



[Position for a PhD student in Molecular imaging](#)

Site : Centre de recherche, Institut de Cardiologie de Montréal / Montreal Cardiology Institute
Faculté de Médecine, Université de Montréal,
Montreal City, Province of Quebec, Canada

Laboratory of : Dr Jocelyn Dupuis

web site: <http://www.icm-mhi.org/en/index.html>

Laboratory research theme: Evaluation of the pulmonary circulation and lung remodeling in pulmonary hypertension

Project description:

We are currently developing new molecular imaging peptides targeting endothelial G-protein coupled receptors. These agents are promising tools for the diagnosis and follow-up of various cardiovascular disorders, including pulmonary hypertension. The candidate will help develop the labelling efficiency and radiochemical purity of a selected agent, evaluate pharmacokinetic and biodistribution, and test its use in targeted animal models of disease.

References :

1. Jiang BH, Tardif JC, Sauvageau S, Ducharme A, Shi Y, Martin JG, **Dupuis J**. Beneficial effects of atorvastatin on lung structural remodeling and function in ischemic heart failure. *J Card Fail.* 2010;16(8):679-688.
2. Fu Y, Letourneau M, Nguyen QT, Chatenet D, **Dupuis J**, Fournier A. Characterization of the adrenomedullin receptor acting as the target of a new radiopharmaceutical biomolecule for lung imaging. *Eur J Pharmacol.* 2009;617(1-3):118-123.
3. **Dupuis J**, Harel F, Fu Y, Nguyen QT, Letourneau M, Prefontaine A, Fournier A. Molecular Imaging of Monocrotaline-Induced Pulmonary Vascular Disease with Radiolabeled Linear Adrenomedullin. *J Nucl Med.* 2009.
4. Harel F, Fu Y, Nguyen QT, Letourneau M, Perrault LP, Caron A, Fournier A, **Dupuis J**. Use of adrenomedullin derivatives for molecular imaging of pulmonary circulation. *J Nucl Med.* 2008;49(11):1869-1874.

Disciplines/ Qualifications:

Candidates should preferably have a formal training in small animal experimentation, cell culture, molecular biology techniques, peptide chemistry and pharmacology, have excellent organizational, interpersonal, and communication skills, and have a strong interest in cardiovascular pathophysiology and pulmonary hypertension.

Contact:

Applicants should submit a resume, university records, a short statement of research interests, TOEFL results and two letters of recommendation to Dr Jocelyn Dupuis by email (dupuisj@mac.com), if possible in one .pdf document.

Collaboration: Collaboration is possible with a former supervisor or another researcher in that field. Please contact me.