

The Ottawa Hospital Research Institute Research Day

Program

Nov 16-17, 2022



OHRI Research Day Program

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Wednesday, Nov 16: Virtual poster evaluations

Gather event platform

Poster room link: <https://app.gather.town/app/GiZako9vEHEK18T9/OHRIResearchDay>

Submit evaluations here: [OHRI Events System](#)

Tips: [How to Gather Guide](#)

10:00 AM **Poster Session A** (60 minutes)

1:30 PM **Poster Session B** (60 minutes)

Thursday, Nov 17: In-person/hybrid event

Ottawa Conference and Event Centre, 200 Coventry Rd, Ottawa.

If attending virtually:

- Link to the full day: [OHRI RESEARCH DAY](#)
- Link to 9:30 a.m. [CLINICAL BREAKOUT SESSION](#)

7:45 AM **Poster setup / continental breakfast**- Room 118

8:15 AM **Opening Remarks** - Room 106 (10 minutes)
Paul Albert, Justin Presseau, Duncan Stewart, Cameron Love, Jocelyn Côté

8:29 AM **Disease biomarkers and biotherapeutics**- Room 106 (50 Minutes)

(Talks: 9 minutes plus 3 minutes for questions)

Moderator: Chloé Landry

Dana Unninayar (Juthaporn Cowan group) Serological response of adult and pediatric patients with primary and secondary immunodeficiency to SARS-CoV2 BNT162b2 and mRNA-1273 vaccines, and breakthrough infections in Canada

Emma Gerber (Benjamin Tsang group) Predicting chemoresistance prior to treatment in epithelial ovarian cancer patients using small extracellular vesicle-derived plasma gelsolin

Robert Myette (Dylan Burger group) Increased mitochondrial DNA in urinary large extracellular vesicles in children with idiopathic nephrotic syndrome: a new disease biomarker?

Adrianna Douvris (Kevin Burns group) miR-486-5p protects against ischemic acute kidney injury in rat, but inhibits eNOS and angiogenesis in vitro

9:23 AM **Refreshment Break**- Room 118 (10 minutes)

9:33 AM

Immune system in disease -Room 106 (50 Min)

(Talks: 9 minutes, 3 minutes discussion)

Moderator: Josephine Elugbaju

Eddy Yakubovich (Barbara Vanderhyden group) Single cell-analysis predicts epithelial-to-mesenchymal transition is associated with CD8+ T-cell exhaustion

Marie Marotel (Michele Ardolino group) Role of LAG3 in Natural Killer cells

Michaela Lunn (Michael Schlossmacher group) The role of LRRK2 in immune modulation of brain health

Ana Beltran-Bless (Mark Clemons group) Does the number of 6-monthly adjuvant zoledronate infusions received affect treatment efficacy for early breast cancer? A sub-study of ABCSG-12

9:33 AM

From community to health systems: showcasing clinical research -Room 110 (50 Min)

(Talks: 9 minutes plus 3 minutes for questions)

Moderator: Grace Fox

Marc Antonino Albert (Manoj Lalu group) Assessing the impact of predatory journals on policy and guidance documents: a cross-sectional study

Elisabeth Vesnaver (Justin Pousseau group) Partnering for impact: A community and health system participatory approach to support the inclusion of newly eligible gay, bisexual and all men who have sex with men in plasma donation in Canada

Emily Hladkovicz (Daniel McIsaac group) Evaluations of postoperative transitions in care for older adults: A scoping review

10:27 AM Refreshment Break (5 minutes)

10:33 AM Keynote Lecture - Room 106 (35 minutes, 10 minutes discussion)

Moderator: John Bell

Sponsored by Bio-Rad

Targeting clonal heterogeneity in treatment-refractory glioblastoma with rationally designed immunotherapies: advances and challenges.

Sheila Singh

11:20 AM Patient speaker - Room 106 (10 minutes)

Marilyn Erdely

11:35 PM Update from OHRI Equity, Diversity and Inclusion Council - Room 106 (5 min)

Maddy Hill & Leah Labib

11:40 AM Lunch Break- Room 118 (45 minutes)

Sponsored by Beckman Coulter

12:25 PM Elevator Pitch Competition - Room 106 (60 minutes)

Sponsored by Borden Ladner Gervais

(Pitches: 3 minutes each)

Moderators: Leah Labib & Chanèle Cyr-Depauw

Judges: Adrian Harewood, Janet Lefebvre, Marilyn Erdely, Jean-Simon Diallo

- **Landry Kalembo (Shannon Bainbridge group)** Act now, make it count!
- **Mahnaz Nazari (Bernard Thébaud group)** Messenger bubbles repair preemie's lungs
- **Sarah Dickson (Kwadwo Kyeremanteng group)** Addressing metabolic health in Black Ontarians: A virtual clinic
- **Ragav Chona (Jing Wang group)** A regeneration sensation! Helping the brain repair itself
- **Rebecca Lau (Donna Maziak group)** *This* cut or *that* cut? -> choosing the right surgery

1:25 PM In-person poster viewing - Room 118 (30 min)

Sponsored by STEMCELL Technologies

Vote for your favorite poster in the People's Choice awards

- 2:00 PM** **Elevator Pitch Competition award winners announced** - Room 106 (1 min)
Leah Labib & Chanèle Cyr-Depauw
First place sponsored by CCRM
Second place sponsored by Invest Ottawa
- 2:05 PM** **Dr. J. David Grimes Lecture** - Room 106 (35 minutes, 10 minutes discussion)
Moderator: Shawn Aaron
Sponsored by the Gairdner Foundation
From local roots to global reach patient-centered critical care research
Deborah Cook
- 2:50 PM** **Brain development and dysfunction** - Room 106 (50 min)
(Talks: 9 minutes plus 3 minutes for questions)
Moderator: Min Zhang
Allison Loan (Jing Wang group) Low-dose methylmercury promotes prenatal neuronal differentiation and autism spectrum disorder-like behaviors in a rodent model
John Cordova Albayay (David Picketts group) The chromatin remodeller ATRX is critical for emergent hippocampal circuitry in the developing forebrain
Alena Kalinina (Diane Lagace group) Beclin1 maintains adult hippocampal neurogenesis by regulating cell cycle progression
Daniel Myran (Peter Tanuseputro group) Edible cannabis legalization and unintentional pediatric poisonings
- 3:45 PM** **Refreshment Break** - Room 118 (15 minutes)
- 4:00 PM** **Viruses, stem cells, and biotherapeutics** - Room 106 (50 min)
(Talks: 9 minutes plus 3 minutes for questions)
Moderator: Maria Madana
Nicholas Cober (Duncan Stewart group) Single-cell transcriptomic analysis implicates a novel arterial endothelial cell population in development of obliterative arterial remodeling and severe pulmonary arterial hypertension
Matthew Driedger (Derek MacFadden group) More cultures and more contaminants – a time series analysis of the impact of the COVID-19 pandemic on blood culture practices and bloodstream infections
Jack Whelan (John Bell group) CRISPR-mediated rapid arming of poxvirus vectors enables facile generation of the novel immunotherapeutic STINGPOX
Yuan Tan (Shirley Mei & Duncan Stewart group) Characterization of the systemic immune landscape in sepsis reveals modulation of the innate immune system by MSCs
- 4:55 PM** **Dr. Ronald G. Worton Researcher in Training Award Winner** - Room 106 (10 min)
Sponsored by MJS BioLynx Inc.
Moderator: John Bell
Taha Azad
- 5:05 PM** **Awards and closing remarks** - Room 106 (10 min)
Sponsored by Thermo Fisher Scientific
Speakers: Paul Albert, Justin Presseau
Dr. Ronald G. Worton Researcher in Training Award
[Taha Azad](#) (John Bell group) honorable mention: [Ronda Lun](#) (Dar Dowlatshahi group)
Dr. Goodman Cohen Summer Student Award Program
Senior summer student: Rebecca Lau (Donna Maziak group)
Junior summer student: Valeria Vasilyeva (Michele Ardolino group)
- 5:15 PM** **Reception** - Room 118 (30 minutes)

Keynotes

Keynote Lecture



Dr. [Sheila Singh](#) is a professor of surgery and biochemistry, chief pediatric neurosurgeon at McMaster Children's Hospital, Division Head of Neurosurgery at Hamilton Health Sciences, and inaugural director of the new Cancer Research Centre at McMaster University. She holds a Tier 1/ Senior Canada Research Chair in Human Brain Cancer Stem Cell Biology, and is the founding Director of the McMaster Surgeon Scientist Program. Her PhD thesis described the novel identification of a population of cancer stem cells that exclusively drive the formation of brain tumours. Since 2007, Dr. Singh's lab has applied a developmental neurobiology framework to the study of brain tumorigenesis.

Dr. J. David Grimes Lecture



Dr. [Deborah Cook](#) is a Distinguished University Professor of Medicine at McMaster University and a critical care physician at St. Joseph's Healthcare Hamilton. She has pioneered improvements in ICU patient management that has both reduced the risk of complications and enhanced end-of-life care for those with fatal illnesses or injuries. As the first Canadian critical care specialist trained in clinical epidemiology and biostatistics, the results of Cook's research are now standard practice internationally in preventing and treating gastrointestinal bleeding, blood clots and ventilator-associated pneumonia in ICU patients.

Worton Award Winner Presentation

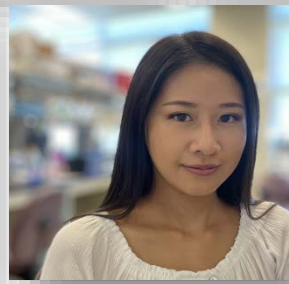


Dr. Taha Azad received the 2022 Worton Researcher in Training Award in recognition of his innovative research and exceptional teamwork during the pandemic. Using a glowing protein called luciferase, Dr. Azad created a biosensor that helps researchers find cancer-causing genes in minutes instead of months. During the pandemic, he and his colleagues adapted this biosensor to detect the COVID-19 virus binding to the ACE2 receptor in human cells, the first step in infection. He shared this biosensor with research teams around the world.

Patient Guest Speaker



At the age of 29, Marilyn Erdely had a lumpectomy after receiving a stage zero breast cancer diagnosis. She was confident she would be fine. But five years later, her cancer metastasized. Scans would reveal the cancer was throughout her body- in her bones, back, ovaries, and liver. Within six months of her stage four diagnosis, Marilyn required several surgeries. But then things changed. She started feeling better, stronger. Today she is down to just a couple of one-centimeter tumours on her liver. Everything else is resolved. The cancer is dormant.



Research Day Committee and Volunteers

The Ottawa Hospital Research Institute would like to express its appreciation to members of the Research Day Committee for their dedication and hard work in organizing this event, and to the volunteers, whose assistance we could not do without.

Dr. Paul Albert (Co-chair)

Dr. Justin Presseau (Co-chair)

Dr. Jay Baltz

Amelia Buchanan

Dr. Angela Crawley

Chanèle Cyr Depauw

Jaahnavi Dave

Jenn Ganton

Leah Labib

Dr. Ian Lorimer

Dr. Tim Ramsay

Dr. Luc Sabourin

Dr. Duncan Stewart

Jennifer Valentino

Nicol Lum

Lucy Sangani

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