



UNIVERSITY OF OTTAWA  
HEART INSTITUTE  
INSTITUT DE CARDIOLOGIE  
DE L'UNIVERSITÉ D'OTTAWA



Canadian Cardiac  
Oncology Network

Partnered with the 4th Annual  
Canadian Cardiac Oncology Network conference

# The 2<sup>nd</sup> Annual Ottawa Heart Research Conference: Personalized Cardiovascular Medicine

Ottawa Convention Centre, Thursday, May 8, 2014

## CONFERENCE PROGRAM

7:30 – 8:15	<b>Breakfast</b>	Colonel By Foyer
8:15 – 8:20	<b>Welcome</b>	<b>Dr Ruth McPherson, Chair</b> <b>Dr Katey Rayner, Vice Chair</b>
8:20 – 8:30	<b>Welcome Address</b>	<b>Dr Thierry Mesana, President and CEO</b> <i>University of Ottawa Heart Institute</i>

8:30 – 12:00

### SESSION I Genetics and Pharmacogenomics

*\*Learning Objectives: By the end of this session, participants will be able to:*

8:30 – 9:10	<b>Cardiovascular Pharmacogenomics: Giving the right drug to the right patient</b>	<b>Dr Naveen Pereira</b> <i>Mayo Clinic</i>
	<ul style="list-style-type: none"> <li><i>* Illustrate the concept of genetic variation and its effect on drug response</i></li> <li><i>*Apply the currently used strategy to evaluate the effect of genetic variation on drug response</i></li> <li><i>*Recall the pharmacokinetic and pharmacodynamic pathways of drug effect</i></li> <li><i>*Recall the effect of genetic variation on the action of beta-blockers, Warfarin and Clopidogrel</i></li> </ul>	
9:10 – 9:25	<b>Need for Speed: The power of point-of-care DNA testing</b>	<b>Dr Paul Lem</b> <i>Spartan Bioscience Inc</i>
	<ul style="list-style-type: none"> <li><i>*Comprehend the clinical need for rapid CYP2C19 results for PCI patients</i></li> <li><i>*Identify how point-of-care genetic testing will improve patient care in the future</i></li> </ul>	
9:25 – 10:00	<b>HONORARY LECTURE Genetics of Coronary Artery Disease</b>	<b>Dr Robert Roberts</b> <i>University of Ottawa Heart Institute</i>

10:00 – 10:15 **Break** Colonel By Foyer

### JOINT PLENARY SESSION with the 4<sup>th</sup> Annual Canadian Cardiac Oncology Network Conference

10:15 – 11:10	<b>Kinase inhibitors in cancer and the heart: Dealing with the other side of the coin</b>	<b>Dr Thomas Force</b> <i>Temple University</i>
	<ul style="list-style-type: none"> <li><i>* Recognize mechanisms of cardio toxicity of kinase inhibitors</i></li> <li><i>* Recall future directions to prevent cardio toxicity</i></li> </ul>	

11:10 – 11:45 **The Future of Personalized Medicine: Economics, Regulatory and Technology** **Dr Brian O'Rourke**  
Canadian Agency for Drugs and Technologies in Health (CADTH)

- \* Comprehend the various technology assessment frameworks
- \* Understand the regulatory and reimbursement challenges associated with personalized medicine
- \* Define examples of companion diagnostics used in oncology and cardiology

11:45 – 12:00 **Why Simple Collection of High Quality Samples Makes a Difference** **Dr Chaim Birnboim**  
DNA Genotek Inc

- \* Recognize why the quality of DNA samples can be important for molecular genetic testing

12:00 – 13:00 **Lunch** Colonel By Foyer

13:00 – 15:00 **SESSION II**  
**Emerging Tools for Diagnosis and Disease Management**

13:00 – 13:40 **Mining GWAS Data to Obtain a Better Understanding of Complex Disease** **Dr Ruth McPherson**  
University of Ottawa Heart Institute

- \* Understand the limits and opportunities of existing GWAS data sets for CAD
- Recognize approaches for understanding the contribution of SNPs, genes and pathways to atherosclerosis

13:40 – 14:20 **Human Pluripotent Stem Cells: From mechanisms of disease and to novel therapeutics** **Dr William Stanford**  
Ottawa Hospital Research Institute

- \* Define pluripotent stem cells to model disease and as a platform to discover novel therapeutics
- \* Compare induced pluripotent stem cells and gene edited pluripotent stem cells
- \* Discuss the prospects for using pluripotent stem cells as cellular therapeutics

14:20 – 15:00 **Epigenetics and Cardiovascular Disease** **Dr Philip Marsden**  
St Michael's Hospital

- \* Understand how chromatin-based pathways regulate endothelial cell phenotype
- \* Provide examples of epigenetic pathways that are functionally important in cardiovascular disease
- \* Debate how the environment of a cell interacts with the static DNA code in blood vessel disease

15:00 – 15:30 **Break** Colonel By Foyer

15:30 – 17:00 **SESSION III**  
**New Kids on the Block: Personalized Medicine in 2014**

15:30 – 16:15 **Restoring a Failing Heart: A dynamic effect of myocardial proteins** **Dr Pei Pei Ping**  
University of California, Los Angeles (UCLA)

- \* Interpret the role of protein dynamics in heart failure
- \* Learn integration of Omic data sets in cardiac disease phenotypes

16:15 – 16:30 **Closing Remarks and Evaluations**

16:30 – 18:00 **Poster Session and Networking Reception** Rideau Canal Atrium

18:00 – 18:15 **Closing** Rideau Canal Atrium