31st Annual
Ottawa Cardiovascular Research Day

April 30, 2018
Foustanellas Auditorium
University of Ottawa Heart Institute
The Ottawa Cardiovascular Research Day Committee gratefully acknowledges the support of our event partners.

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The Polk Family Foundation

Ms. Coralie Lalonde

UOHI Electrophysiology Research Group

UOHI Trainee Committee
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Welcome to the 2018 Ottawa Cardiovascular Research Day

On behalf of the planning committee, it is with great pleasure we welcome you to the 2018 Ottawa Cardiovascular Research Day (formerly Research Day). This event is open to all cardiovascular research trainees in the Ottawa region, and is designed to give trainees an opportunity to showcase their outstanding projects and network with scientists and peers.

We are excited to share with you the following program highlights:

- **Keynote lecture by Dr. Stanley Nattel**, renowned cardiac electrophysiologist and researcher from the Montreal Heart Institute
- **UOHI Investigator of the Year Lecture** by Dr. Jennifer Reed, Scientist and Director, Exercise Physiology & Cardiovascular Health Laboratory, University of Ottawa Heart Institute (UOHI) and Assistant Professor, School of Epidemiology & Public Health, University of Ottawa
- **Ottawa Region’s Cardiovascular Trainee of the Year Lecture** by Ms. My-Anh Nguyen, PhD Candidate working with Dr. Katey Rayner, Department of Biochemistry, Microbiology & Immunology, University of Ottawa and UOHI
- **Presentation of the Dr. Robert Roberts Award for Research Excellence**
- **NEW** The Coralie Lalonde Innovation Award Finals will be held in the Foustanellas Auditorium and open to all event attendees! This award recognizes innovative ideas and trainees’ ability to effectively communicate to a lay audience. Attend to hear your colleagues pitch their work to a panel of external judges!!
- **NEW** The Award for the Best Fundamental Science Oral Presentation is now named in honour of Dr. Yves Marcel, former scientist and Chief Scientific Officer at UOHI
- **UOHI Trainee Committee Awards** for Best Trainee and PI Participation at the Work in Progress Rounds

With 14 abstract talks and 65 posters, we are confident the Ottawa Cardiovascular Research Day is a great venue to network with your colleagues and learn more about the work being done in the Ottawa region. The day will conclude with a networking session, and an awards ceremony to recognize the best oral presentations and posters.

We would like to thank our speakers, presenters, judges, session chairs, and organizers for making this event possible. We would also like to extend our gratitude to the Polk Family Foundation, Ms. Coralie Lalonde, the UOHI Electrophysiology Research Group, the UOHI Trainee Committee, and our Bronze Level Sponsor: AstraZeneca Canada Inc. for their generous support.

Join us on April 30 for an exciting meeting!

Sincerely,

Pablo Nery, MD  
Chair, Research Day Committee

Erik Suuronen, PhD  
Co-Chair, Research Day Committee
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<tr>
<th>Time</th>
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<tr>
<td>7:00 – 8:00</td>
<td>Registration and Poster Setup</td>
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<tr>
<td>8:00 – 8:15</td>
<td><strong>Opening Remarks</strong>&lt;br&gt;Dr. Pablo Nery, Chair, Research Day Committee, UOHI</td>
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<td><strong>Chief Scientific Officer Address</strong>&lt;br&gt;Dr. Peter Liu, VP Research &amp; Chief Scientific Officer, UOHI</td>
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<td><strong>Welcome Address</strong>&lt;br&gt;Dr. Thierry Mesana, CEO &amp; President, UOHI</td>
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<td>8:15 – 9:30</td>
<td><strong>Oral Presentation Session 1</strong>&lt;br&gt;<strong>Linkage to Heart Failure Innovation Hub</strong>&lt;br&gt;Chair: Ms. Supriya Hota, MSc Candidate, UOHI</td>
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<tr>
<td>8:15 – 8:30</td>
<td>O-1 <strong>Encapsulation of Explant-derived Cardiac Stem Cells Using a High Throughput Microfluidic Device for Cell Mediated Tissue Repair of Injured Myocardium</strong>&lt;br&gt;Mr. Pushpinder Kanda, MD-PhD Candidate (Supervisor: Dr. Darryl Davis), UOHI</td>
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<td>8:30 – 8:45</td>
<td>O-2 <strong>Gold Nanoparticle Incorporated Collagen-based Conductive Patch Improves Cardiac Function in Murine Myocardial Infarction</strong>&lt;br&gt;Dr. Katsuhiro Hosoyama, Postdoctoral Fellow (Supervisors: Drs. Erik Suuronen &amp; Emilio Alarcon), UOHI</td>
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<td>8:45 – 9:00</td>
<td>O-3 <strong>Pharmacologic Inhibition of Fatty Acid Oxidation Improves Right Ventricular Function &amp; Oxidative Metabolism in Pulmonary Arterial Hypertension Rats</strong>&lt;br&gt;Dr. Ali Ahmadi, Postdoctoral Fellow (Supervisor: Dr. Lisa Mielniczuk), UOHI</td>
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<td>9:00 – 9:15</td>
<td>O-4 <strong>Differential Effects of Female Sex Hormones on Severe Pulmonary Arterial Hypertension Induced by VEGFR2 Inhibition</strong>&lt;br&gt;Dr. Ketul Chaudhary, Postdoctoral Fellow (Supervisor: Dr. Duncan Stewart), Ottawa Hospital Research Institute</td>
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<td>9:15 – 9:30</td>
<td>O-5 <strong>Sex-Specific Trends in Incidence &amp; Mortality for Urban &amp; Rural Ambulatory Heart Failure Patients in Eastern Ontario from 1994-2013</strong>&lt;br&gt;Dr. Elizabeth Chan, Anesthesiology Resident (Supervisors: Drs. Louise Sun &amp; Lisa Mielniczuk), UOHI</td>
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<td>9:30 – 9:40</td>
<td>Health Break</td>
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<td>Oral Presentation Session 2</td>
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| 9:40 – 10:40 | **Linkage to Atherosclerosis & Cardiometabolic Diseases Innovation Hub**  
Chair: Dr. Ali Ahmadi, Postdoctoral Fellow, UOHI |
| 9:40 – 9:55 | O-6 **Outcomes of Switching P2Y12 inhibitors in Patients Who Underwent Percutaneous Coronary Intervention: A Retrospective Cohort Study**  
Dr. Angel Fu, Internal Medicine Resident (Supervisor: Dr. Derek So), UOHI |
| 9:55 – 10:10 | O-7 **In-Hospital Outcomes of STEMI Patients on Warfarin Undergoing Primary PCI**  
Dr. Jeffrey Marbach, Cardiology Resident (Supervisor: Dr. Michel Le May), UOHI |
| 10:10 – 10:25 | O-8 **Sex Differences in Thoracic Aortic Aneurysm Growth: Role of Aortic Stiffness**  
Dr. Kevin Boczar, Cardiology Resident (Supervisor: Thais Coutinho), UOHI |
| 10:25 – 10:40 | O-9 **Utility of Novel Biomarkers in the Prediction of Congestive Kidney Injury Following Cardiac Surgery**  
Mr. Jason Zelt, MD-PhD Candidate (Supervisor: Louise Sun), UOHI |
| 10:40 – 11:10 | **Linkage to Brain & Heart Innovation Hub**  
Chair: Ms. Samantha Sarkar, PhD Candidate, UOHI |
| 10:40 – 10:55 | O-10 **One Size Does Not Fit All: Differential Effects of Cardiac Rehabilitation on Quality of Life in Patients with Obesity compared to Normal Weight**  
Dr. Tasuka Terada, Postdoctoral Fellow (Supervisor: Dr. Jennifer Reed), UOHI |
| 10:55 – 11:10 | O-11 **Heart Failure Induced Depression-Like Behaviour in Ovariectomized Rats is Prevented by Estrogen Replacement**  
Theme 1  
Ms. Fatimah Najjar, MSc Candidate (Supervisor: Dr. Frans Leenen), UOHI |
| 11:10 – 11:25 | Lunch |
| 11:25 – 11:55 | Coralie Lalonde Innovation Award Finalists’ Pitches  
Moderator: Dr. Katey Rayner, Scientist, UOHI  
Chair & Member of Judging Panel: Ms. Coralie Lalonde, CEO, Katsura Investments |
|---|---|
| I-1 Building Blocks to Repair a Broken Heart  
Ms. Justina Pupkaite, PhD Candidate (Supervisor: Dr. Erik Suuronen), UOHI |
| I-2 Infection-fighting Gel for Treatment of Diabetic Foot Ulcers  
Ms. Caitlin Lazurko, MSc Candidate (Supervisor: Dr. Emilio Alarcon), UOHI |
| I-3 Cocooned Stem Cells to Promote Tissue Repair & Regeneration in Heart Disease  
Mr. Nicholas Cober, PhD Candidate (Supervisor: Dr. Duncan Stewart), Ottawa Hospital Research Institute |
| I-4 New Nuclear Scan for Early Diagnosis of Mild Heart Damage from Breast Cancer Treatment  
Dr. Samia Massalha, Fellow in Cardiac Imaging (Supervisors: Dr. Terry Ruddy & Benjamin Chow), UOHI |

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<th>11:55 – 13:00</th>
<th>Award Presentations &amp; Investigator and Trainee of the Year Lectures</th>
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| 11:55 – 12:00 | Announcing the Recipient of the Dr. Robert Roberts Award of Research Excellence & Award Presentation  
Presented by: Dr. Thierry Mesana, CEO & President & Dr. Peter Liu, VP Research & Chief Scientific Officer, UOHI |
| 12:00 – 12:30 | UOHI Investigator of the Year Lecture  
*HIIT-ing Heart Disease with Physical Activity*  
Dr. Jennifer Reed, Scientist, UOHI |
| 12:30 – 12:35 | Presentation of the Coralie Lalonde Innovation Award to the Winner  
Presented by: Ms. Coralie Lalonde, CEO, Katsura Investments |
| 12:35 – 12:40 | UOHI Trainee Committee Awards: Best Participation in the Work-in-Progress Trainee Rounds  
Presented by Dr. Lisa Cotie & Ms. Sandrine Parent, UOHI |
| 12:40 – 13:00 | Ottawa Cardiovascular Research Trainee of the Year Lecture  
*A Tale of Exosomes: What We Know about Macrophage Communication*  
Ms. My-Anh Nguyen, PhD Candidate (Supervisor: Dr. Katey Rayner), UOHI |
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| 13:00 – 14:00 | **KEYNOTE LECTURE**  
*Translational Research in Cardiology: How Clinical Curiosity can lead to Exciting and Potentially Important Research Findings*  
Stanley Nattel, MD, FRCPC, FACC  
Director, Electrophysiology Research Program, Montreal Heart Institute  
Professor of Medicine and Paul-David Chair in Cardiovascular Electrophysiology, University of Montreal |
| 14:00 – 15:30 | **Poster Session & Poster Judging (Track Area)**  
(see page 16 for the List of Posters) |
| 15:30 – 16:15 | **Oral Presentation Session 4**  
*Linkage to Arrhythmias Innovation Hub*  
Chair: Ms. Sandrine Parent, MSc Candidate, UOHI |
| 15:30 – 15:45 | O-12  
**Dual Mechanisms of Cardiac Sodium Channel Inhibition by Wnt Signaling**  
Dr. Aizhu Lu, Postdoctoral Fellow (Supervisor: Dr. Wenbin Liang), UOHI |
| 15:45 – 16:00 | O-13  
**Evaluation of Sympathetic Function with PET ¹¹C-Hydroxyephedrine & Ammonia (¹⁵N-NH₃) in a Canine Pacing Model of Atrial Fibrillation**  
Mr. Robert Miner, PhD Candidate (Supervisor: Robert deKemp), Carleton University & UOHI |
| 16:00 – 16:15 | O-14  
**Evaluation of a Novel Cardioversion Intervention for Atrial Fibrillation: the Ottawa AF Cardioversion Protocol**  
Dr. Daniel Ramirez, Cardiology Resident (Supervisor: Dr. David Birnie), UOHI |
| 16:30 – 16:45 | **Refreshment Break and Networking** |
### Awards Ceremony
Chair: Dr. Erik Suuronen, Co-Chair, Research Day Committee, UOHI

**Awards include:**

- Dr. Yves Marcel Award for Best Basic Science Oral Presentation
- Howard & Doris Polk Award for Best Clinical Science / Bio-behavioural & Population Health Oral Presentation
- Award for Best Basic Science Poster
- AstraZeneca Award for Best Clinical Science / Bio-Behavioural & Population Health Poster
- Awards for Honourable Mentions

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<th>16:45 – 17:00</th>
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| **16:45 – 17:00** | **Awards Ceremony**  
Chair: Dr. Erik Suuronen, Co-Chair, Research Day Committee, UOHI |
| **Awards include:** |  |
| - Dr. Yves Marcel Award for Best Basic Science Oral Presentation |  |
| - Howard & Doris Polk Award for Best Clinical Science / Bio-behavioural & Population Health Oral Presentation |  |
| - Award for Best Basic Science Poster |  |
| - AstraZeneca Award for Best Clinical Science / Bio-Behavioural & Population Health Poster |  |
| - Awards for Honourable Mentions |  |

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<th>17:00 – 17:05</th>
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| **17:00 – 17:05** | **Closing Remarks**  
Dr. Pablo Nery, Chair, Research Day Committee, UOHI |

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<th>17:05 – 17:15</th>
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<tr>
<td><strong>17:05 – 17:15</strong></td>
<td><strong>Poster Tear-Down</strong></td>
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Dr. Stanley Nattel received his M.D. from McGill University in 1974 and undertook Internal Medicine and Clinical Pharmacology training at McGill between 1974 and 1978. He then obtained Cardiology clinical and basic research training at Indiana University and University of Pennsylvania (1978-1981) before joining the faculty at McGill in 1981. In 1987, he transferred to the University of Montreal and Montreal Heart Institute, where he directed the Research Center between 1990 and 2004.

He is presently Paul-David Chair in Cardiovascular Electrophysiology at the University of Montreal, and Director of the Electrophysiology Research Program at the Montreal Heart Institute, where he continues to practice clinical cardiology. He is Editor in Chief of the Canadian Journal of Cardiology and Associate Editor of Cardiovascular Research, and is on the editorial board of a number of other journals including Circulation Research, Circulation Arrhythmia and Electrophysiology, Drugs, JACC, JACC Clinical Electrophysiology, Journal of Molecular and Cellular Cardiology, Journal of Cardiovascular Electrophysiology, Journal of Cardiovascular Pharmacology, and Nature Reviews in Cardiology.

His research focuses on clinically-relevant mechanisms of cardiac bioelectricity, particularly atrial fibrillation, proarrhythmia, cardiac remodeling, ion channel molecular physiology and mechanisms of drug action. His lab uses a wide range of molecular, cellular, whole-animal and theoretical methods to gain insights into clinically-relevant basic mechanisms and identify novel therapeutic targets. He has also been involved in the initiation and conduct of many clinical trials, and has sat on steering committees and participated in or chaired data monitoring and safety committees. He has supervised over 160 research trainees, published over 600 papers in peer-review journals, has an h-index of 125, and is a Fellow of the Royal Society of Canada (Academy of Science), the Royal College of Physicians of Canada, the American College of Cardiology and the Heart Rhythm Society.
Have you heard...? The Institute’s "Ask Me About Clinical Research” campaign, developed in conjunction with Network of Networks (N2), has been launched!

The purpose of this campaign is to:

- Increase public awareness of clinical trials
- Get patients and staff talking about clinical trials so patients can consider clinical trials as a potential option
- Encourage patients to approach staff about clinical trials in order to assist with dispelling any misconceptions & increase access to clinical trial resources
- Increase patient awareness on how they can become a Patient Partner in Research

Visit our booth to get more information on how you can participate in the campaign!
Dr. Jennifer Reed directs the Exercise Physiology and Cardiovascular Health Laboratory at the University of Ottawa Heart Institute (UOHI), and is appointed as an Assistant Professor in the Department of Epidemiology, Faculty of Medicine at the University of Ottawa.

Dr. Reed’s research is focused on understanding the role of exercise in the prevention of heart disease and during the rehabilitation following a cardiac event. She is particularly interested in the role of exercise in the management and treatment of heart rhythm disorders, developing novel exercise training strategies for patients with heart disease, and developing workplace interventions to improve heart health. Dr. Reed’s work spans from basic science to clinical practice and population health, with a focus on women’s heart health.

In only a few short years since establishing her independent research program in late 2013, Dr. Reed has quickly earned national and international recognition. Just in this past year, she was awarded a Canadian Institutes of Health Research (CIHR) Project Grant; a Servier Investigator-Initiated Research Grant; a Heart and Stroke Foundation’s Emerging Research Leader Initiative Award; and an Ontario Early Researcher Award. Dr. Reed is the recipient of a CIHR Clinician Scientist Award, a prestigious grant to recognize research excellence by an early career investigator.

Dr. Reed has published 37 peer-reviewed articles, 20 of which are first-authored. Eight of these articles were published within this past year alone. Notable papers from the last year included a systematic review and meta-analysis, “The Impact of Workplace Physical Activity Interventions on Physical Activity and Cardiometabolic Health among Working-age Women” in the ‘Go Red for Women Issue’ in Circulation: Cardiovascular Quality and Outcomes, and an original study examining the physical activity and cardiovascular health of nurses in the Champlain region of Ontario. The results of the latter have been brought forward to key local, provincial and national stakeholders at the Nurses’ Night Dissemination Event led by Dr. Reed herself.

Dr. Reed serves on grant committees for the Canadian National Transplant Research Program, CIHR Project Scheme Program, and the Health Research Board of the Research Institute in Dublin, Ireland.

Dr. Reed is regularly invited to speak at national and international meetings.
Visit the Berkman Library booth in the poster display (track area) to learn more.

There will be chocolate at the booth!
Ms. My-Anh Nguyen is completing her doctoral study at the University of Ottawa Heart Institute under the tutelage of Dr. Katey Rayner.

Ms. Nguyen’s research is focused on macrophage communication via exosomal transfer of microRNAs during the development of atherosclerosis. Based on the understanding of how macrophages use exosomes to send signals to nearby cells, her research also aims to design nanoparticles that mimic macrophage-derived exosomes to deliver key miRNAs or other therapeutics directly to the atherosclerotic plaque, enabling the development of new strategies to treat heart disease.

Ms. Nguyen is recognized for the excellent research accomplishments already achieved at this early stage of her career. In this past year, Ms. Nguyen published a first-authored paper in Arteriosclerosis, Thrombosis, and Vascular Biology. This work demonstrated that microRNAs derived from extracellular vesicles from atherogenic macrophages may accelerate the development of plaque formation, by decreasing cell migration and promoting macrophage entrapment in the vessel wall. The publication received editorial highlights in the same issue. Ms. Nguyen also co-authored another study published in Circulation Research.

Ms. Nguyen has received travel awards from CIHR and other organizations to present at regional and international scientific meetings. She has presented at the Gordon Research Conference; the Arteriosclerosis, Thrombosis, and Vascular Biology meeting; the Canadian Lipoprotein Conference and have won several best presentation awards for both abstract talks and posters. She has received the University of Ottawa Cardiac Endowment Fund at the Heart Institute Graduate Award; the University of Ottawa Excellence Award in Graduate Studies; and the Ontario Graduate Scholarship in support of her doctoral research.

Ms. Nguyen is also recognized for her leadership in the trainee community. She is a teaching assistant for the undergraduate Biochemistry program. She is involved with the University of Ottawa’s Let’s Talk Science and provided hands-on lab demonstrations to primary and secondary students. She recently served on the UOHI Trainee Committee and led the organization of workshops for trainees. In the laboratory, Ms. Nguyen teaches new trainees the skills and critical thinking concepts needed to succeed in research. She is the go-to-person on er floor. Ms. Nguyen truly embodies the spirit of collaboration, drive, and dedication to research excellence.
**List of Posters: Basic Science**

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<tr>
<th>Poster</th>
<th>Title</th>
<th>Author(s)</th>
<th>Supervisor(s)</th>
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<tr>
<td>P-1</td>
<td>Preliminary development &amp; evaluation of selective MMP-13 radiotracers for imaging of atherosclerosis</td>
<td>Rami Al-Haddad, MSc Candidate, UOHI (Supervisor: Dr. Benjamin Rotstein)</td>
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<td>P-2</td>
<td>Exploring alternate conformations of PCSK9: effects on LDL &amp; LDL receptor binding</td>
<td>Ikhuosh Asikhia, MSc Candidate, UOHI (Supervisor: Ds. Thomas Lagace)</td>
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<tr>
<td>P-3</td>
<td>PCSK9 Mediated Degradation of the LDL Receptor is Influenced by Ca2+ Levels in the Early Endosome</td>
<td>Dr. Curtis Brandt, Postdoctoral Fellow, UOHI (Supervisor: Dr. Thomas Lagace)</td>
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<tr>
<td>P-4</td>
<td>Development of selective PET radiotracers for matrix metalloproteinase-13</td>
<td>Ariel Buchler, BSc Hon Candidate, UOHI (Supervisor: Dr. Benjamin Rotstein)</td>
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<tr>
<td>P-5</td>
<td>Selective impairment in fatty acid oxidation is associated with maladaptive right ventricular remodeling &amp; failure in pulmonary arterial hypertension</td>
<td>Dr. Virgilio Cadette, Postdoctoral Fellow, Ottawa Hospital Research Institute (Supervisor: Dr. Duncan Stewart)</td>
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<tr>
<td>P-6</td>
<td>Spontaneous mutation in Pituitary Tumor Transforming Gene-1 (PTTG1) leads to increased susceptibility to severe pulmonary arterial hypertension</td>
<td>Dr. Ketul Chaudhary, Postdoctoral Fellow, Ottawa Hospital Research Institute (Supervisor: Dr. Duncan Stewart)</td>
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<tr>
<td>P-7</td>
<td>Microencapsulation of endothelial progenitors in matrix-supplemented hydrogels improves cell retention &amp; therapeutic efficacy in pulmonary arterial hypertension</td>
<td>Mr. Nicholas Cober, PhD Candidate, Ottawa Hospital Research Institute (Supervisor: Dr. Duncan Stewart)</td>
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<tr>
<td>P-8</td>
<td>Differences in cardiac image noise for two SPECT camera designs</td>
<td>Ms. Sarah Cuddy-Walsh, PhD Candidate, Carleton University/UOHI (Supervisor: Dr. R. Glenn Wells)</td>
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<td>P-9</td>
<td>Functional relationship of the CARS2 locus to CAD</td>
<td>Ms. Anh-Thu Dang, MSc Candidate, UOHI (Supervisor: Dr. Ruth McPherson)</td>
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<tr>
<td>P-10</td>
<td>Effects of inducible over-expression of Glyoxalase-1 (GLO1) on cardiac function in GATA6 heterozygous mice</td>
<td>Dr. Godwin Dogbevia, Postdoctoral Fellow, UOHI (Supervisor: Dr. Erik Suuronen)</td>
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<td>P-11</td>
<td>Evaluation of Myocardial Apoptosis in Surgically Induced Myocardial Infarction &amp; Ischemia/Reperfusion Mice with Dual-Tracer MicroSPECT</td>
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<td>Mr. Daniel Duan, Technologist, UOHI (Supervisor: Dr. Terrence Ruddy)</td>
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<tr>
<th>P-12</th>
<th>Mechanisms of atheroprotection by the anti-inflammatory mediator Resolvin D1</th>
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<td>Dr. AnneClaire Duchez, Postdoctoral Fellow, UOHI (Supervisor: Dr. Katey Rayner)</td>
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<tr>
<th>P-13</th>
<th>Combined methylglyoxal scavenger &amp; collagen hydrogel therapy improves function of the infarcted heart</th>
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<tr>
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<td>Cagla Eren-Cimenci, PhD Candidate, UOHI (Supervisor: Dr. Erik Suuronen)</td>
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<tr>
<th>P-14</th>
<th>Identifying the predominant subtype &amp; genetic determinants of macrophage lipophagy</th>
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<tr>
<td></td>
<td>Mr. Garrett Fairman, BS Hon Candidate, UOHI (Supervisor: Dr. Mireille Ouimet)</td>
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<th>P-15</th>
<th>Wnt signaling regulates calcium channels in cardiomyocytes</th>
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<td>Ms. Kaya Gaudet, MSc Candidate, UOHI (Supervisor: Dr. Wenbin Liang)</td>
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<th>P-16</th>
<th>Unveiling GATA6 multicellular control of Sinoatrial node development &amp; function</th>
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<tr>
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<td>Dr. Lara Gharibeh, University of Ottawa (Supervisor: Dr. Mona Nemer)</td>
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<tr>
<th>P-17</th>
<th>Collagen Age-related expression of matricellular proteins Nov &amp; Wisp1 &amp; their role in cardiac repair &amp; remodelling</th>
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<tr>
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<td>Ms. Danielle Giroux, MSc Candidate, UOHI (Supervisor: Dr. Erik Suuronen)</td>
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<tr>
<th>P-18</th>
<th>Endothelial-Targeted Diphtheria Toxin Mediated Cell Injury Leads to Pulmonary Arterial Hypertension Followed by Rapid Repair &amp; Resolution</th>
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<tr>
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<td>Dr. Rafael Godoy, Postdoctoral Fellow, Ottawa Hospital Research Institute (Supervisor: Dr. Duncan Stewart)</td>
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<th>Methylglyoxal Effects in Cell Therapy for Myocardial Infarction</th>
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<td>Mayte Gonzalez-Gomez, MSc Candidate, UOHI (Supervisor: Dr. Erik Suuronen)</td>
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<th>P-20</th>
<th>Endogenous Expression of Translationally Controlled Tumour Protein Regulates Growth of Pulmonary Microvascular Endothelial Cells</th>
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<td>Dr. Miriel Ho, Postdoctoral Fellow, Ottawa Hospital Research Institute (Supervisor: Dr. Duncan Stewart)</td>
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</table>
P-21 Reconstructing the Tree of Life: Co-Delivery of Induced Pluripotent Stem Cell-derived Endothelial & Smooth Muscle Cells Enhances Recellularization of Decellularized Lung Scaffolds
Dr. Mirabelle Ho, Postdoctoral Fellow, Ottawa Hospital Research Institute (Supervisor: Dr. Duncan Stewart)

P-22 Synthesis of selective MMP-13 inhibitor for radiolabeling
Abdillahi Kadir Abdi, Undergraduate Research Student, UOHI (Supervisor: Dr. Benjamin Rotstein)

P-23 Essential role for vascular smooth muscle cell Gata5 in aortic valve formation
Dr. Alice Lau, Postdoctoral Fellow, University of Ottawa (Supervisor: Dr. Mona Nemer)

P-24 Collagen Hydrogels for the Treatment of Diabetic Foot Ulcers
Ms. Caitlin Lazurko, MSc Candidate, UOHI (Supervisor: Dr. Emilio Alarcon)

P-25 Effects of Exercise Training & TrkB blockade on Cardiac BDNF-TrkB signaling post Myocardial Infarction in Rats
Dr. Heow Won Lee, PhD Candidate, UOHI (Supervisor: Dr. Frans Leenen)

P-26 Innate immune nod1/rip2 signaling is essential for cardiac hypertrophic response with a surprising critical interaction with mitochondrial danger activator
Dr. Han-Bin Lin, Postdoctoral Fellow, UOHI (Supervisor: Dr. Peter Liu)

P-27 Rhodium-catalyzed coupling of organozinc halides and isocyanates for preparing carbon-11 radiolabeled amides
Braeden Mair, BSc Hon Candidate, UOHI (Supervisor: Dr. Benjamin Rotstein)

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(Supervisor: Dr. Emilio Alarcon)

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(Supervisor: Dr. Darryl Davis)

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Dr. Luciana Moneira, Postdoctoral Fellow, Ottawa Hospital Research Institute
(Supervisors: Drs. Shirley Mei & Duncan Stewart)

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Ms. Sandrine Parent, MSc Candidate, UOHI
(Supervisor: Dr. Darryl Davis)

Non-toxic Chemically Crosslinked Collagen Scaffolds for Cell Engraftment
Ms. Justina Pupkaite, PhD Candidate, UOHI
(Supervisor: Dr. Erik Suuronen)

New rubidium-82 generator efficiency improves over time
Ms. Jennifer Renaud, Research Analyst, UOHI
(Supervisor: Dr. Rob deKemp)

Eating up the plaque: Investigating the metabolism of foam cell lipid droplets
Ms. Sabrina Robichaud, Undergraduate Research Student, UOHI
(Supervisor: Dr. Mireille Ouimet)

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Ms. Samantha Sarkar, PhD Candidate, UOHI
(Supervisor: Dr. Thomas Lagace)

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Uzair Sayani, MSc Candidate, UOHI
(Supervisor: Dr. Benjamin Rotstein)

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Dr. Samia Massalha, Cardiac Imaging Fellow, UOHI
(Supervisors: Drs. Terrence Ruddy & Benjamin Chow)

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Dr. Andrew Moeller, Clinical Fellow, UOHI
(Supervisor: Dr. Lisa Mielniczuk)

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Dr. Janet Ngu, Cardiac Surgery Resident, UOHI
(Supervisor: Dr. Louise Sun)

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(Supervisor: Dr. Jennifer Reed)

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(Supervisors: Drs. Rob deKemp & Rob Beanlands)
Simplified Estimation of Myocardial Flow Reserve using Stress/Rest Activity Ratios with Nitrogen-13-Ammonia and Rubidium-82 PET

Mr. Kai Yi Wu, MD Candidate, UOHI
(Supervisors: Drs. Rob deKemp & Rob Beanlands)

Fluorine-18 LMI1195 Positron Emission Tomography Provides Accurate Measure of Cardiac Sympathetic Innervation Compared to Carbon-11 Hydroxyephedrine

Mr. Jason Zelt, MD-PhD Candidate, UOHI
(Supervisor: Dr. Rob Beanlands)
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RESEARCH DAY SPEAKERS
Dr. Stanley Nattel, Montreal Heart Institute.
Drs. Thierry Mesana, CEO & President; Peter Liu, VP Research & Chief Scientific Officer; Pablo Nery; Erik Suuronen; Jennifer Reed & Ms. My-Anh Nguyen (UOHI).

INNOVATION AWARD REVIEWERS & JUDGES & SESSION MODERATOR
Chair: Ms. Coralie Lalonde, CEO, Katsura Investments. Judges: Ms. Coralie Lalonde; Mr. Richard Deboer; Mr. Simon Kennedy, Deputy Minister, Health Canada; Drs. Katey Rayner & Derek So (UOHI). Session Moderator: Dr. Katey Rayner (UOHI). Innovation Award Abstract Reviewers: Drs. Darryl Davis & Katey Rayner (UOHI).
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ORAL PRESENTATION JUDGES
Drs. Andrew Crean, Thomas Lagace, Erin Mulvihill, Pablo Nery, Erik Suuronen, Heather Tulloch (UOHI).

POSTER JUDGES
Basic Science: Dr. Lynn Megeney (Ottawa Hospital Research Institute); Dr. Rebecca Thornhill, The Ottawa Hospital; Drs. Ali Ahmadi, Rob deKemp, Katsuhico Hosoyama, Han Kim, Wenbin Liang, Erin Mulvihill, Katey Rayner, David Smyth, Sebastien Soubeyrand, Erik Suuronen, Glenn Wells, & Branka Vulesevic (UOHI). Clinical Science and Bio-behavioural & Population Health: Drs. Andrew Crean, Jodi Edwards, Mehrdad Golian, David Messika-Zeitoun, Pablo Nery, & Jennifer Reed (UOHI).

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