in vascular smooth muscle cells.
Supervisor: Pickering, J. Geoffrey
- **Segall, Laura** (Biochemistry, Montreal General Hospital Research Institute)
Studies of the isoform-specific properties of the Na, K-ATPase, with emphasis on the alpha2 and alpha3 catalytic subunits.
Supervisor: Blostein, Rhoda
- *** St. Pierre, Julie** (Physiology, Laval University)
Association between genetic variants in protein kinase C (PKC) BI and BII genes and the development of type II diabetes, cardiovascular disease and insulin resistance.
Supervisor: Després, Jean-Pierre

- * **Stark, Kenneth D.** (Human Biology & Nutritional Science, University of Guelph)
The effects of omega-3 fatty acids and soy phytoestrogens on cardiovascular disease risk factors in post-menopausal women.
Supervisor: Holub, Bruce J.
- **Sterling, Deborah A.** (Physiology, University of Alberta)
Role and regulation of cardiac chloride/ bicarbonate exchange proteins.
Supervisor: Casey, Joseph
- **Sussman, Marshall** (Sunnybrook & Women's Health Science Centre)
Accurate magnetic resonance (MR) coronary angiography through improved motion compensation techniques.
Supervisor: Wright, Graham
- **Szado, Tania** (Pharmacology & Therapeutics, University of British Columbia)
Calcium signalling in freshly isolated smooth muscle cells from human saphenous vein and internal mammary artery.
Supervisor: Van Breemen, Casey
- **Taillefer, Marie-Christine** (Psychologie, Université du Québec à Montréal)
Qualité de vie périopératoire des valvulaires selon leur sexe et leur âge.
Supervisor: Dupuis, Gilles
- **Tang, Guanghua** (Physiology, University of Saskatchewan)
Voltage-dependent K⁺ channels in vascular smooth muscle cells in hypertension.
Supervisor: Wang, Rui
- * **Teichert, Anouk-Martine** (Medicine, University of Toronto)
In vivo regulation of the eNOS gene: a role for transcriptional and post transcriptional modification.
Supervisor: Marsden, Philip A.
- **Temsah, Rana** (Physiology, University of Montreal)
Alterations in cardiac sarcoplasmic reticulum function and gene expression in ischemia-reperfusion injury.
Supervisor: Dhalla, Naranjan S.
- **Thifault, Stéphane** (Neurologie, Hôtel-Dieu de Montréal)
Evaluation pharmacogénétique des déficits comportementaux des souris hypertendues et hypotendues.
Supervisor: Lalonde, Robert
- **Ton, Christopher** (Laboratory Medicine and Pathobiology, University of Toronto)
Development of an integrated cDNA microarray for the zebra fish.
Supervisor: Liew, C.C.
- **Tremblay, Sandra** (Biomedical Sciences, University of Montreal)
Cloning and characterization of the promoter of a novel gene: HCaRG.
Supervisor: Tremblay, Johanne
- **Turgeon, Benjamin** (Centre de recherche, Centre hospitalier de l'Université de Montréal)
Rôle de l'inhibiteur p27Kip1 dans la réponse phénotypique des CMLV.
Supervisor: Meloche, Sylvain
- * **Vogt, Janet A.** (Nutritional Sciences, University of Toronto)
Influence of colonic acetate and propionate on blood cholesterol levels.
Supervisor: Wolever, Thomas M.S.

- * **Washburn, David L.** (Physiology, Queen's University)
Ion sensing by the sudformical organ.
Supervisor: Ferguson, Alastair V.
- * **Zettler, Marjorie E.** (Physiology, St. Boniface Hospital Research Centre)
The role of cell proteins in atherosclerosis.
Supervisor: Pierce, Grant N.