Research Day 2010
Presentation Program
May 12, 2010
University of Ottawa Heart Institute
## PROGRAM

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<tr>
<th>Time</th>
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<tr>
<td>12:00</td>
<td>Lunch</td>
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<tr>
<td>12:10 – 12:20</td>
<td>Welcome and Opening Remarks (CF)</td>
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<td>Dr. Terry Ruddy</td>
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<td>12:20 – 12:25</td>
<td>Investigator of the Year Awards (CF)</td>
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<td>Dr. Terry Ruddy</td>
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<td>12:25 – 12:40</td>
<td>Basic Science Investigator of the Year Presentation (CF)</td>
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<td>Dr. Heidi McBride</td>
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<td>12:40 – 12:55</td>
<td>Clinical Science Investigator of the Year Presentation (CF)</td>
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<td>Dr. Rob Beanlands</td>
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<tr>
<td>13:00 – 15:45</td>
<td>Basic Science Oral Presentations (CF)</td>
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<td>13:00 – 16:00</td>
<td>Clinical Science Oral Presentations (WF)</td>
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<td>13:00 – 15:45</td>
<td>Allied and Population Health Oral Presentations (EF)</td>
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<td>15:30 – 16:45</td>
<td>Poster Presentations and Wine and Cheese (TR)</td>
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<td>17:00 – 17:15</td>
<td>Oral and Poster Presentation Awards (TR)</td>
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<td>Dr. Thierry Mesana</td>
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<td>18:00</td>
<td>Research Day End</td>
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**CF** – Centre Foustanellas Auditorium  
**EF** – East Foustanellas Auditorium  
**WF** – West Foustanellas Auditorium  
**TR** – Track Room
ORAL PRESENTATIONS: SIMULTANEOUS SESSIONS
13:00 – 16:00

Session 1: Fundamental Science Oral Presentations (CF)
Judges: Dr. Heidi McBride (Chair), Dr. Adolfo de Bold, Dr. Alexandre Stewart

1:00  O-1 Dynamic Tracking of Human Progenitor Cells after Intramyocardial Injection: Comparison of 18F-HFB and 18F-FDG Cell Labeling for PET Imaging
Mary Zhang (Supervisor: Dr. M. Ruel)

1:15  O-2 In Vivo Evaluation of [11C]Methyl-Losartan as a Selective AT1R Radioligand in Rats
Rawad E. Antoun (Supervisors: Drs. R.S. Beanlands and J. N. DaSilva)

1:30  O-3 The Role of cIAP2 in Atherosclerotic Lesion Development
Lyne Sleiman (Supervisors: Drs. R.S. Beanlands and S. Whitman)

1:45  O-4 Collagen Matrices for Endothelial Progenitor Cell Enrichment & Functional Enhancement
Drew Kuraitis (Supervisor: Dr. E.J. Suuronen)

2:00  O-5 The Tail-Anchored Membrane Protein SLMAP is a Novel Regulator of E-C Coupling and Cardiac Function
Moni Nader (Supervisor: Dr. B.S. Tuana)

2:15 – 2:30 COFFEE BREAK

2:30  O-6 A Collagen Matrix for Endothelial Progenitor Cell Therapy Improves Cardiac Function in a Mouse Myocardial Infarction Model
Ali Ahmadi (Supervisor: Dr. E. Suuronen)

2:45  O-7 Extracellular HSP27 Blocks Uptake of Modified Lipids by Binding and Modulating Expression of SRA: A Novel Anti-Atherogenesis Therapeutic Opportunity?
Joshua Raizman (Supervisor: Dr. E. O’Brien)

3:00  O-8 Interferon Responsive Factor 2 Binding Protein 2 Is an Ischemia-inducible Coactivator of Vascular Endothelial Growth Factor-A Expression in Cardiac and Skeletal Muscle
Allen C. T. Teng (Supervisor: Dr. A.F.R. Stewart)

3:15  O-9 Identifying the Transcription Factors and microRNAs involved in the Perinatal Cardiogenomic Program
Lara Kouri (Supervisor: Dr. P.G. Burgon)
3:30  O-10  A Collagen-Chitosan Scaffold as a Possible Highly Vascularized Ectopic Site for Pancreatic Islet Transplantation
Chao Deng (Supervisor: Dr. E.J. Suuronen)

Session 2: Clinical Science Oral Presentations (WF)
Judges: Dr. Marc Ruel (Chair), Dr. Jean-Yves Dupuis, Dr. Sandy Dick

1:00  O-11  CARE Score versus EuroSCORE for Prediction of Mortality in Cardiac Surgery
Diem T. T. Tran (Supervisor: Dr. J-Y Dupuis)

1:15  O-12  Short- and Long-term Outcomes of Systematic Primary Percutaneous Coronary Intervention in Patients who Develop Cardiogenic Shock after a ST-elevation Myocardial Infarction (STEMI)
Bethany E. Durling (Supervisor: Dr. C.A. Glover)

1:30  O-13  Relationship Between Electrical and Structural Remodeling after CRT
Mouhannad Sadek (Supervisor: Dr. D.H. Birnie)

1:45  O-14  Body Mass Index and Prognosis of Patients with Heart Failure
Fawaz Almutairi (Supervisor: Dr. H. Haddad)

2:00  O-15  Mitral Valve Prolapse: Anatomical Diagnosis and Predicting Surgical Repair with Cardiac CT
Nina Ghosh (Supervisor: Dr. B.J.W. Chow)

2:15 – 2:30 COFFEE BREAK

2:30  O-16  Evaluation of Non-Synonymous NPPA SNPs in Atrial Fibrillation
Jason D. Roberts (Supervisor: Dr. M.H. Gollob)

2:45  O-17  Significance of Prosthesis-Patient Mismatch after Aortic Valve Replacement According to Age at the Time of Operation
Joel Price (Supervisor: Dr. M. Ruel)

3:00  O-18  Clinical and Genetic Predictors of Impaired Response to Clopidogrel
Sandro C. Goncalves (Supervisor: Dr. D. So)

3:15  O-19  Reduced Myocardial Flow Reserve Quantified with Rubidium-82 PET is an Independent Predictor of Three Vessel Coronary Artery Disease
Maria Cecilia Ziadi (Supervisor: Dr. R.S. Beanlands)
3:30  O-20  Initial Clinical Experience with an Active Fixation Left Ventricular Lead (Starfix)
Haitham Alanazi (Supervisor: Dr. D.H. Bimie)

3:45  O-21  Mitral Valve Repair Versus Replacement in Patients with Ischemic Mitral Tegurgitation: A Case-Matched Study
Vincent Chan (Supervisor: Dr. T. Mesana)

Session 3: Allied and Population Health Oral Presentations (EF)
Session Chair: Dr. Andrew Pipe (Chair), Dr. George Fodor, Kathryn Williams

1:00  O-22  Pre-surgical Use of Nicotine Replacement Therapy in Cardiac Smokers
Debbie Aitken

1:15  O-23  Safety of Nicotine Replacement Therapy in Smokers Admitted to Hospital with Acute Coronary Syndrome
Dana L. Riley (Supervisor: Dr. R. Reid)

1:30  O-24  Severity of Craving and Nicotine Withdrawal Symptoms and Effect of Nicotine Replacement Therapy in Smokers Hospitalized with Heart Disease
Kerri-Anne Mullen (Supervisors: Drs. R. Reid and A.L. Pipe)

1:45  O-25  Applying Theoretical Frameworks to Evaluate the Effectiveness of the Ottawa Model for Smoking Cessation in Eastern Ontario
Abha Bhatnagar and Kerri-Anne Mullen (Supervisor: Dr. R. Reid)

2:00  O-26  Strategies to Increase the Delivery of Smoking Cessation Treatments in Primary Care Settings: A Systematic Review and Meta-analysis
Sophia Papadakis (Supervisors: Drs. A. L. Pipe, R. Reid, and P. McDonald)

2:15 – 2:30 COFFEE BREAK

2:30  O-27  Impact of the Ottawa Model for Smoking Cessation on Smoking Outcomes in Primary Care Settings: A Cluster Randomized Pilot Trial
Sophia Papadakis (Supervisors: Drs. A. L. Pipe, R. Reid, and P. McDonald)

2:45  O-28  Differences in Cardiovascular Mortality Trends in Western and Eastern European Union Countries
Eftyhia Helis

3:00  O-29  Is the Triglyceride-to-HDL Cholesterol Ratio a Marker of Metabolic Syndrome?
Penelope Turton (Supervisor: Dr. G. Fodor)
3:15  O-30  Alternative Delivery Models of Cardiac Rehabilitation: Description and Patient Characteristics
      Heather Tulloch

3:30  O-31  Analysis of Two Cardiac Rehabilitation Programs: High Intensity Onsite and Rehab Lite Home Program. Do These Program Options Compare?
      Helena Van Ryn-Bolland
POSTER PRESENTATIONS
15:30 – 16:45

Fundamental Science Poster Presentations

Judges: Dr. Mercedes Kuroski de Bold, Dr. Thomas Lagace, Dr. Ross Milne, Dr. Erik Suuronen

P-1 Pre-clinical Evaluation of Biopolymer Delivered EPCs in Hibernating Myocardium
Céline Giordano (Supervisor: Dr. M. Ruel)

P-2 Experimental Validation of a Two Dimensional Partial Volume Correction Strategy for PET imaging in Mice with Simulated and Measured Data
Tyler Dumouchel (Supervisor: Dr. R. deKemp)

P-3 Normal Population Variability and Test-retest Reproducibility of Mouse Heart FDG Uptake and SUV with the Siemens Inveon
Stephanie Thorn (Supervisors: Drs. M. Gollob, J.N. DaSilva, and R.A. deKemp)

P-4 The Effects of Endothelial Dysfunction on Cell Therapy
Jenelle Marier (Supervisor: Dr. E.J. Suuronen)

P-5 Mechanisms of Cell-Matrix Therapy and the Role of Integrin-linked Kinase
Emily Manthorp (Supervisor: Dr. E.J. Suuronen)

P-6 Cytokine- and Ligand-Enhanced Matrices for Augmented Progenitor Responses in Ischemia
Tanja Sofrenovic (Supervisor: Dr. E.J. Suuronen)

P-7 Participation of Interleukin-1 in the Development of Atherosclerosis by Chronic Oral Infection
Joshua Y.S. Chan (Supervisors: Dr. R.W. Milne and S. C. Whitman)

P-8 Phosphatidylcholine Metabolism Affects Trafficking of LDL-derived Free Cholesterol in Cholesterol-loaded CHO Cells
Chandra Landry (Supervisor: Dr. T. Lagace)

P-9 Developmental and Molecular Basis of LITF in Cell Fate Determination
Shelley A. Deeke (Supervisors: Dr. A.F.R. Stewart, and P.G. Burgon)

P-10 Functional Relationship of the COL4A1/COL4A2 Locus on Chromosome 13q34 to Coronary Artery Disease (CAD)
Adam Turner (Supervisor: Dr. R. McPherson)
P-11  Functional Analysis of the Trib1 Locus Associated with Coronary Artery Disease
Adrianna Douvris (Supervisor: Dr. R. McPherson)

P-12  Elucidating the Functional Role of LITF in Myogenesis
Seham Rabaa (Supervisor: Dr. P.G. Burgon)

P-13  Transcriptional Analysis of the Endocrine Heart Under Normal and Chronic
Hemodynamic Overload Conditions
Monica Forero McGrath (Supervisor: Dr. A.J. de Bold)

Clinical Science Poster Presentations
Judges: Dr. Derek So, Dr. Ben Chow, Robbie Davies, Kathryn Williams

P-14  Identification of Vulnerable Aortic Plaque Using PET FDG Viability Studies
Nina Ghosh (Supervisor: Dr. T. Ruddy)

P-15  The Impact of Renal Dysfunction on Clinical Outcomes after Primary PCI for ST-
Elevation Myocardial Infarction in a Regionalized Primary Percutaneous
Coronary Intervention Program
Nina Ghosh (Supervisor: Dr. T. Ruddy)

P-16  Improved Homogeneity of Normal MBF Using Factor-Analysis with 82Rb PET
Ran Klein (Supervisor: Dr. R. A. deKemp)

P-17  Predicting Left Vventricular Hypertrophy in Patients with Left Bundle Branch Block
Wael Abuzeid (Supervisor: Dr. B.J.W. Chow)

P-18  Presence and Significance of Functional Mitral Stenosis after Mitral Valve Repair
for Myxomatous Mitral Regurgitation
Kristen Chen (Supervisor: Dr. K-L Chan)

P-19  The Use of 18F-FDG PET Imaging in Diagnosis of Cardiac Sarcoid, A Systematic
Review Including the UOHI Experience
George Youssef (Supervisors: Drs. Robert Beanlands and P. Nery)

P-20  Anticoagulant Therapy in Patients with ST-elevation Myocardial Infarction
Undergoing Primary PCI
Andrea MacDougall (Supervisor: Dr. M. Le May)

P-21  New Effective Dose Estimates for Rubidium-82 Based on Dynamic PET/CT
Imaging in Humans
Chad R. Hunter (Supervisor: Dr. R.A. deKemp)

P-22  Therapeutic Hypothermia in STEMI Patients Surviving Out of Hospital Cardiac
Arrest in a Regional STEMI Program: Our Experiences
Ronen Maze (Supervisor: Dr. M. Le May)
P-23 Comparison of 3D versus 2D 13N-ammonia PET Myocardial Perfusion Imaging
Jennifer M. Renaud (Supervisor: Dr. R.A. deKemp)

P-24 Training in Cardiac CT Angiography: Does Certification Mean Competence?
Nadine Gauthier (Supervisor: Dr. B. Chow)

P-25 Rates of Downstream Invasive Coronary Angiography and Revascularization: Computed Tomographic Coronary Angiography versus Tc-99m Single Photon Emission Computed Tomography
Vikas Tandon (Supervisor: Dr. B. Chow)

Allied and Population Health Poster Presentations
Judges: Dr. R. Reid, Dr. A. Mark, M. Dalipaj, L. Chen

P-26 Knowledge, Attitudes, and Behaviours Related to Dietary Sodium among 35-50 Year Old Ontario Residents
Sophia Papadakis, Andrew L. Pipe, Isabella A. Moroz, Robert D. Reid, Amy E. Mark

P-27 Description of a Behavioural Counseling Strategy for Risk Factor Modification in a Family Heart Health Randomized Controlled Trial: Preliminary Results
Laura E Bridgewater, MA Lodge, RD Reid

P-28 Evaluation Study of the Ottawa Model for Smoking Cessation Integration with Smokers’ Helpline
Jana Kocourek, Sharon Lee, TelAsk Technologies

P-29 Cardiac Rehabilitation: Beginning at the Bedside
Louise Leger-Caldwell and Sueann Tiller

P-30 The Use of 6 Minute Walk Testing in Low Intensity Cardiac Rehabilitation Patient Population
Marja-Leena Keast and V. Filteau

P-31 FRANCOFORME: French Minority of Ontario at Higher Risk of Cardiovascular Disease Benefit from Weekly Lifestyle Intervention
Michele de Margerie and Marc Laflamme

P-32 FRANCOFORME: Programme à domicile de réduction des facteurs de risque cardiovasculaires
Marc Laflamme and Michele de Margerie

P-33 Task and Barrier Self-efficacy and Physical Activity Predictors in a Home-based Cardiac Rehabilitation Program: Preliminary Results
P-34  Heart Wise Exercise: A Model for Encouraging Community-based Exercise for Individuals Living with Heart Disease
Jennifer Harris, Danielle Rolfe, Jane Brownrigg, Monika Slovinec D’Angelo

P-35  After Cardiac Rehabilitation: Exploring Lifestyle Changes as Transformative Learning
Lorraine Montoya

P-36  The Use of Massage Therapy to Alleviate and Control Musculoskeletal Symptoms among Cardiac Sonographers: A 10 Year Experience
Michael Blakeley, Kathryn Ascah, Madeleine Linkruus, Karen Hay

AWARDS PRESENTATION
17:00 –17:15
Presenter: Dr. T. Mesana, Chief, Cardiac Surgery

Doris & Howard Polk Award for the Best Clinical Presentation
Merck Frosst Award for the Best Basic Science Presentation
Merck Frosst Award for the Best Allied and Population Health Presentation

The Howard & Doris Polk Award was established by their family in 1995 in honour of their 50th wedding anniversary and in appreciation and gratitude to the Heart Institute for helping to extend Howard and Doris’s lives.

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Special thanks are extended to the judges and abstract reviewers who participated in the 23rd Annual UOHI Research Day.

**Fundamental Science**
*Oral Presentation Judges*: Dr. H. McBride, Dr. A. de Bold, Dr. A. Stewart  
*Poster Presentation Judges*: Dr. M. Kurowski de Bold, Dr. T. Lagace, Dr. R. Milne, Dr. E. Suurnonen  
*Abstract Reviewers*: Dr. E. O’Brien, Dr. Y. Marcel, Dr. O. Jarinova, Dr. S. Soubeyrand

**Clinical Science**
*Oral Presentation Judges*: Dr. M. Ruel, Dr. J-Y Dupuis, Dr. A. Dick  
*Poster Presentation Judges*: Dr. D So, Dr. B. Chow, R. Davies, K. Williams  
*Abstract Reviewers*: Dr. D. Birnie, Dr. I. Burwash, Dr. N. Gauthier, Dr. M. Kazmi

**Allied and Population Health**
*Oral Presentation Judges*: Dr. A. Pipe, Dr. G. Fodor, K. Williams  
*Poster Presentation Judges*: Dr. R. Reid, Dr. A. Mark, M. Dalipaj, L. Chen  
*Abstract Reviewers*: Dr. A. Pipe, Dr. G. Fodor, Dr. R. Reid, Dr. A. Mark

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Special thanks are also extended to the Organizing Committee:

**Trainees**: Dr. N. Gauthier, Dr. M. Kazmi, Dr. O. Jarinova, S. Rabaa, J. Thackeray  
**Advisors**: Dr. T. Ruddy, Dr. R. Beanlands, Dr. P. Burgon  
**Support**: L. Bennet, M. Korim, I. Moroz

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We Are Grateful To Merck Frosst Canada and the Polk Family for Their Support