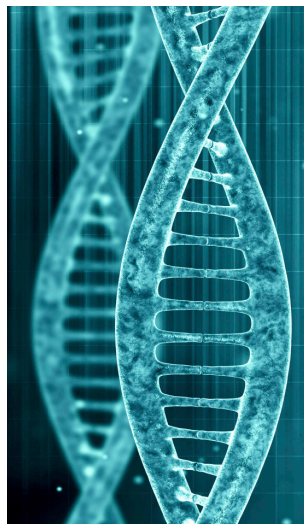




UNIVERSITY OF OTTAWA  
HEART INSTITUTE  
INSTITUT DE CARDIOLOGIE  
DE L'UNIVERSITÉ D'OTTAWA



34<sup>th</sup> ANNUAL

# Ottawa Cardiovascular Research Day

**PROGRAM**

May 26-27, 2022 | University of Ottawa Heart Institute

**The Ottawa Cardiovascular Research Day  
Committee gratefully acknowledges the  
support of our event partners:**

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# Welcome

On behalf of the planning committee, it is with great pleasure that we welcome you to the 34th 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 investigators and peers.

For the first time, we have a two-day program to enable more opportunities for networking. We are excited to share the following program highlights:

- Keynote lecture by Cristen Willer, PhD, whose research focuses on the genetic basis of cardiovascular and metabolic diseases and related traits in the global human population.
- Ottawa Region's Cardiovascular Trainee of the Year Lecture by Richard Jung, PhD, MD Candidate, UOHI.
- The Innovation Award Competition this year will feature six finalists. The 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 innovation champions!
- **NEW** Poster Swap – this session will feature pairs of trainees teamed up to present each other's research. The winning team will be decided by an audience vote!
- Off-site Networking Event


With 17 abstract talks and 49 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 region. The event will conclude with 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, UOHI Trainee Committee, Fisher Scientific, Virica Biotech, Bio-Rad Laboratories, Diamed Laboratory Supplies; Bronze Level Sponsors: Gather, Peter Liu, MD; and Gold Level Sponsor: UOHI Foundation.

Sincerely,



Erin Mulvihill, PhD  
Chair, Research Day Committee



Jennifer Reed, PhD  
Co-Chair, Research Day Committee

# Planning Committee

## **Erin Mulvihill, PhD**

Chair, Research Day  
Scientist and Director, Energy Substrate  
Metabolism Research Laboratory, UOHI  
Associate Professor, Department of  
Biology, Microbiology and Immunology,  
Faculty of Medicine  
University of Ottawa

## **Jennifer Reed, PhD**

Co-Chair, Research Day  
Scientist and Director, Exercise  
Physiology and Cardiovascular Health  
Laboratory, UOHI  
Assistant Professor, School of  
Epidemiology and Public Health, Faculty  
of Medicine  
University of Ottawa

## **Kelsey Bolger**

Lead Organizer, Research Day  
Administrative Officer  
Research Services, UOHI

## **Brianne Bruijns, PhD**

Innovation Award Coordinator, Research Day  
Grants Officer  
Research Services, UOHI

## **Sabrina Robichaud**

PhD Candidate, UOHI  
Chair, UOHI Trainee Committee

## **Braeden Mair**

PhD Candidate, UOHI  
Co-Chair, UOHI Trainee Committee

## **Nadya Morrow**

PhD Candidate, UOHI  
Work-in-Progress Rounds Coordinator,  
UOHI Trainee Committee



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# Program Overview

DAY ONE: THURSDAY, MAY 26, 2022

	<b>Opening Remarks</b> Erin Mulvihill, PhD, Chair, Research Day Committee, UOHI  Poster Room, Gather Town
9:00 – 10:30	<b>Poster Session 1</b> Poster Room, Gather Town
10:30 – 11:45	<b>Poster Swap</b> Auditorium, Gather Town  Moderator: Nadya Morrow, PhD Candidate
11:45 – 12:15	<b>Lunch - Offline</b>
12:15 – 13:15	<b>Ottawa Region's Cardiovascular Research Trainee of the Year Lecture</b> Auditorium, Gather Town  <b>Richard Jung, PhD, MD Candidate</b>
13:15 – 14:15	<b>Mentoring Session with Cristen Willer, PhD</b> Auditorium, Gather Town
14:15 – 15:45	<b>Poster Session 2</b> Poster Room, Gather Town
18:00	<b>Networking Event</b>  <b>Heart &amp; Crown</b> 353 Preston St, Ottawa ON *This event is open to all trainees and PIs! Separate registration is required for this event. Please contact <a href="mailto:researchservices@ottawaheart.ca">researchservices@ottawaheart.ca</a> for more information.

7:45 – 8:00	<p><b>Opening Remarks</b> Erin Mulvihill, PhD, Chair, Research Day Committee, UOHI</p> <p><b>Chief Scientific Officer Address</b> Peter Liu, MD, CSO &amp; VP Research, UOHI</p> <p><b>President Address</b> Thierry Mesana, MD, PhD, President &amp; CEO, UOHI</p> <p>Auditorium, Gather Town</p>
8:00 – 9:15	<p><b>Oral Presentation Session 1</b> Auditorium, Gather Town</p> <p><b>Linkage to ORACLE Theme: Precision Medicine</b> Moderators: Braeden Mair, PhD Candidate and Ariel Buchler, PhD Candidate</p>
	<p><b>O-1 Pulmonary Artery Pulsatility Index Predicts Intermediate Survival Following Mitral Valve Repair</b> Kenza Rahmouni, MD, Cardiac Surgery Resident, UOHI Supervisor: Vincent Chan, MD</p> <p><b>O-2 Anti-Inflammatory Effect of Biologic Therapy in Patients with Psoriatic Disease: A Prospective Cohort FDG-PET Study</b> Kevin Boczar, MD, Cardiology Resident, UOHI Supervisor: Rob Beanlands, MD</p> <p><b>O-3 Genetically Eliminating Hepatocyte-Derived DPP4 Does Not Alter Diastolic Function, but Downregulates Cardiac Immune- and Collagen-Related Genes</b> Natasha Trzaskalski, PhD Candidate, UOHI Supervisor: Erin Mulvihill, PhD</p> <p><b>O-4 Mitochondrial Dynamics Directs Macrophage Polarization During Atherosclerosis: Implications for disease regression</b> Leah Susser, PhD Candidate, UOHI Supervisor: Katey Rayner, PhD</p> <p><b>O-5 Immune-Dependent Ampk Signaling to HMG-CoA Reductase Protects Against Atherosclerosis</b> Tyler Smith, PhD Candidate, uOttawa Supervisor: Morgan Fullerton, PhD</p>
9:15 – 9:30	<p><b>Health Break</b></p>
9:30 – 10:30	<p><b>Oral Presentation Session 2</b> Auditorium, Gather Town</p> <p><b>Linkage to ORACLE Theme: Healthy Diverse Populations</b> Moderators: Braeden Mair, PhD Candidate and Ariel Buchler, PhD Candidate</p>

	<p><b>O-6 High-Intensity Interval Training Improves Performance and Cardiac Function in Female Mice After Myocardial Infarction</b> Ines Amara, PhD, Postdoctoral Fellow, UOHI Supervisor: Erik Suuronen, PhD</p> <p><b>O-7 Sex differences in Arterial Hemodynamics in Patients with Degenerative Thoracic Aortic Aneurysms</b> Amélie Paquin, MD, Clinical Fellow, UOHI Supervisor: Thais Coutinho, MD</p> <p><b>O-8 Exploring the Associations Between Gender-Related Variables and Physical Activity Levels in Women with Atrial Fibrillation</b> Isabela R Marçal, PhD Candidate, UOHI Supervisor: Jennifer Reed, PhD</p> <p><b>O-9 Mental Health and Quality of Life in Patients and Their Partners During Cardiac Rehabilitation: Investigating bidirectional influences</b> Kathleen Lalande, PhD, Research Associate, UOHI Supervisor: Heather Tulloch, PhD</p>
<b>10:30 – 10:45</b>	<b>Health Break</b>
<b>10:45 – 12:15</b>	<p><b>Innovation Award Finalists' Pitches</b> Auditorium, Gather Town</p> <p>Moderator: Erin Mulvihill, PhD</p>
	<p><b>I-1 Can Green Light Help Replace Stitches in Open-Heart Surgery?</b> Aidan Macadam, MSc Candidate, UOHI Supervisor: Emilio Alarcón, PhD</p> <p><b>I-2 COVID-19 Vaccine-Induced Inflammatory Heart Disease Registry and Prospective Case-Control Study (COVID-VIHPR)</b> Tahir Kafil, MD, Clinical Fellow, UOHI Supervisor: Peter Liu, MD</p> <p><b>I-3 An App for Helping Physicians Care for Patients After Heart Attacks</b> Avinash Pandey, MD, Internal Medicine Resident, UOHI Supervisor: Hassan Mir, MD</p> <p><b>I-4 Can Exosomes Prevent Life-Threatening Heart Rhythm Disorders After Open Heart Surgery?</b> Sandrine Parent, MSc, Laboratory Technician, UOHI Supervisor: Darryl Davis, MD</p> <p><b>I-5 Treating Heart Disease Risk After Pneumonia Using Fish Oils</b> Cameron Stotts, MSc Candidate, UOHI Supervisor: Katey Rayner, PhD</p> <p><b>I-6 Genetic Blueprint of the Heart's Electrical Network</b> Yena Oh, PhD Candidate, UOHI Supervisor: Kyoung-Han Kim, PhD</p>



12:15 – 12:45	<b>Lunch - Offline</b>
12:45 – 13:00	<b>Presentation of the Innovation Award to the Winner</b> Auditorium, Gather Town  Moderator: Erin Mulvihill, PhD
13:00 – 14:00	<b>Keynote Lecture</b> Auditorium, Gather Town  <b>What Can the Messages in Our DNA Teach us About Human Disease and Improving Human Health?</b>  <b>Cristen Willer, PhD</b> Professor, Departments of Internal Medicine, Human Genetics and Computational Medicine & Bioinformatics Michigan Medicine, University of Michigan
14:00 – 14:30	<b>Oral Presentation Session 3</b> Auditorium, Gather Town  <b>Linkage to ORACLE Theme: Big Data</b> Moderators: Braeden Mair, PhD Candidate and Ariel Buchler, PhD Candidate
	<b>O-10 Association Between Markers of Atrial Cardiopathy and Cognitive Decline in the Absence of Atrial Fibrillation</b> Claudia Li, PhD, Postdoctoral Fellow, UOHI Supervisor: Jodi Edwards, PhD  <b>O-11 Paradoxical Apelin Expression by gCap Alveolar Endothelial Stem Cells: Role in microvascular regeneration after acute lung injury induced by targeted endothelial cell ablation</b> Nicholas Cober, PhD Candidate, OHRI Supervisor: Duncan Stewart, MD
14:30 – 14:45	<b>Health Break</b>
14:45 – 16:15	<b>Oral Presentation Session 4</b> Auditorium, Gather Town  <b>Linkage to ORACLE Theme: Discovery to Translational Innovations</b> Moderators: Braeden Mair, PhD Candidate and Ariel Buchler, PhD Candidate
	<b>O-12 3D Printed Flexible Heart Case for Ex Vivo Organ and Tissue Maturation</b> Maxime Emmanuel Comtois-Bona, BSc Candidate, UOHI Supervisor: Emilio Alarcón, PhD

	<p><b>O-13 Targeting Cardiomyocyte Survival for Cardioprotection</b> Abir Almazloun, PhD Candidate, uOttawa Supervisor: Mona Nemer, PhD</p> <p><b>O-14 Extracellular Vesicles of Human Heart Explant Derived Cells Attenuate NLRP3 Inflammasome in Macrophages Possibly Via Transferring their Salutary miRNA and Protein Cargo</b> Ramana Vaka, PhD, Postdoctoral Fellow, UOHI Supervisor: Darryl Davis, MD</p> <p><b>O-15 Prone Myocardial Perfusion Imaging (MPI) Improves Inferior and Apical Artifacts in IQ- SPECT Compared to Supine MPI with or Without Attenuation Correction</b> Anahita Tavoosi, MD, Clinical Fellow, UOHI Supervisor: Terrence Ruddy, MD</p> <p><b>O-16 Accelerated Tracer Washout in Regions Of Sympathetic Denervation In Patients With Ischemic Cardiomyopathy Using Flubrobenguane Positron Emission Tomography Imaging</b> Yuchen Dai, MD Candidate, UOHI Supervisor: Rob Beanlands, MD</p> <p><b>O-17 Automated Motion Correction Improves the Repeatability And Reproducibility Of Myocardial Blood Flow Quantification With Rubidium-82 PET imaging</b> Justen Choueiry, MD Candidate, UOHI Supervisor: Robert deKemp, PhD</p>
<b>16:15 – 16:45</b>	<b>Health Break</b>
<b>16:45 – 17:00</b>	<p><b>Awards Ceremony</b> <b>Moderator:</b> Jennifer Reed, PhD, Co-Chair, Research Day Committee, UOHI</p> <p><b>Auditorium, Gather Town</b></p> <p><b>Awards include:</b></p> <ul style="list-style-type: none"> <li>• Dr. Yves Marcel Award for Best Basic Science Oral Presentation</li> <li>• Howard &amp; Doris Polk Award for Best Clinical Science / Bio-behavioural &amp; Population Health Oral Presentation</li> <li>• Award for Best Basic Science Poster</li> <li>• Award for Best Clinical Science / Bio-Behavioural &amp; Population Health Poster</li> <li>• Awards for Honourable Mentions</li> </ul>
<b>17:00</b>	<p><b>Closing Remarks</b> Erin Mulvihill, PhD, Chair, Research Day Committee, UOHI</p>

# Keynote Speaker

## **Cristen Willer, PhD**



Frank N. Wilson Professor of Cardiovascular Medicine

Department of Internal Medicine, Division of Cardiovascular Medicine

Department of Computational Medicine and Bioinformatics

Department of Human Genetics

University of Michigan Medical School

**Dr. Cristen J. Willer** is an esteemed professor at the University of Michigan. Dr. Willer was trained as a computational geneticist after completing a DPhil at the Wellcome Trust Center in Human Genetics at the University of Oxford, and postdoctoral fellowship in Biostatistics at the University of Michigan. In 2015, Dr. Willer was recognized as a Thomson-Reuters Highly Cited Researcher, top 1% of field. In 2021, Dr. Willer was awarded the ASHG Early Career Award for being a distinguished professor. Dr. Willer has published ~180 manuscripts, which have been cited over 65,000 times.

Dr. Willer's research is focused on the genetic basis of cardiovascular and metabolic diseases and related-traits in global human populations. Dr. Willer is interested in identifying the full spectrum of disease-associated alleles using a variety of approaches including whole genome and exome sequencing, analysis of coding variation, and unbiased surveys of common variation in the genome. Dr. Willer has developed expertise in gene discovery, imputation of variants from population reference sets, meta-analysis of genetic data and visualization of genomic features. Dr. Willer leads the genetic mapping section for the International Common Disease Alliance (ICDA), and co-leads the Global Biobank Meta-analysis Initiative and the Polygenic Risk Score Task Force of the Ethics & Policy ICDA working group. Dr. Willer is the principal investigator of multiple NIH awards and of large biobanks initiatives, including the HUNT investigation, Cardiovascular Health Improvement Project (CHIP), and Michigan Racial Equality and Community Health (M-REACH).

# Ottawa Region Cardiovascular Trainee of the Year



## **Richard Jung, PhD, MD Candidate**

University of Ottawa Heart Institute

**Richard Jung, PhD, MD Candidate**, was selected as the Ottawa Region's Cardiovascular Research Trainee of the Year. Dr. Jung is recognized for his exceptional productivity in research and outstanding leadership in the community. His research (under the tutelage of Dr.

Benjamin Hibbert) is centred on translational research and meta-research through clinical outcomes studies.

Since his tenure as a Vanier Scholar, Dr. Jung has made outstanding contributions to cardiovascular research. Just last year, Richard received the Dr. Frans Leenen Excellence in Publication Award in Clinical Research from the UOHI for his paper entitled "Transcatheter mitral valve repair in cardiogenic shock and mitral regurgitation: a patient-level multicenter analysis." This article highlights Dr. Jung's research in the Hibbert lab, which demonstrated that transcatheter mitral valve repair may improve both short- and immediate-term death in high-risk patients with cardiogenic shock and moderate to severe mitral regurgitation.

Dr. Jung has published 45 peer reviewed publications to date, and in this past year alone he has published nine first-authored original research papers, many of which were published in high-impact journals such as the Journal of the American College of Cardiology and Circulation Research. This has accelerated the uptake of his research findings by international audiences, with his work being cited 627 times – a true testament to the impact of Dr. Jung's research. This academic success is only going to grow; in fact, his recent Nature Communications paper on the importance of methodological rigour of COVID-19 research has already been cited over 50 times in its first year of publication!

Dr. Jung is recognized for his outstanding leadership in the research and trainee communities. He has served as a reviewer for multiple journals, including Frontiers in Bioengineering and Thrombosis Research. Closer to home, Richard has served as the Co-Chair of the UOHI Trainee Committee and was a Co-Founder of the Internal Medicine Summer Camp, designed to diversify medical students' training through professional development sessions and clinics. Since joining Dr. Hibbert's lab, Dr. Jung has shared his knowledge and skills with the next generation of scientists and physicians. Not only has he provided mentorship to students conducting their first clinical research projects, he has also served as a valuable role model for others embarking on the MD/PhD journey.

These are remarkable achievements – research excellence, dedication to the community and outstanding leadership. Dr. Jung exemplifies the next generation of research leaders.

# Poster Presentations: Basic Science

- P-1 **Effect of Proteolytic Processing on PCSK9 Activities**  
Ikhuosho Asikhia, PhD Candidate, UOHI  
Supervisor: Thomas Lagace, PhD
- P-2 **Difference of Gates to Measure Data Consistency in Cardiac SPECT**  
Taylon Clark, MSc Candidate, UOHI  
Supervisor: Glenn Wells, PhD
- P-3 **DPP4 and MERP-1 and Their Roles in Atherosclerosis**  
Andrew Clement, MSc Candidate, UOHI  
Supervisor: Erin Mulvihill, PhD
- P-4 **Profound Loss of Lung cKit Expressing Endothelial Cells During the Early Development of Severe PAH Points to an Imbalance Between Injury and Repair in Progression of Lung Vascular Disease**  
Nicolas Cober, PhD Candidate, OHRI  
Supervisor: Duncan Stewart, MD
- P-5 **Extracellular Vesicles from Human Heart Explant-Derived Cells Target Pro-Fibrotic Atrial Fibroblasts**  
Bérénice Collet, PhD, Postdoctoral Fellow, UOHI  
Supervisor: Darryl Davis, MD
- P-6 **CARS2 Expression Associates with CAD Protection: Potential role of the IL10 pathway**  
Anh-Thu Dang, PhD Candidate, UOHI  
Supervisor: Ruth McPherson, MD
- P-7 **Identifying the Genetic Determinants of Lipophagy in *Saccharomyces Cerevisiae***  
Garrett Fairman, PhD Candidate, UOHI  
Supervisor: Mireille Ouimet, PhD
- P-8 **Mitochondrial Supercomplex Formation in the Prevention of Heart Failure**  
Claire Fong-McMaster, PhD Candidate, uOttawa  
Supervisor: Mary-Ellen Harper, PhD
- P-9 **Effect of sGAG on Opening Angle of Intact & Crosslinked Aortas**  
Noor Ghadie, PhD Candidate, uOttawa  
Supervisor: Michel Labrosse, PhD
- P-10 **The Arterial Biology Protecting Against Atherosclerosis**  
Lara Gharibeh, PhD, Translational Research Fellow, UOHI  
Supervisors: Mireille Ouimet, PhD; Rob Beanlands, MD; Juan Grau, MD
- P-11 **Choline Metabolism Underpins Macrophage IL-4 Polarization in Vitro and in Vivo**  
Peyman Ghorbani, PhD, Postdoctoral Fellow, uOttawa  
Supervisor: Morgan Fullerton, PhD
- P-12 **Intestinally-Derived Preproglucagon Peptides Mediate Nutrient Absorption and Gut Adaptation with Exposure to Cold**  
Antonio Hanson, MSc, Laboratory Technician, UOHI  
Supervisor: Erin Mulvihill, PhD
- P-13 **Can Study Time be Reduced by using Early Datasets in Myocardial Perfusion Imaging with a Solid-state Cardiac SPECT Camera? A multi-center evaluation**  
Annika Kelly, MSc Candidate, UOHI  
Supervisor: Glenn Wells, PhD

- P-14 **Ketogenic Diet Intervention Worsens Glucose Tolerance but Increases Incretin Activity in Female Mice with Metabolic Dysfunction**  
Cassandra Locatelli, MSc Candidate, UOHI  
Supervisors: Erin Mulvihill, PhD
- P-15 **Regulation of Voltage-Gated Sodium Channels by Wnt Signaling in Human iPSC-Derived Cardiomyocytes**  
Aizhu Lu, PhD, Postdoctoral Fellow, UOHI  
Supervisor: Wenbin Liang, MD, PhD
- P-16 **Light-Activated Adhesive for Sealing Cardiovascular Defects**  
Aidan Macadam, MSc Candidate, UOHI  
Supervisor: Emilio Alarcón, PhD
- P-17 **Data-Driven Respiratory Motion Correction of Myocardial Perfusion SPECT Using a Convolutional Neural Network**  
Dylan Malenfant, PhD Candidate, UOHI  
Supervisor: Glenn Wells, PhD
- P-18 **Inflammatory-Mediated Blood-Brain Barrier Dysfunction and Cognitive Decline: A population-based cohort study among aging adults with atrial fibrillation**  
Danielle Marion, MSc Candidate, UOHI  
Supervisor: Jodi Edwards, PhD
- P-19 **Glucagon-Like Peptides 1 and 2 Receptor Signalling Regulate the Intestinal Metabolic Switch from Fasting to Refeeding in a Sex-Dependent Manner**  
Nadya Morrow, PhD Candidate, UOHI  
Supervisor: Erin Mulvihill, PhD
- P-20 **Antimicrobial Light Triggering Plastic for Biomedical Applications**  
Marcelo Muñoz, PhD, Postdoctoral Fellow, UOHI  
Supervisor: Emilio Alarcón, PhD
- P-21 **Transcriptomic Landscape of the Postnatal Atrioventricular Conduction System**  
Yena Oh, PhD Candidate, UOHI  
Supervisor: Kyoung-Han Kim, PhD
- P-22 **Extracellular Vesicles from Human Atrial Explant Derived Cells Prevent Atrial Fibrillation After Open Chest Surgery**  
Sandrine Parent, MSc, Laboratory Technician, UOHI  
Supervisor: Darryl Davis, MD
- P-23 **Challenging the Traditional Understanding: Investigating Mitochondrial Choline Metabolism in Macrophages**  
Ciara Pember, MSc Candidate, uOttawa  
Supervisor: Morgan Fullerton, PhD
- P-24 **Exploring the Role of Metformin on Cardiac Fibrosis in PAI-1 Deficient Mice**  
Serena Pulente, MSc Candidate, uOttawa  
Supervisor: Erin Mulvihill, PhD
- P-25 **Selectively Enhancing and Tracking Lipophagy for LD Clearance with Novel Biosensor**  
Valérie Rochon, BSc Candidate, UOHI  
Supervisor: Mireille Ouimet, PhD
- P-26 **The Role of AMPK in Macrophage Metabolic Reprogramming During Liver Injury**  
Julia Rolim Cavalcanti Nunes, PhD Candidate, uOttawa  
Supervisors: Morgan Fullerton, PhD

# Poster Presentations: Clinical Science

- P-27 **Biofunctional Peptide-based 3D Matrices for Advanced Tissue Engineering**  
Alex Ross, PhD Candidate, UOHI  
Supervisors: Emilio Alarcón, PhD and Erik Suuronen, PhD
- P-28 **Small Molecule Screening for The Identification of Modifiers Favoring Beneficial Cardiac Hypertrophy**  
Anupam Sharama, PhD Candidate, OHRI  
Supervisor: Lynn Megeney, PhD
- P-29 **The Development of New Therapies Targeting Pneumonia-Accelerated Atherosclerosis**  
Cameron Stotts, MSc Candidate, UOHI  
Supervisor: Katey Rayner, PhD
- P-30 **ORP6 Regulates Astrocytic Cholesterol Metabolism and Whole-Body Lipid Homeostasis**  
Viyashini Vijithakumar, MSc Candidate, UOHI  
Supervisor: Mireille Ouimet, PhD
- P-31 **Wnt5a Increases QT Interval and Susceptibility to Ventricular Arrhythmias**  
Jerry Wang, MSc Candidate, UOHI  
Supervisor: Wenbin Liang, MD, PhD
- P-33 **Post-Transcriptional Control of RIPK1 in Macrophages Undergoing Inflammation & Necroptosis**  
Zier Zhou, MSc Candidate, UOHI  
Supervisor: Katey Rayner, PhD

- P-34 **Maximum Likelihood Scatter and Prompt-Gamma Corrections for Myocardial Blood Flow Imaging using 82Rb PET**  
David Gao, MD, Medical Student, UOHI  
Supervisor: Robert deKemp, PhD
- P-35 **Use of Race, Ethnicity, and National Origin in Studies Assessing Cardiovascular Risk in Women with a History of Hypertensive Disorders of Pregnancy**  
Amy Johnston, PhD Candidate, UOHI  
Supervisors: Jodi Edwards, PhD and Thais Coutinho, MD
- P-36 **A Systematic Review of Validated Case Definitions to Identify Hypertensive Disorders of Pregnancy in Administrative Healthcare Databases**  
Amy Johnston, PhD Candidate, UOHI  
Supervisors: Jodi Edwards, PhD and Thais Coutinho, MD
- P-37 **COVID-19 Vaccine-induced Inflammatory Heart Disease Registry and Prospective Case-Control Study (COVID-VIHPR)**  
Tahir Kafil, MD, Clinical Fellow, UOHI  
Supervisor: Peter Liu, MD
- P-38 **It Takes a Team: Implementation of a Multidisciplinary Endocarditis Heart Team at a Canadian Tertiary Care Referral Centre**  
Lawrence Lau, MD, Clinical Fellow, UOHI  
Supervisor: David Messika-Zeitoun, MD
- P-39 **Long-Term Outcomes of Transcatheter Aortic Valve Replacement Compared with Surgical Aortic Valve Replacement: A retrospective cohort study with overlap propensity score weighting**  
Claudia Li, PhD, Postdoctoral Fellow, UOHI  
Supervisor: Jodi Edwards, PhD
- P-40 **“It’s overwhelming” A descriptive qualitative study of families’ experiences seeking answers about their relative’s cause of sudden cardiac death**  
Katherine Mason, Research Assistant, uOttawa  
Supervisor: Krystina Lewis, PhD
- P-41 **Edge-to-edge Technique with Partial Band for Mitral Valve Repair Compared to Mitral Replacement for Ischemic Mitral Regurgitation**  
Alex Nantsios, MD, Clinical Resident, UOHI  
Supervisor: Fraser Rubens, MD
- P-42 **Feasibility and Usability of an App for Risk Stratification and Optimization of Patients with Atherosclerotic Cardiovascular Disease**  
Avinash Pandey, MD, Internal Medicine Resident, UOHI  
Supervisor: Hassan Mir, MD
- P-43 **Interventions for Electronic Nicotine Delivery System and Vaping Cessation in Adults - A Systematic Review**  
Avinash Pandey, MD, Internal Medicine Resident, UOHI  
Supervisor: Hassan Mir, MD
- P-44 **Arterial Health Abnormalities in Women with Pre-eclampsia - Contributing Role of Central Obesity**  
Amélie Paquin, MD, Clinical Fellow, UOHI  
Supervisor: Thais Coutinho, MD



- P-45      **Canadian Platform for trials with non-invasive brain Stimulation: Contralesional inhibitory rTMS for Recovery of Arm function after stroke – Protocol for a feasibility trial (CanStim: ConTRA-stroke-f)**  
 Lisa Sheehy, PhD, Clinical Research Assistant, UOHI  
 Supervisor: Jodi Edwards, PhD
- P-46      **Exponential Dosing for Consistent Image Quality with Rubidium-82 PET MPI**  
 Anahita Tavoosi, MD, Clinical Fellow, UOHI  
 SupervisorS: Robert deKemp, PhD and Rob Beanlands, MD
- P-47      **Is Scar Homogenization Needed For Successful Long-term Ablation of Ventricular Tachycardia?**  
 Michael Thibert, MD, Clinical Fellow, UOHI  
 Supervisor: Mouhannad Sadek, MD
- P-48      **Sex-Specific Predictors for Depressive and Cognitive Comorbidity in Women with Heart Failure: A Narrative Review**  
 Victrine Tseung, PhD, Postdoctoral Fellow, UOHI  
 Supervisor: Jodi Edwards, PhD
- P-49      **Sex-differences in the Physical Health Profile of Patients with Persistent or Permanent Atrial Fibrillation**  
 Sol Vidal Almela, PhD Candidate, UOHI  
 Supervisor: Jennifer Reed, PhD

# Special Thanks

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## ALL PRESENTERS & ATTENDEES

### RESEARCH DAY SPEAKERS

Cristen Willer, PhD, University of Michigan

Thierry Mesana, MD, PhD, President & CEO; Peter Liu, MD, CSO & VP Research; Erin Mulvihill, PhD; Jennifer Reed, PhD and Richard Jung, PhD, MD Candidate, UOHI

### INNOVATION AWARD JUDGES

Robert Cushman, MD, Chair, OHIRC Board of Directors

Keira Torkko, Member, OHIRC Board of Directors

Simon Kennedy, Deputy Minister, Innovation, Science & Economic Development Canada

Nick Quain, Lead, Venture Development Program, Invest Ottawa

Andrea Vervoort, Junior Data Scientist, Virica Biotech

Rob Beanlands, MD, Deputy Director General; Director, National Cardiac PET Centre, UOHI

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