32nd ANNUAL

Ottawa Cardiovascular Research Day

May 13, 2019

Foustanellas Auditorium
University of Ottawa Heart Institute
The Ottawa Cardiovascular Research Day Committee gratefully acknowledges the support of our event partners:

**SILVER LEVEL SPONSOR**

AKCEA THERAPEUTICS

**BRONZE LEVEL SPONSOR**

AstraZeneca

**CONFERENCE SUPPORTERS**

The Polk Family Foundation

Ms. Coralie Lalonde
**Contents**

Welcome .................................................................................................................. 3  
Planning Committee .................................................................................................. 4  
Program Overview .................................................................................................... 5  
Keynote Speaker ........................................................................................................ 9  
Ottawa Region Trainee of the Year .......................................................................... 10  
Poster Presentations: Basic Science ....................................................................... 11  
Poster Presentations: Clinical Science .................................................................... 14  
Special Thanks ........................................................................................................... 19
On behalf of the planning committee, it is with great pleasure that we welcome you to the 32nd Annual Ottawa Cardiovascular 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 the following program highlights:

- Keynote lecture by Dr. Milica Radisic, esteemed Biomaterials and Biomedical Engineering Researcher and Professor at the University of Toronto

- Ottawa Region's Cardiovascular Trainee of the Year Lecture given by Dr. Janet Ngu, Cardiac Surgery Resident, Division of Cardiac Surgery

- The Coralie Lalonde Innovation Award Finals, 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!

- Investigator of the Year and Roberts Awards have been moved to the Research Celebration annually held in December

With 11 abstract talks and 62 posters, we are confident the Ottawa Cardiovascular Research Day is a great venue to network with 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 all sponsors for their generous support: the Polk Family Foundation, Ms. Coralie Lalonde, the University of Ottawa Faculty Of Medicine, and our Silver Level Sponsor: Akcea Therapeutics, and Bronze Level Sponsor: AstraZeneca.

Sincerely,

Erik Suuronen, PhD  Sharon Chih, MBBS, PhD, FRACP
Chair, Research Day Committee  Co-Chair, Research Day Committee
Planning Committee

Erik Suuronen, PhD
Chair, Research Day
Scientist, Cardiovascular Tissue Engineering Laboratory, UOHI | Director, Biomaterials and Regeneration Program, Division of Cardiac Surgery, UOHI | Associate Professor, Department of Surgery & Department of Cellular and Molecular Medicine, University of Ottawa

Sharon Chih, MBBS, PhD, FRACP
Co-Chair, Research Day
Advanced Heart Failure & Transplantation Cardiologist, UOHI | Medical Director, Mechanical Circulatory Support Program, UOHI | Assistant Professor, Department of Medicine, University of Ottawa

Cassie Roeske, MSc
Organizer, Research Day
Research Resource Officer | Research Services, UOHI

Anne-Claire Duchez, PhD
Postdoctoral Fellow, UOHI

Richard Jung
MD/PhD Candidate, UOHI

AnhThu Dang
PhD Candidate, UOHI

Caitlin Lazurko
MSc Candidate, UOHI

Sabrina Robichaud
MSc Candidate, UOHI

Trainee Committee
UOHI
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 – 8:00</td>
<td>Registration, Morning Snack &amp; Poster Setup</td>
</tr>
<tr>
<td>8:00 – 8:15</td>
<td><strong>Opening Remarks</strong>&lt;br&gt;Dr. Erik Suuronen, Chair, Research Day Committee, UOHI</td>
</tr>
<tr>
<td></td>
<td><strong>Chief Scientific Officer Address</strong>&lt;br&gt;Dr. Peter Liu, VP Research &amp; Chief Scientific Officer, UOHI</td>
</tr>
<tr>
<td></td>
<td><strong>Welcome Address</strong>&lt;br&gt;Dr. Thierry Mesana, CEO &amp; President, UOHI</td>
</tr>
<tr>
<td>8:15 – 9:30</td>
<td><strong>Oral Presentation Session #1</strong>&lt;br&gt;<em>Linkage to ORACLE Themes: Precision Medicine &amp; Big Data &amp; Artificial Intelligence</em></td>
</tr>
<tr>
<td></td>
<td><strong>Chair:</strong> Dr. Mohammad Al-Khalaf, Postdoctoral Fellow, UOHI</td>
</tr>
</tbody>
</table>

**O-1** Combining aortic size with measures of aortic stiffness and pulsatile hemodynamics enhances prediction of future thoracic aortic aneurysm expansion  
Dr. Tina Zhu, Clinical Fellow, UOHI  
Supervisor: Dr. Thais Coutinho

**O-2** Persistent LV Mechanical Dyssynchrony Portends a Poor Prognosis Post CRT: a RAFT Substudy  
Dr. Aws Almufleh, Cardiology Resident, UOHI,  
Supervisor: Dr. Gary Small

**O-3** Regulation of voltage-gated Na+ current by Wnt signalling in healthy and Brugada Syndrome human cardiomyocytes  
Dr. Aizhu Lu, Postdoctoral Fellow, UOHI  
Supervisor: Dr. Wenbin Liang

**O-4** The Role of Irx5 in Establishing Ventricular Transmural Gradients  
Ms. Yena Oh, PhD Candidate, UOHI  
Supervisor: Dr. Han Kim

**O-5** Functional relationship of CARS2 locus to Coronary Artery Disease  
Ms. AnhThu Dang, PhD Candidate, UOHI  
Supervisor: Dr. Ruth McPherson
<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 10:15</td>
<td>Health Break</td>
</tr>
<tr>
<td>10:15 – 11:00</td>
<td>Poster Session &amp; Poster Judging #1</td>
</tr>
<tr>
<td>10:15 – 11:00</td>
<td>Coralie Lalonde Innovation Award Finalists’ Pitches</td>
</tr>
<tr>
<td>Moderator &amp; Judge:</td>
<td>Dr. Mireille Ouimet</td>
</tr>
<tr>
<td>Chair &amp; Member of Judging Panel:</td>
<td>Ms. Coralie Lalonde, CEO, Katsura Investments</td>
</tr>
<tr>
<td>I-1</td>
<td>Correcting patient motion during cardiac PET imaging using PeTrack</td>
</tr>
<tr>
<td>Mr. Spencer Manwell, PhD Candidate, Carleton University</td>
<td>Supervisor: Dr. Rob deKemp</td>
</tr>
<tr>
<td>I-2</td>
<td>How a lipid could be a therapy of a cardiovascular disease called atherosclerosis</td>
</tr>
<tr>
<td>Dr. Anne-Claire Duchez, Postdoctoral Fellow, UOHI</td>
<td>Supervisor: Dr. Katey Rayner</td>
</tr>
<tr>
<td>I-3</td>
<td>A novel strategy to correct the key defect causing sudden deaths in Brugada Syndrome patients</td>
</tr>
<tr>
<td>Dr. Aizhu Lu, Postdoctoral Fellow, UOHI</td>
<td>Supervisor: Dr. Wenbin Liang</td>
</tr>
<tr>
<td>I-4</td>
<td>MicroRNA Biosignatures in Cardiac Allograft Vasculopathy</td>
</tr>
<tr>
<td>Dr. Aws Almufleh, Cardiology Resident, UOHI</td>
<td>Supervisor: Dr. Sharon Chih</td>
</tr>
<tr>
<td>11:00 – 11:25</td>
<td>Lunch</td>
</tr>
<tr>
<td>11:25 – 11:55</td>
<td>Ottawa Cardiovascular Research Trainee of the Year Lecture</td>
</tr>
<tr>
<td>A Cardiac Surgery &amp; Research Trainee: Lessons I’ve Learned Along the Journey</td>
<td></td>
</tr>
<tr>
<td>Dr. Janet Ngu, Cardiac Surgery Resident, UOHI</td>
<td>Chair: Dr. Peter Liu, VP Research &amp; Chief Scientific Officer, UOHI</td>
</tr>
<tr>
<td>11:55 – 12:00</td>
<td>Presentation of the Coralie Lalonde Innovation Award to the Winner</td>
</tr>
<tr>
<td>Presented by:</td>
<td>Ms. Coralie Lalonde, CEO, Katsura Investments</td>
</tr>
</tbody>
</table>
**KEYNOTE LECTURE**

*Organ-on-a-Chip Engineering & Injectable Tissues*

**Milica Radisic, PhD**  
Professor and Canada Research Chair Tier 2  
Institute of Biomaterials and Biomedical Engineering, University of Toronto  
Principal Investigator, Laboratory for Functional Tissue Engineering, Toronto General Hospital Research Institute

*Chair: Dr. Erik Suuronen, Chair, Research Day Committee, UOHI*

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 12:00 – 13:00 | **KEYNOTE LECTURE**  
*Organ-on-a-Chip Engineering & Injectable Tissues*  
Milica Radisic, PhD  
Professor and Canada Research Chair Tier 2  
Institute of Biomaterials and Biomedical Engineering, University of Toronto  
Principal Investigator, Laboratory for Functional Tissue Engineering, Toronto General Hospital Research Institute  
*Chair: Dr. Erik Suuronen, Chair, Research Day Committee, UOHI* |
| 13:00 – 14:00 | **POSTER SESSION & POSTER JUDGING #2** |
| 14:00 – 14:45 | **ORAL PRESENTATION SESSION #2**  
*Linkage to ORACLE Theme: Discovery & Translational Innovations*  
*Chair: Ms. AnhThu Dang, PhD Candidate, UOHI* |
| 14:45 – 15:30 | **ORAL PRESENTATION SESSION #3**  
*Linkage to ORACLE Theme: Healthy Diverse Populations*  
*Chair: Ms. Natasha Trzaskalski, PhD Candidate, UOHI* |

- **O-6**  
  Anti-inflammatory lipid mediator resolvin D1 decreases regulated cell death necroptosis in atherosclerosis  
  Dr. Anne-Claire Duchez, Postdoctoral Fellow UOHI  
  Supervisor: Dr. Katey Rayner

- **O-7**  
  Infarcted hearts treated with methylglyoxal scavenger-loaded collagen hydrogel exhibit less inflammation greater vascularity and improved function  
  Ms. Cagla Eren Cimenci, PhD Candidate, UOHI  
  Supervisor: Dr. Erik Suuronen

- **O-8**  
  Regulation of Glucose Metabolism via the Intra-Islet Dipeptidyl Peptidase 4 – Incretin Axis  
  Ms. Evgenia Fadzeyava, MSc Candidate, UOHI  
  Supervisor: Dr. Erin Mulvihill

- **O-9**  
  The Effect Of A Single Bout Of Aerobic Exercise On Arterial Stiffness And Central Hemodynamics In Adults With Diabetes: A Randomized Controlled Cross-Over Design Study  
  Dr. Kimberley Way, Postdoctoral Fellow, UOHI  
  Supervisor: Dr. Jennifer Reed

- **O-10**  
  The use of placenta pathology to identify women at high-risk of cardiovascular disease following preeclampsia  
  Ms. Erika Mery, BSc Candidate, University of Ottawa  
  Supervisor: Dr. Shannon Bainbridge
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:30 – 16:15</td>
<td>Refreshment Break and Networking Reception</td>
</tr>
<tr>
<td>16:15 – 16:30</td>
<td>Awards Ceremony</td>
</tr>
<tr>
<td>Chair: Dr. Sharon Chih, Co-Chair, Research Day Committee, UOHI</td>
<td>Awards include:</td>
</tr>
<tr>
<td></td>
<td>- Dr. Yves Marcel Award for Best Basic Science Oral Presentation</td>
</tr>
<tr>
<td></td>
<td>- Howard &amp; Doris Polk Award for Best Clinical Science / Bio-behavioural &amp; Population Health Oral Presentation</td>
</tr>
<tr>
<td></td>
<td>- Award for Best Basic Science Poster</td>
</tr>
<tr>
<td></td>
<td>- Award for Best Clinical Science / Bio-Behavioural &amp; Population Health Poster</td>
</tr>
<tr>
<td></td>
<td>- Awards for Honourable Mentions</td>
</tr>
<tr>
<td>16:30 – 16:35</td>
<td>Closing Remarks</td>
</tr>
<tr>
<td></td>
<td>Dr. Erik Suuronen, Chair, Research Day Committee, UOHI</td>
</tr>
<tr>
<td>16:35 – 16:50</td>
<td>Poster Tear-Down</td>
</tr>
</tbody>
</table>
Dr. Milica Radisic obtained her B.Eng. from McMaster University and Ph.D. from the Massachusetts Institute of Technology. She is a Fellow of the Royal Society of Canada-Academy of Science, Canadian Academy of Engineering and the American Institute for Medical and Biological Engineering, and has received numerous awards and fellowships including MIT Technology Review Top 35 Innovators Under 35. Dr. Radisic was a recipient of the Professional Engineers Ontario-Young Engineer Medal in 2011, Engineers Canada Young Engineer Achievement Award in 2012, Queen Elizabeth II Diamond Jubilee Medal in 2013 and NSERC E.W.R Steacie Fellowship in 2014.

The long-term objective of Dr. Radisic’s research is to enable cardiovascular regeneration through tissue engineering and development of new biomaterials. Her research interests also include microfluidic cell separation and development of in vitro models for drug testing, and her research findings have been presented in over 160 research papers, reviews and book chapters with h-index of 54 and over 10,000 citations. Currently, Dr. Radisic holds research funding from CIHR, NSERC, CFI, ORF, NIH, and the Heart and Stroke Foundation.

She is also the Associate Chair-Research for the Department of Chemical Engineering and Applied Chemistry at the University of Toronto and Director of the NSERC CREATE Training Program in Organ-on-a-Chip Engineering and Entrepreneurship.

Dr. Radisic is an Associate Editor for ACS Biomaterials Science & Engineering, and a member of the Editorial Board of Tissue Engineering, Advanced Drug Delivery Reviews and Regenerative Biomaterials. She serves on review panels for Canadian Institutes of Health Research and the National Institutes of Health, and is actively involved with BMES (Cardiovascular Track Chair in 2013 and 2014) and TERMIS-AM (Council member, Chair of the Membership Committee). Dr. Radisic was a co-organizer of a 2017 Keystone Symposium, “Engineered Cells and Tissues as Platforms for Discovery and Therapy” and is a co-founder of a New York-based company TARA Biosystems that uses human engineered heart tissues in drug development and safety testing for major pharmaceutical companies. Dr. Radisic serves on the Board of Directors for Ontario Society of Professional Engineers and TARA Biosystems.
Dr. Janet Ngu is a final-year Cardiac Surgery Resident at the University of Ottawa Heart Institute (UOHI). Dr. Ngu had a tremendous year in 2018-19, where her research success was exemplified by several papers published in high impact, peer reviewed specialty journals. Of note was a first-authored paper in the *European Journal of Cardiothoracic Surgery* describing short and long term outcomes of bilateral internal thoracic artery skeletonization in coronary artery bypass surgery. As the junior principal author of the study, Dr. Ngu led the design of the research and made key contributions to many aspects of the project including complex data analysis. It was this project that led her to the Young Investigator Award at the European Association of Cardio-Thoracic Surgery Annual Meeting in Vienna. At the Canadian Cardiovascular Congress in the fall of 2018, Dr. Ngu was recognized with the prestigious Paul Cartier Resident Award; this honour is presented to a resident who has demonstrated the highest degree of research accomplishment during their training and a great potential for a distinguished career in cardiac surgery research.

Dr. Ngu mentors junior trainees and is involved with undergraduate medical student and cardiac surgery resident boot camps. She presently supervises an anesthesiology resident and a medical student; serves on the Cardiac Surgery Residency Program Recruiting Committee; and stood on the UOHI Board of Directors' Quality of Care Committee for the last 4 years. She has served as a reviewer for the Collins Surgical Research Day, the Canadian Cardiovascular Congress Abstract Review Committee, and the *Journal of Thoracic Surgery*. Dr. Ngu is a member of the International Society for Minimally Invasive Cardiothoracic Surgery, Canadian Cardiovascular Society, Canadian Society of Cardiovascular Surgeons, and College of Physicians & Surgeons of Ontario.

Dr. Ngu has published 21 peer reviewed papers in high impact journals including *Circulation* and the *Journal of Thoracic Cardiovascular Surgery*. She has presented 21 abstracts at local, national, and international conferences, and written a book chapter on Minimally Invasive Coronary Artery Bypass Grafting Surgery.

Dr. Ngu’s success to date is a testament to her dedication in balancing research and clinical training demands and overcoming challenges. In 2017, Dr. Ngu was interviewed on national television by CTV when a segment featured the inspiring story of Dr. Ngu who is continuing to overcome enormous obstacles to achieve her goals, including surmounting her hearing impairment using her gift of enhanced observation - a striking quality that sets her apart from others. Dr. Ngu is a leader and an inspiration for us all, having dedicated her life toward mending hearts and saving lives.
Poster Presentations: Basic Science

P-1 Preliminary Evaluation of Matrix Metalloproteinase-13 as a Target for Imaging Atherosclerosis
Mr. Rami Al Haddad, MSc Candidate, UOHI
Supervisor: Dr. Benjamin Rotstein

P-2 DNA Damage Activates Inflammation via the cGAS-STING Pathway Inducing Cardiac Remodeling and Senescence
Dr. Mohammad Al-Khalaf, Postdoctoral Fellow, UOHI
Supervisor: Dr. Peter Liu

P-3 Kernel-Based Dynamic Cardiac PET Image Reconstruction of C-11-Hydroxyephedrine
Ms. Zahra Ashouri, PhD Candidate, UOHI
Supervisor: Dr. Robert deKemp

P-4 Exploring alternate conformations of PCSK9: effects on LDL and LDL receptor binding
Mr. Ikhuoshio Asikhia, MSc Candidate, UOHI
Supervisor: Dr. Thomas Lagace

P-5 The Role of Human miR1908-5p on Cholesterol Metabolism
Ms. Kaitlyn Beehler, MSc Candidate, UOHI
Supervisor: Dr. Ruth McPherson

P-6 Regulation of necrosome components by microRNAs
Ms. Mary Lynn Cottee, MSc Candidate, UOHI
Supervisor: Dr. Katey Rayner

P-7 Understanding the role of mitochondria fusion and fission in macrophage polarization through the use of microRNAs
Mr. Shan Dhaliwal, Undergraduate Student, UOHI
Supervisor: Dr. Katey Rayner

P-8 Effects of Glyoxalase-1 (GLO1) over-expression on cardiac function in GATA6 heterozygous mice
Dr. Godwin Dogbevia, Postdoctoral Fellow, UOHI
Supervisor: Dr. Erik Suuronen

P-9 Identifying the genetic determinants and autophagic forms of macrophage lipophagy
Mr. Garrett Fairman, MSc Candidate, UOHI
Supervisor: Dr. Mireille Ouimet

P-10 Imaging Valvular Matrix Remodeling to Predict Progression of Aortic Stenosis and CAVD
Mr. Gedaliah Farber, MSc Candidate, UOHI
Supervisor: Dr. Benjamin Rotstein

P-11 Wnt Signaling Inhibits T-Type Calcium Channels in Cardiomyocytes
Ms. Kaya Gaudet, MSc Candidate, UOHI
Supervisor: Dr. Wenbin Liang
Role of Tbx5 in proliferation and differentiation of skeletal muscle cells
Ms. Massomeh Sheikh-Hassani, PhD Candidate, University of Ottawa
Supervisor: Dr. Mona Nemer

Role of GLP-1R and GLP-2R signaling in intestinal nutrient absorption
Mr. Antonio Hanson, Undergraduate Student, University of Ottawa
Supervisor: Dr. Erin Mulvihill

A collagen-based patch containing electroconductive nanogold for repair of the infarcted heart
Dr. Katsuhito Hosoyama, Postdoctoral Fellow, UOHI
Supervisors: Drs. Erik Suuronen & Emilio Alarcon

Absence of Heat Shock Factor-1 modulates Survival and Inflammation Post-Myocardial Infarction
Ms. Supriya Hota, MSc Candidate, University of Ottawa
Supervisor: Dr. Peter Liu

Engineered modification of nanoporous gel microcapsules for optimized treatment of diseased cardiovascular tissue
Mr. Erik Jacques, Research Assistant, UOHI
Supervisor: Dr. Emilio Alarcon

Hepatic Inflammation and Kupffer Cell Apoptosis Stimulate Shedding of DPP4
Ms. Natasha Jeraj, Undergraduate Student, University of Ottawa
Supervisor: Dr. Erin Mulvihill

Multilayered Hybrid Biomaterial for the Treatment of Diabetic Foot Ulcers
Ms. Caitlin Lazurko, MSc Candidate, University of Ottawa
Supervisor: Dr. Emilio Alarcon

Clodronate-induced Kupffer Cell Apoptosis increases Circulating DPP4
Ms. Cassie Locatelli, Undergraduate Student, University of Ottawa
Supervisor: Dr. Erin Mulvihill

Wnt signaling inhibits cardiac Na+ current by direct and indirect suppression of Scn5a gene expression
Dr. Aizhu Lu, Postdoctoral Fellow, UOHI
Supervisor: Dr. Wenbin Liang

Whole-body motion correction in cardiac PET/CT using Positron Emission Tracking: a phantom validation study
Mr. Spencer Manwell, PhD Candidate, Carleton University
Supervisor: Dr. Rob deKemp

Biomimetic photoactivated materials for tissue repair
Dr. Christopher McTiernan, Postdoctoral Fellow, UOHI
Supervisor: Dr. Emilio Alarcon

Remotely Activated Bio-responsive peptide based matrices for soft tissue repair
Dr. Marcelo Munoz, Postdoctoral Fellow, UOHI
Supervisor: Dr. Emilio Alarcon

Collagen Hydrogel Therapy Post-MI: Repeated Injections Vs One Injection
Ms. Justina Pupkaite, PhD Candidate, UOHI
Supervisor: Dr. Erik Suuronen
Wnt Activator 6-bromoindrubin-3oxime Enhances Explant Derived Cells Proliferation and Post-Ischemic Cardiac Repair in Adult Murine Hearts
Ms. Ola Qassim, MSc Candidate, UOHI
Supervisor: Dr. Darryl Davis

Knockdown of the Mixed Lineage Kinase Domain-Like Protein (MLKL) Enhances Extramedullary Hematopoiesis to Increase Atherosclerosis
Dr. Adil Rasheed, Postdoctoral Fellow, UOHI
Supervisor: Dr. Katey Rayner

Eating Up the Plaque: Foam Cell Lipid Droplet Catabolism
Ms. Sabrina Robichaud, MSc Candidate, UOHI
Supervisor: Dr. Mireille Ouimet

Automated Synthesis and Validation of [18F]mFBG for Cardiac Sympathetic Denervation Imaging
Mr. Uzair Sayani, MSc Candidate, UOHI
Supervisor: Dr. Benjamin Rotstein

Collagen-based injectable hydrogels for treatment of myocardial infarction
Dr. Veronika Sedlakova, Postdoctoral Fellow, UOHI
Supervisor: Dr. Erik Suuronen

Mitochondrial fission and fusion in inflammatory macrophage polarization: role in atherosclerosis
Ms. Leah Susser, MSc Candidate, UOHI
Supervisors: Drs. Katey Rayner & Mireille Khacho

Identification of Novel Natural Substrates of Dipeptidyl Peptidase-4 in Cardiovascular Disease
Ms. Natasha Aleksandra Trzaskalski, PhD Candidate, UOHI
Supervisor: Dr. Erin Mulvihill

A Deletion Polymorphism in Interferon Regulatory Factor 2 Binding Protein 2 that Confers Risk for Coronary Atherosclerosis Disrupts Binding of RNA-binding Proteins Following Innate Immune Activation
Mr. Ragnar Vilmundarson, PhD Candidate, UOHI
Supervisor: Dr. Alexandre Stewart

Wnt5a overexpression leads to action potential prolongation in adult rat cardiomyocytes
Mr. Jerry Wang, MSc Candidate, UOHI
Supervisor: Dr. Wenbin Liang

Beta Receptor Blockade Fails to Recover Ventricular Function Despite Increased Pre-synaptic Sympathetic Nervous System Function in Experimental Pulmonary Arterial Hypertension.
Mr. Jason Zelt, PhD Candidate, UOHI
Supervisor: Dr. Lisa Mielniczuk

GATA6-dependent Sinoatrial Node dysfunction predisposes to Atrial Fibrillation
Ms. Lara Gharibeh, Postdoctoral Fellow, University of Ottawa
Supervisor: Dr. Mona Nemer
P-35  MicroRNA Biosignatures in Cardiac Allograft Vasculopathy
Dr. Aws Almufleh, Resident, UOHI
Supervisor: Dr. Sharon Chih

P-36  Appropriate versus inappropriate de-escalation of P2Y12 inhibitor therapy post percutaneous coronary intervention: a retrospective cohort study.
Dr. Quinton Barry, Resident, UOHI
Supervisor: Dr. Derek So

P-37  Measures of Aortic stiffness Central Blood Pressure and Pulsatile Arterial Load Predict Future Thoracic Aortic Aneurysm Growth: Results from a Prospective Cohort Study
Dr. Kevin Boczar, Resident, UOHI
Supervisor: Dr. Thais Coutinho

P-38  Patient and spousal caregiver quality of life after a cardiac event and cardiac rehabilitation
Dr. Karen Bouchard, Postdoctoral Fellow, UOHI
Supervisor: Dr. Heather Tulloch

P-39  Do the DAPT and precise-DAPT scores provide concordant recommendations for duration of P2Y12 inhibitor treatment after percutaneous coronary intervention?
Dr. Rene Boudreau, Resident, University of Ottawa
Supervisor: Dr. Derek So

P-40  Comparing Outcomes Following 1 Year of Dual Antiplatelet Therapy in Patients with High and Low PRECISE-DAPT Scores
Dr. Rene Boudreau, Resident, University of Ottawa
Supervisor: Dr. Derek So

P-41  Examining the relationship between gender-role orientation and clinical outcomes in patients with coronary artery disease enrolled in cardiac rehabilitation
Dr. Daniele Chirico, Postdoctoral Fellow, UOHI
Supervisor: Dr. Jennifer Reed

P-42  Coronary artery calcium detection using oncology 18F-FDG PET/ CT scans predicts cardiac events in cancer survivors.
Ms. Huda El Mais, Clinical Research Coordinator, UOHI
Supervisor: Dr. Gary Small

P-43  Evaluating the Chest Pain Evaluation Protocol at The Ottawa Hospital
Dr. Angel Yi Nam Fu, Resident, The Ottawa Hospital
Supervisors: Drs. Chris Johnson & Nadine Gauthier

P-44  Bleeding and ischemic outcomes in patients on concurrent warfarin or direct oral anticoagulants with P2Y12 inhibitor post percutaneous coronary intervention: findings in a real world cohort
Dr. Angel Yi Nam Fu, Resident, The Ottawa Hospital
Supervisor: Dr. Derek So
P-45 Peri-operative and long-term morbidity and mortality for elderly patients undergoing thoracic aortic surgery  
Dr. Ming Hao Guo, Resident, UOHI  
Supervisor: Dr. Munir Boodhwani

P-46 Single versus Multiple Arterial Revascularization in Patients with Reduced Renal Function: Long-Term Outcome Comparisons in 23,406 CABG patients from Ontario Canada.  
Dr. Yukihiro Hayatsu, Clinical Fellow, UOHI  
Supervisor: Dr. Marc Ruel

P-48 Sex Differences in Long-Term Survival After Major Cardiac Surgery: A Population-Based Cohort Study  
Ms. Amy Johnston, Research Methodologist, UOHI  
Supervisor: Dr. Louise Sun

P-49 Characterization of patients readmitted to the Cardiac Surgery Intensive Care Unit  
Ms. Hanah Lamothe-Kipnes, MD Candidate, University of Ottawa  
Supervisor: Dr. Vynka Lash

P-50 Utility of In-Patient Telemetry for Subclinical Arrhythmia  
Mr. Brennan Sai Hin Mao, MD Candidate, UOHI  
Supervisor: Dr. Calum Redpath

P-51 The Diagnostic Accuracy of Focused Cardiac Ultrasound: A Systematic Review & Meta-analysis  
Dr. Jeffrey Marbach, Resident, UOHI  
Supervisor: Dr. Benjamin Hibbert

P-52 Strategies to Optimize Post-Operative Atrial Fibrillation (STOP AFib) Reduces New-Onset Atrial Fibrillation in Patients Undergoing Elective Cardiac Surgery  
Mr. Adam Merlo, MD Candidate, UOHI  
Supervisor: Dr. Diem Tran

P-53 Cardiovascular Risk Assessment in Pilots  
Dr. Andrew Mulloy, Resident, University of Ottawa  
Supervisor: Dr. Andreas Wielgosz

P-54 Impact of revascularization versus medical therapies on left ventricular functional recovery in patients with reduced ejection fraction and coronary artery disease: A systematic review & network meta-analysis  
Dr. Janet Ngu, Resident, UOHI  
Supervisor: Dr. Louise Sun

P-55 Device-measured physical activity sedentary behaviour and cardiometabolic health and fitness across occupational groups: a systematic review and meta-analysis  
Dr. Stephanie Prince Ware, Postdoctoral Fellow, UOHI  
Supervisor: Dr. Bob Reid

P-56 Central Hypertension in Patients with Thoracic Aortic Aneurysms Without Established Diagnosis of Hypertension: Prevalence and Association with Aneurysm Size  
Mr. Jasjit Rooprai, MD Candidate, UOHI  
Supervisor: Dr. Thais Coutinho
P-57  Sex-Based Differences in Outpatient Specialist Referral Patterns of Heart Failure Patients: A Scoping Review
Mr. Jasjit Rooprai, MD Candidate, UOHI
Supervisor: Dr. Louise Sun

P-58  Are hospital nurses in the Champlain region of Ontario at risk of not meeting Canadian strength training and aerobic physical activity guidelines?
Mr. Kyle Scott, PhD Candidate, UOHI
Supervisors: Drs. Jennifer Reed & Kristi Adamo

P-59  Does metformin therapy influence the effects of intensive lifestyle intervention? Exploring the interaction between first line therapies in the Look AHEAD trial
Dr. Tasuku Terada, Postdoctoral Fellow, UOHI
Supervisor: Dr. Jennifer Reed

P-60  A sex-difference evaluation of an Aerobic Interval Training Cardiac Rehabilitation program in adults with heart disease
Ms. Sol Vidal Almela, PhD Candidate, UOHI
Supervisor: Dr. Jennifer Reed

P-61  Pulmonary Artery Pulsatility Index Predicts the Need for De Novo Post-Operative Renal Replacement Therapy
Dr. George Wharmby, Resident, University of Ottawa
Supervisor: Dr. Louise Sun

P-62  Assessing Mortality Risk in Pulmonary Arterial Hypertension: From Heart to Kidney
Mr. Jason Zelt, PhD Candidate, UOHI
Supervisor: Dr. Lisa Mielniczuk
Literature searching and retrieval
Available for your publication, research and clinical care. Articles or books not immediately available to you can be quickly obtained.

Seamless access to e-resources
The Library’s computers provide seamless access to the University’s electronic resources without a username or password.

Training
Personal or group training on searching for literature, using databases, locating full-text, reference management software, bibliometrics, etc.

Systematic review
Support in question refinement, search strategy development, and review management software.

House calls
Got a question about research or research materials? Your librarian will come to you!
Planning a new research study? Have you thought how to incorporate a Patient Partner on your team?

We have a database of willing volunteers eager to be Patient Partners. Email us for more information!

Visit the Heart Hub to learn more about Patient Partners and our “Ask Me About Clinical Research” Campaign

Contact us
Sharon Finlay (Manager) sfinlay@ottawaheart.ca ext. 18686
Megan Reilly (Officer) megreilly@ottawaheart.ca ext. 14572
CONFERENCE SUPPORTERS

Bio-Rad Laboratories
Fisher Scientific
Miltenyi Biotec
Thermo Fisher
The Polk Family Foundation
Ms. Coralie Lalonde
University of Ottawa Faculty of Medicine

ALL PRESENTERS & ATTENDEES

RESEARCH DAY SPEAKERS
Dr. Milica Radisic, University of Toronto;
Drs. Thierry Mesana, CEO & President; Peter Liu, VP Research & Chief Scientific Officer;
Erik Suuronen; Sharon Chih; Janet Ngu (UOHI)

INNOVATION AWARD JUDGES
Ms. Coralie Lalonde, CEO, Katsura Investments; Mr. Richard Deboer; Mr. Simon Kennedy, Deputy Minister, Health Canada; Drs. Mireille Ouimet, Bob Reid (UOHI)

INNOVATION AWARD REVIEWERS & SESSION MODERATOR

ORAL PRESENTATION SESSION CHAIRS

ORAL PRESENTATION JUDGES

POSTER JUDGES

ABSTRACT REVIEWERS

PHOTOGRAPHY
Mr. Ammar Jayashy, 7th Dimension Studio

ORGANIZING STAFF
UOHI Office of Research Services

SUPPORT STAFF
Communications; IT Department; French Language Services; Tickers Catering