

## 2000/2001 Research Fellows

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

- \* **Anderson, Christopher M.** (Neurology, University of California, San Francisco)  
*Mechanisms and regulation of CNS glutamate transport and neurotoxicity.*  
Supervisor: Swanson, Raymond A.
- \* **Benisty, Jacques** (Surgery & Cell Biology, Children's Hospital)  
*Angiogenic growth factors in pulmonary vascular disease.*  
Supervisor: Folkman, Judah
- \* **Booth, James W.** (Programme in Cell Biology, Hospital for Sick Children)  
*Role of Tic and Arf6 in leukocyte activation: role in ischemia-reperfusion.*  
Supervisor: Grinstein, Sergio
- \* **Carpentier, André** (Medicine, The Toronto Hospital-General Division)  
*Investigation of the mechanisms of VLDL-apolipoprotein B100 overproduction in insulin resistant states.*  
Supervisor: Lewis, Gary F.
- **Chopra, Gopal K.** (Neuroprotection Laboratory, Toronto Western Hospital)  
*Non-excitotoxic mechanisms of anoxic neuronal damage.*  
Supervisor: Tymianski, Michael
- **Cregan, Sean P.** (Neuroscience Research Institute, University of Ottawa)  
*The role of APAF1 in p53-induced neuronal cell death.*  
Supervisor: Slack, Ruth
- **Cunningham, Michael A.** (Biological Chemistry, University of Michigan)  
*Elucidation of the phospholipid binding site on human factor VIII.*  
Supervisor: Kaufman, Randal J.
- \* **Czubryt, Michael P.** (Molecular Biology, University of Texas Southwestern Medical Centre at Dallas)  
*Role of MEF2 in cardiac hypertrophy.*  
Supervisor: Olson, Eric N.
- \* **Datta, Partha** (Cardiology, St. Michael's Hospital)  
*The role of endothelins in a mouse model of aortic aneurysm formation.*  
Supervisor: Stewart, Duncan J.
- \* **Demaerschalk, Bart Maurice** (Clinical Neurology Sciences, University of Western Ontario)  
*The impact of an evidence-based stroke educational intervention on clinical outcomes.*  
Supervisor: Hachinski, Vladimir C.
- **Derakhchan Khadjou, Katayoun** (Medicine, Montreal Heart Institute)  
*Three-dimensional mapping of atrial fibrillation.*  
Supervisor: Nattel, Stanley
- **Deschenes, Isabelle** (Medicine, John Hopkins University)  
*Motions in the external pore of the sodium channel probed by paired cysteine mutagenesis and fluorescent labeling.*  
Supervisor: Tomaselli, Gordon F.
- \* **Devereaux, Philip J.** (Clinical Epidemiology & Biostatistics, McMaster University)  
*Evaluation of perioperative cardiac risk and modification.*  
Supervisor: Guyatt, Gordon H.

- \* **Ding, Hao** (Molecular & Cellular Biology, Samuel Lunefeld Research Institute)  
*Neoangiogenesis in cerebral ischemia.*  
Supervisor: Guha, Abhijit
- \* **Dumont, Aaron S.** (Neurosurgery, Foothills Hospital)  
*Metabolism and the ischemic brain: new perspectives.*  
Supervisor: Sutherland, Garnette R.
- **Duriez, Patrick J.** (Pathology & Laboratory Medicine, St. Paul's Hospital)  
*Role of Notch4 during endothelial apoptosis.*  
Supervisor: Karsan, Aly
- **Eikelboom, John W.** (Preventive Cardiology & Therapeutics, Hamilton General Hospital)  
*Direct thrombin inhibitor trialists' collaborative project.*  
Supervisor: Yusuf, Salim
- \* **Fedak, Paul W.** (Cardiac Surgery, University of Toronto)  
*Experimental cardiomyocyte transplantation to improve left ventricular function in chronic decompensated mitral regurgitation.*  
Supervisor: Weisel, Richard D.
- \* **Gladstone, David J.** (Medicine, Sunnybrook & Women's College Health Sciences Centre)  
*Amphetamine for stroke recovery: a clinical and fMRI study.*  
Supervisor: Black, Sandra E.
- **Golfman, Leonard S.** (Biochemistry, University of Alberta)  
*Transcriptional regulation of cytidylyltransferase during the cell cycle.*  
Supervisor: Vance, Dennis E.
- **Grand'Maison, Anne** (Medicine, McMaster University)  
*Pharmacokinetic profile of subcutaneous low-molecular-weight-heparin in overweight and underweight patients with acute venous thromboembolism.*  
Supervisor: Ginsberg, Jeffrey S.
- **Guo, Lei** (Biochemistry, University of Alberta)  
*Transcriptional control of cardiac expression of calreticulin.*  
Supervisor: Michalak, Marek
- **Han, Hong** (Medicine, Montreal Heart Institute)  
*Role of potassium channels in cardiomyocyte apoptosis.*  
Supervisor: Wang, Zhiguo
- **Hennan, James K.** (Pharmacology, University of Michigan)  
*Role of the complement system in mediating myocardial injury and pharmacological cardioprotection.*  
Supervisor: Lucchesi, Benedict R.
- **Hilairt, Sandrine** (Biochimie, Université de Montréal)  
*Mécanismes de régulation du récepteur du CGRP et de l'adrenomedulline (CRLR) par les protéines RAMPs.*  
Supervisor: Bouvier, Michel
- \* **Hill, Michael D.** (Neuroscience, University of Calgary)  
*Validation of the Alberta Stroke Program Early CT Score (ASPECTS) in patients treated with rtPA for acute stroke: Early prediction of outcome*  
Supervisor: Buchan, Alastair M.
- \* **Hirasawa, Michiru** (Physiology and Biophysics, University of Calgary)  
*Mechanism of neurotransmitter release and plasticity in the supraoptic nucleus.*  
Supervisor: Pittman, Quentin J.

- \* **Huang, Yue-Qiao** (Brain and Behavior, Hospital for Sick Children)  
*NMDA receptor regulation by Src: A role of PSD-95.*  
Supervisor: Salter, Michael W.
- \* **Jahromi, Babak S.** (Neurosurgery, University of Chicago)  
*Effect of subarachnoid hemorrhage and vasospasm on smooth muscle calcium homeostasis.*  
Supervisor: Macdonald, Robert L.
- \* **Jong, Phillip** (Cardiology, University of Toronto)  
*Effect of enalapril on long-term mortality and morbidity in patients with left ventricular systolic dysfunction.*  
Supervisor: Liu, Peter P.
- **Jutras, Isabelle** (Physiopathology, Pasteur Institute)  
*Interactions of the intracellular pathogen chlamydia with host cells: effects on cellular trafficking.*  
Supervisor: Dautry-Varsat, Alice
- \* **Kahr, Walter** (Pathology & Molecular Medicine, McMaster University)  
*Characterization of the platelet enzyme defect in the Quebec platelet disorder.*  
Supervisor: Hayward, Catherine P.
- **Kaprielian, Roger** (Cardiovascular Research Centre, Massachusetts General Hospital)  
*Role of Kv4.3 and SERCA2a on  $[Ca^{2+}]_i$  and signal transduction in cardiac failure.*  
Supervisor: Hajjar, Roger
- \* **Kaul, Padmaja** (Medicine, Duke University Medical Centre)  
*Long-term impact of early revascularization in AMI patients: Canada versus the US.*  
Supervisor: Mark, Daniel B.
- **Krebs, Claudia** (Physiology, University of British Columbia)  
*Calbindin and NMDA receptor subtypes in ischemia/anoxia-induced neuron death.*  
Supervisor: Baimbridge, Kenneth G.
- **Legaud, Guy** (Pharmacology & Therapeutics, University of British Columbia)  
*Calcium gradients regulate endothelial secretions.*  
Supervisor: Van Breemen, Casey
- \* **Lam, Buu-Khanh** (Thoracic and Cardiovascular Surgery, Cleveland Clinic Foundation)  
*Defining the appropriate roles for valve replacement versus valve repair in the spectrum of mitral valve disease.*  
Supervisor: Blackstone, Eugene H.
- \* **Lee, Douglas S.Y.** (Medicine & Public Health Sciences, University of Toronto)  
*Determination of prognosis and outcomes of congestive heart failure in Ontario.*  
Supervisor: Tu, Jack V.
- \* **Leong-Poi, Howard M.** (Cardiovascular, University of Virginia)  
*The non-invasive assessment of inflammation using contrast enhanced ultrasound.*  
Supervisor: Kaul, Sanjiv
- **Leung, Yuk Man** (Physiology and Medicine, University of Toronto)  
*The mechanisms of cardiac hypertrophy and disease following reductions in transient outward currents.*  
Supervisor: Backx, Peter H.
- **Li, Ronald A.** (Medicine, John Hopkins University)  
*Reversal of electrical defects in heart failure using adenoviral gene transfer.*  
Supervisor: Marban, Eduardo

- **Li, Timao** (Physiology, University of Manitoba)  
*Molecular mechanism of cytokine-induced apoptosis in adult ventricular myocytes.*  
Supervisor: Kirshenbaum, Lorrie A.
- **Liu, Qingde** (Centre of Hemostasis and Thrombosis, Beth Israel Deaconess Medical Centre)  
*Protein histidine phosphorylation in platelet activation.*  
Supervisor: Furie, Barbara
- **Lomax, Alan** (Physiology & Biophysics, University of Calgary)  
*Na<sup>+</sup>/Ca<sup>2+</sup> and Na<sup>+</sup>/Ca<sup>2+</sup>/K<sup>+</sup> antiporters in the cardiovascular system.*  
Supervisor: Giles, Wayne R.
- \* **Mallidi, Hari** (Surgery, University of Toronto)  
*Bioengineered tissue grafts to improve ventricular function in a porcine infarct model of heart failure.*  
Supervisor: Weisel, Richard D.
- **Massaelli, Hamid** (Cardiovascular Research, University of Toronto)  
*The role of apolipoprotein D in vascular smooth muscle cell motility.*  
Supervisor: Rabinovitch, Marlene
- **Masumiya, Haruko** (Physiology & Biophysics, University of Calgary)  
*Molecular characterization of the ion-conducting pore of the cardiac Ca<sup>2+</sup> - release channel (ryanodine receptor).*  
Supervisor: Chen, S.R. Wayne
- \* **Miner, Steven E. S.** (Medicine, University of Toronto)  
*Transcardiac L-arginine kinetics and nitric oxide synthase activity.*  
Supervisor: Parker, John D.
- **Nagai, Yoshihiko** (Physiology, McGill University)  
*Nonlinear dynamics of reentrant arrhythmias: experiment and theory.*  
Supervisor: Glass, Leon
- **Ni, Heyu** (Pathology, Harvard University)  
*Adhesion molecules in platelet adhesion and thrombus formation.*  
Supervisor: Wagner, Denisa
- \* **Nong, Zengxuan** (Medicine, University of Ottawa Heart Institute)  
*Local delivery of estrogen receptor beta post-balloon injury.*  
Supervisor: O'Brien, Edward R.
- **Nygren, Anders** (Physiology & Biophysics, University of Calgary)  
*Voltage-sensitive dye recordings of cardiac rhythm disturbances: Image processing algorithms.*  
Supervisor: Giles, Wayne R.
- \* **Oudit, Gavin Y.** (Medicine, University of Toronto)  
*Role of estradiol and L-type calcium channel in the pathophysiology of iron-overload.*  
Supervisor: Backx, Peter H.
- **Pan, Yan** (Banting & Best Department of Medical Research, University of Toronto)  
*Compensatory changes in muscle diseases arising from defects in calcium regulatory proteins.*  
Supervisor: MacLennan, David H.
- **Pheng, Leng Hong** (Neurologie, Université McGill)  
*Internalisation et trafic intracellulaire des recpteurs du NPY.*  
Supervisor: Beaudet, Alain

- **Pineyro, Graciela** (Biochemistry, University of Montreal)  
*Role of Gi-mediated responses in the pathophysiology of heart failure.*  
Supervisor: Bouvier, Michel
- **Raffai, Robert** (Gladstone Institute of Cardiovascular Disease , The J. David Gladstone Institutes)  
*An animal model for human apolipoprotein E4 and diet-induced hypercholesterolemia.*  
Supervisor: Weisgraber, Karl H.
- \* **Raj, Satish** (Medicine, University of Calgary)  
*Influence of cardiac hypertrophy and gender on Class III antiarrhythmic drug effects.*  
Supervisor: Gillis, Anne M.
- **Rupert, Jim** (Pathology, University of British Columbia)  
*Genetic risk factors for cardiovascular disease in Native Americans.*  
Supervisor: Devine, Dana V.
- **Sambandam, Nandakumar** (Pediatrics and Pharmacology, University of Alberta)  
*5'AMP-activated protein kinase control of glucose metabolism in the newborn heart.*  
Supervisor: Lopaschuk, Gary D.
- **Schulze, Costas** (Pediatrics & Pharmacology, University of Alberta)  
*Role of matrix metalloproteinases in cytokine-mediated heart injury.*  
Supervisor: Schulz, Richard
- **Smieja, Marek J.** (Medicine, McMaster University)  
*A case-control study of the association of chlamydia pneumoniae and coronary atherosclerosis.*  
Supervisor: Yusuf, Salim
- \* **Stewart, Ronald J.** (Biochemistry, Queen's University)  
*Characterizing the antifibrinolytic properties of TAFa.*  
Supervisor: Nesheim, Michael E.
- \* **Storey, Margo K.** (Medicine, National Jewish Medical and Research Center)  
*The biochemistry and genetics of eucaryotic lipid transport and organelle biogenesis.*  
Supervisor: Voelker, Dennis R.
- **Taylor, R. Blaine** (London Health Sciences Centre)  
*MRI predictors of clinical outcomes in t-PA treated patients.*  
Supervisor: Hachinski, Vladimir C.
- \* **Tsuda, Takeo** (Banting & Best Department of Medical Research, University of Toronto)  
*Conformational changes that accompany Ca<sup>2+</sup> transport by SERCA molecules.*  
Supervisor: MacLennan, David H.
- **Tupling, Allan R.** (Banting & Best Department of Medical Research, University of Toronto)  
*Analysis of compensatory mechanisms in animal models of Ca<sup>2+</sup> regulatory muscle diseases.*  
Supervisor: MacLennan, David H.
- **Turcato, Sally** (Pharmacology & Therapeutics, University of Calgary)  
*Regulation of vascular smooth muscle KNDP channels by PKC.*  
Supervisor: Cole, William C.
- \* **Verma, Subodh** (Cadiology, University of Calgary)  
*Diabetes, atherosclerosis and endothelial dysfunction.*  
Supervisor: Anderson, Todd J.
- **Voisin, Laure** (Centre de Recherche, Centre hospitalier de l'Université de Montréal)  
*Bases moléculaires de l'action hypertrophique de l'angiotensine II dans les cellules musculaires lisses vasculaires.*  
Supervisor: Meloche, Sylvain

- **Wang, Xi** (Pathology, University of Washington)  
*Functional genomic of arterial unique genes.*  
Supervisor: Schwartz, Stephen M.
- **Wilcox, Lisa J.** (Nutrition, Columbia University)  
*Sterol trafficking and esterification.*  
Supervisor: Sturley, Stephen
- **Wilson, David P.** (Biochemistry and Molecular Biology, University of Calgary)  
*CA2+ sensitization of smooth muscle contraction.*  
Supervisor: Walsh, Michael P.
- \* **Wu, Lingyun** (Anatomy and Cell Biology, University of Saskatchewan)  
*Management of oxidative stress and inflammation in brain microvasculature.*  
Supervisor: Juurlink, Bernard H.J.
- **Wu, Sheng-Qian** (Pharmacology, University of Saskatchewan)  
*Role of endothelin in diabetic vascular complications.*  
Supervisor: Gopalakrishnan, Venkat
- \* **Young, Lynne E.** (Nursing, University of Washington)  
*Living at risk: Exploring risk for heart disease with low-income single mothers of dependent children.*  
Supervisor: Cunningham, Susanna
- **Yue, Lixia Y.L.** (Pharmacological & Physiological Sciences, University of Chicago)  
*Structural determinants of binding of local anesthetic QX derivatives to sodium channel.*  
Supervisor: Clapham, David
- **Zhang, Shetuan** (Physiology, University of British Columbia)  
*Modulation of cardiac potassium channels by cocaine.*  
Supervisor: Fedida, David
- **Zhang, Yi-Hong** (Physiology & Biophysics, University of Calgary)  
*Previous fever and anoxic response.*  
Supervisor: Pittman, Quentin J.