

#### 2 SYMPOSIUM JACQUES DE CHAMPLAIN

In memoriam, Dr Jacques de Champlain



Institut de Cardiologie de Montréal 2 décembre 2013

#### L'émergence de la médecine cardiovasculaire personnalisée : vers le traitement du patient N = 1 ?

The rise of personalized cardiovascular medicine: Treating N of 1?

Bh30 **Denis deBlois, Ph.D.**Professeur, Faculté de Pharmacie, Université de Montréal
Co-directeur, Groupe de recherche sur le médicament (GRUM) *Mot de bienvenue* 

8h40 **Marie-Pierre Dubé, M.D., Ph.D.**Directrice, Centre de pharmacogénomique, Institut de Cardiologie de Montréal Chercheure agrégée, Département de médecine, U de Montréal *The Rise of Personalized Cardiovascular Medicine* 

9h40 Larisa H. Cavallari, PharmD

Associate Professor, College of Pharmacy Practice, U of Illinois at Chicago

Warfarin and the Translation of Basic Knowledge into Clinical Practice:

What Have We Learned?

10h40 Health Break

Lunch

11h00

12h00

Stephen B. Liggett, M.D.
Professor, Department of Medicine and Molecular Pharmacology
Vice Dean for Research
Associate Vice President for Personalized Medicine
University of South Florida, Morsani College of Medicine

Physiologic and Pharmacologic Effects of Common Genetic Variations of Adrenergic Receptors

13h00 Daniel Gaudet, M.D., Ph.D.

Professeur, Faculté de Médecine, Université de Montréal
Directeur scientifique, Génome Québec
Genetics of Hypertriglyceridemia and Emerging Therapies: a ROC POP
Approach of Personalized Medicine

14h00 Aidan C. Power, MB BCh MSc MRCPsych

Vice President and Head PharmaTherapeutics Precision Medicine
Pfizer Worldwide Research and Development
Translational Genomics: Challenges and Opportunities in Clinical

Translational Genomics : Challenges and Opportunities in Clinical Research

15h00 Health Break

15h15 MODÉRATEURS : Denis deBlois, Ph.D. & Marie Lordkipanidzé, BPharm, Ph.D.

Professeure adjointe, Faculté de Pharmacie, Université de Montréal Chercheure, Centre de recherche, Institut de Cardiologie de Montréal Discussion générale avec panel de conférenciers : *Traitement du patient N* = 1 ? *Défis et opportunités* 

16h00 Marta Cerruti, Ph.D.

Assistant Professor, Biointerface Laboratory Mining and Materials Engineering, McGill University

Monzur Murshed, Ph.D.

Assistant Professor, Dept. of Medicine and Faculty of Dentistry, McGill University Mechanism of Vascular Calcification and its Prevention: Lessons Learned and Future Directions

16h50 François de Champlain, M.D.

Président, Fondation Jacques de Champlain

Présentation du Prix d'excellence en recherche 2013 de la Fondation Jacques

de Champlain

17h00 Cocktail

Cette activité a reçu une subvention à visée éducative des compagnies : Pzifer, Takeda et Merck.







# SPEAKERS at the 2<sup>nd</sup> Jacques de Champlain Symposium December 2<sup>nd</sup> 2013, Montreal



Marie-Pierre Dubé (M.D., Ph.D.) is Associate Professor in the Department of Medicine at the Université de Montréal. She is the director of the Beaulieu-Saucier Pharmacogenomics Centre at the Montreal Heart Institute where she leads clinical research projects in pharmacogenomics and personalized medicine. Dr Dubé completed a B.Sc. and Ph.D. in genetics at McGill University and post-doctoral studies in public health at University of Toronto. She worked at Xenon Pharmaceuticals before taking her current academic position. Dr Dubé has authored over 90 peer-reviewed articles, has received career awards from the FRSQ, and her research is funded by CIHR and Genome Canada.

The Rise of Personalized Cardiovascular Medicine

Larisa H. Cavallari (PharmD) is an Associate Professor of Pharmacy Practice and Co-Director of the Warfarin Pharmacogenetics Service at the University of Illinois at Chicago. She received her PharmD degree from the University of Georgia and completed a fellowship in Cardiovascular Pharmacogenomics at the University of Florida. Her research focuses on genetic contributions to cardiovascular drug response, particularly in minority populations. Her research has been funded by the NIH, American Heart Association, and other foundation awards. Dr Cavallari is a member of the International Warfarin Pharmacogenetics Consortium and an affiliate member of the Pharmacogenomics Research Network.



Warfarin and the Translation of Basic Knowledge into Clinical Practice: What Have We Learned?



**Stephen B. Liggett, (M.D.)** received a B.S. in Physics at Georgia Institute of Technology and a M.D. from the University of Miami School of Medicine. This was followed by post-doctoral fellowships at Washington University School of Medicine and the Howard Hughes Medical Institute at Duke University. He is currently Vice Dean for Research, and Associate Vice President for Personalized Medicine at University of South Florida College of Medicine. His research is funded by the U.S. National Institutes of Health and focuses on structure/functions relationships, and genetics, of G-protein coupled receptors in relation to heart and lung disease.

Physiologic and Pharmacologic Effects of Common Genetic Variations of Adrenergic Receptors

Daniel Gaudet (M.D., Ph.D.) is a specialist of Genetic disorders of Lipid metabolism. He has funded a Lipid research clinic, which he has been managing for more than two decades now in Chicoutimi (Quebec, Canada). He is currently the scientific director of ECOGENE-21 and of a Genome Quebec Technology Platform (biobank). Dr Gaudet has led integrated clinical and translational research activities in the fields of genetics, especially with regards to lipid disorders and their associated risks for some 25 years. He has coordinated several clinical trials (PoC and phase I to IIb) and academic projects involving the development of new drugs, oligonucleotide-based treatments, gene therapy, biodrugs, nutritional approaches and emerging technologies for severe dyslipoproteinemia and associated risk.



Genetics of Hypertriglyceridemia and Emerging Therapies : a ROC POP Approach of Personalized Medicine

# SPEAKERS at the 2<sup>nd</sup> Jacques de Champlain Symposium December 2<sup>nd</sup> 2013, Montreal



Aidan C. Power (MB, BCh, MSc, MRCPsych) has been Vice President and Head of PharmaTx Precision Medicine since January 2008. Precision Medicine represents a synthesis of all the emerging technologies and operations (computational science, imaging, pharmacogenomics, metabolomics, proteomics, physiological measurements, diagnostics) that form the scientific basis of emerging approaches to the development of Personalized Medicine. Graduating in Medicine from University College Cork, Ireland, he trained as a psychiatrist in England, and joined Pfizer in the United Kingdom in 1993 working on the antidepressant, Sertraline, and the antipsychotic, Ziprasidone. In 2002, Dr Power relocated to Pfizer Global Research and Development Headquarters in New London, Connecticut, where he headed Clinical Pharmacogenomics. For the last five years he has headed up Molecular Medicine (now PharmaTx Precision Medicine), which has been integrating molecular studies across disease areas as well as developing diagnostics for critical programs in the Pfizer product pipeline.

Translational Genomics: Challenges and Opportunities in Clinical Research

**Denis deBlois (Ph.D.)** is a pharmacology professor at the Faculty of Pharmacy at the Université de Montréal, where he teaches drug discovery and development at the undergraduate and graduate levels. Dr deBlois has published over 70 scientific publications and book chapters on the response to tissue injury. He has over 7 years of experience as a scientific consultant for the pharmaceutical industry in Canada and the USA and is an alumnus of the University of California, San Francisco, American Course on Drug Development and Regulatory Sciences (2010). He is codirector of the Groupe de recherche universitaire sur le médicament (GRUM).

Moderator - Panel of Speakers, General Discussion: Treating N of 1? Challenges and Opportunities





Marie Lordkipanidzé (BPharm, Ph.D.) is a clinical pharmacist, associate professor at the Faculty of Pharmacy at the Université de Montréal, and Principal Investigator at the Montreal Heart Institute. Dr Lordkipanidzé's major research interests are in bringing platelet function testing and molecular biology to clinical settings with the aim of individualizing antiplatelet treatment to specific patient needs.

Moderator - Panel of Speakers, General Discussion: Treating N of 1? Challenges and Opportunities

Marta Cerruti (Ph.D., 2013 Jacques de Champlain Foundation Research Awardee) is Assistant Professor in Materials Engineering at McGill University, and Canada Research Chair in Bio-synthetic interfaces. She received her Ph.D. in Chemistry at the University of Torino in 2004, where she studied bioactive glasses for bone regeneration. She worked as a post-doc at North Carolina State University and at UC Berkeley. Her research focuses on understanding and controlling surface phenomena, especially at the interface between synthetic materials and biological molecules. Her expertise is in surface characterization and functionalization, biomineralization and drug delivery. Dr Cerruti published more than 30 highly cited papers, and was invited to speak at several international conferences.

Mechanism of Vascular Calcification and its Prevention: Lessons Learned and Future Directions



# SPEAKERS at the 2<sup>nd</sup> Jacques de Champlain Symposium December 2<sup>nd</sup> 2013, Montreal



Monzur Murshed (Ph.D.) did his Ph.D. under the supervision of Dr Roswitha Nischt at University of Cologne, Cologne, Germany and his postdoctoral training in the lab of Dr Gerard Karsenty at Baylor College of Medicine, Houston, USA. Over the past fourteen years, Dr Murshed has been working as an ECM biologist, ten years of which have been devoted to studying the mechanisms of biomineralization. His research interests are primarily focused on the mechanism of biomineralization that includes the physiologic mineralization of bone and tooth extracellular matrix (ECM) and pathologic calcification of the ECM in the 'soft' tissues. He is particularly interested about the mechanism of medial calcification in the blood vessels in which hydroxyapatite minerals deposit on the arterial elastic lamina. Currently, he is working on a mouse model lacking a potent mineralization inhibitor, matrix gla protein (MGP)- that manifests severe calcification of the vascular elastic lamina. His research has been funded by the Heart and Stroke Foundation of Canada and Canadian Institute of Health Research.

Mechanism of Vascular Calcification and its Prevention: Lessons Learned and Future Directions

François de Champlain (M.D., President, Jacques de Champlain Foundation) is an Assistant Professor of Medicine at McGill University. He completed an undergraduate degree in Civil Engineering in 1993. He earned his medical degree from Université de Montréal in 1998 and pursued his residency in Emergency Medicine at McGill University where he graduated in 2003. Since then, Dr de Champlain has been recognized for his expertise in prehospital medicine, disaster preparedness and traumatology. He currently practices at the Montreal General Hospital as an emergency physician and trauma team leader. He is also the son of Professor Jacques de Champlain and started the Foundation named after him in 2009, which aims to improve resuscitation care and support cardiovascular research.



Presentation of the 2013 Jacques de Champlain Foundation Excellence in Research Award

#### \* Activité de développement professionnel continu (DPC) accréditée

Le vice-décanat au développement continu des compétences professionnelles de la faculté de médecine de l'Université de Montréal est pleinement agrée par l'Association des facultés de médecine du Canada (AFMC) et par le Collège des médecins du Québec (CMQ).

Le vice-décanat au développement continu des compétences professionnelles reconnaît, à la présente activité, **6,75** heures créditées de catégorie 1 pour l'omnipraticien (médecin de famille) présent.

Pour le médecin spécialiste, le vice-décanat reconnaît 1 crédit de la section 1 par heure de participation pour un total de **6,75** crédits pour l'activité globale conformément au programme du maintien du certificat du Collège Royal des médecins et chirurgiens du Canada (CRMCC).

La Faculté des sciences infirmières de l'Université de Montréal reconnaît à l'infirmière participante jusqu'à 6,75 heures de formation accréditées.

Pour tout autre professionnel participant, ce programme donne une attestation de participation de **6,75** heures.

Les participants doivent réclamer un nombre d'heures conforme à leur participation.

Pour obtenir votre reconnaissance de présence, veuillez signer le formulaire disponible à l'entrée auprès de Mme Joanne Wayland et fournir les informations d'usage.