



**DALHOUSIE**  
UNIVERSITY

# Department of Surgery

# RESEARCH

**BULLETIN**  
WINTER 2025

Welcome to the Winter 2025 Dalhousie University Department of Surgery Research Bulletin.

I am pleased to report that over the last fiscal year we have made significant strides in strengthening research infrastructure within the Department. In lieu of having multiple calls for operating grant funding to support individual investigators, the Research Committee has taken a new tack, distributing funding to Divisions to support productive research personnel who are driving collaboration between surgeons. In the current funding environment, retaining highly qualified research personnel is paramount to the ongoing success of our Department. Additionally, Divisions have taken advantage of a “rapid response” fund we have established to obtain biostatistical and research design support from collaborators in the Department of Community Health and Epidemiology.



As you are aware, the Department has seen a flurry of new hires, many of whom have strong research interests. To ensure that these new faculty members have the research supports they need, we have also developed formal terms of reference for an Establishment Grant. To date, one of these grants was awarded this year, with funds earmarked for two incoming surgeon-scientists in the coming fiscal year.

A subcommittee including Drs. Katerina Neumann, Alison Wallace and Sam Jessula continues to work on updating the Hirsch scoring system used to assess research productivity. The plan is to roll out a revised scoring system in parallel with the current scoring system this year to see how it performs. Ultimately, I am hoping this revised scoring system can help the Research Committee identify researchers who, with some additional resources, would have the best chance of successful capturing Tri-Council funding.

In the meantime, you can keep up-to-date with Departmental research funding opportunities on our website: <https://medicine.dal.ca/departments/department-sites/surgery/research/research-office/funding.html>

For a look at research publications from the Department, please visit <https://medicine.dal.ca/departments/department-sites/surgery/research/research-office/research-deliverables.html>

Michael Bezuhly MD MSc SM FRCSC FAAP  
Director of Research

**Surgeon-Scientist Trainees:** The Department of Surgery Research Office has a long history of supporting and mentoring the next generation of surgeon-scientists through the Royal College Clinician-Investigator Program (CIP). Our CIP alumni can be found here: <https://medicine.dal.ca/departments/department-sites/surgery/research/research-office/clinician-investigator-program.html>

The Department currently has three residents enrolled in the Clinician-Investigator Program:

**Dr. Joel Bierer** (Division of Cardiac Surgery) is in the fifth year of his Ph.D. in the Medical Research Graduate Program. His research focus is determining an optimal ultrafiltration protocol for pediatric cardiac surgery.



**Dr. Katherine Tourigny** (Division of Neurosurgery) is in the second year of her Master's in Neuroscience at Oxford University. Her thesis work involves evaluating signals and artifacts from devices in bioelectronic systems for closed loop neuromodulation.



**Dr. Takhliq Amir** (Division of Cardiac Surgery) is in the first year of her Master's in Community Health and Epidemiology and is developing a surveillance strategy for thoracic aortic aneurysms using cardiac CT scan



Welcome **Dr. Cameron Penny** (Division of General Surgery). Dr. Penny has been accepted into the program and will begin his Master's in Community Health and Epidemiology. His project concentrates on examining the influence of physical activity patterns on breast cancer incidence in Nova Scotia using the Atlantic Partnership for Tomorrow's Health (Atlantic PATH) Study.

## Upcoming Events

### APRIL

April 8: Department of Surgery Research Day  
TBA: Hirsch Score System Revision Committee will meet to finalize and update existing research productivity metrics and report to membership

### MAY

May 3: Division of Otolaryngology Resident Research Day  
May 30: Report Cards for research productivity will be distributed

### JUNE

Department of Surgery Research Committee Annual General Meeting  
Announcement of funding call schedule

**Department of Surgery Research Committee:** The Research Committee meets quarterly and is comprised of Divisional Research Directors and members of the wider Departmental research community. In addition to reviewing grant applications, CIP trainee proposals, and Research Day abstracts, Committee members guide the overall direction of research within the Department.

The Research Committee welcomes three new members to its ranks:



**Dr. David Wilson**  
Research Director  
Orthopaedic Surgery



**Dr. Locke Davenport Huyer**  
Faculty of Dentistry



**Dr. Daniel Keefe**  
Research Director  
Department of Urology

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**Department of Surgery Research Day  
TUESDAY APRIL 8<sup>th</sup>, 2025  
8AM-5PM- Halifax Convention Centre**

Our Keynote Collaborative Research Day Speaker  
The Dr. Bethune Visiting Professor in Surgery:

**Dr. Mohammad Mamdani**

***“Applied Artificial Intelligence in Health Care”***



**Learning Objectives for Research Day 2025**



1. Participants will review and discuss research in the Surgical Department. (Medical Expert, Scholar)
2. Participants will identify opportunities and challenges in the implementation of AI in health care research (keynote). (Medical Expert, Scholar)
3. To develop oral presentation skills needed to effectively present scientific research data. (Communicator)
4. To develop skills related to defending their research results (through Q&A format). (Communicator)

**Division of General Surgery** held their Divisional Research Day on November 20<sup>th</sup>, 2024: Department of Surgery Research Committee Members: **Dr. Robyn Urquhart** and **Dr. Michael Bezuhly** were judges for the day. The Winners from the day's event were:

**Best Overall Presentation: Anthony Dame**, PGY2 Resident  
*"Unveiling the Drivers for the Ninety-Day Emergency Department Visits Post Thoracic Surgery: A Nova Health Study"*

**Best New Project: Michael Vladovsky**, PGY1 Resident  
*"Increasing the Adoption of Minimally Invasive Surgery for the Colectomies in Nova Scotia: Structured and Objective Proctoring for the Surgical Trainee"*

**Best Medical Student Presentation: Moamen Bydoun**, Clerk III  
*"The Impact of BMI on Operative Decision Making in Patients Undergoing Colorectal Surgery in Nova Scotia"*

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## **Congratulations**

**Dr. Ashely Drohan**, for being named the new Director of the Clinical-Investigator Program in the Faculty of Medicine.

**Dr. Locke Davenport Huyer**, our newest committee member for being awarded the Emerging Investigator Award at this year's Dalhousie Legacy Award Ceremony.

## **And**

Thank you to **Dr. Bernard Burgesson** (Division of Orthopaedic Surgery) for agreeing to serve as one of our Departmental representatives on the Nova Scotia Health Research Ethics Board.

## Department of Surgery Grant Support Awards 2024-2025

**Dr. Matt Rigby** – Division of Otolaryngology - **\$47,010.94**

**OPERATIONAL GRANT** entitled “*Head and Neck Oncology Wait Times at the QEII HSC*”

**Dr. Boris Gala Lopez** – Division of General Surgery **\$25,000.00**

**OPERATIONAL GRANT** entitled “*Quantifying suspended colorectal tumour cells during hepatectomies in CUSA aspirate and their predictive value for same-site liver cancer recurrence*”

**Dr. Elise Graham** – Division of Pediatric Otolaryngology - **\$15,000.00**

**ESTABLISHMENT GRANT**

**Basic Science Collaborative Support: \$80,000.00**

Dr. Sean Christie	\$20,000.00
Dr. Adrienne Weeks	\$15,000.00
Dr. Michael Bezuhly	\$10,500.00
Dr. Jim Fawcett	\$12,000.00
Dr. Alison Wallace	\$ 7,500.00
Dr. Boris Gala Lopez	\$15,000.00

**Divisional Research Personnel Support \$280,000.00**

Orthopaedics	\$40,000.00
General Surgery	\$40,000.00
Cardiac Surgery	\$35,000.00
Otolaryngology	\$35,000.00
Plastic Surgery	\$35,000.00
Neurosurgery	\$35,000.00
Thoracic Surgery	\$30,000.00
Vascular Surgery	\$30,000.00

**Total Support Monies \$ 432,010.44**