Welcome to the Fall 2024 Dalhousie University Department of Surgery Research Bulletin.

Since taking on the role of Departmental Research Director in June, I have had the opportunity to meet with key research stakeholders, including Division Heads and Research Directors, and the outgoing Departmental Research Director Dr. Michael Dunbar. Thanks to Dr. Dunbar and Deputy Research Director Dr. Sean Christie, research within the Department has taken important leaps forward, most notably with the emergency department rebound initiative and closer collaboration with data analytics structures within Nova Scotia Health.

Through my meetings with Divisional Research Directors, common issues have been raised. One of the highest research priorities identified within our Department is the need for stable common Departmental infrastructure, more specifically the identification and retention of high-quality research personnel who can assist with patient recruitment, and oversee ethics and grant proposals, particularly for clinical trials. To meet this need, the Research Committee has agreed to invest in fewer operating grants to individual researchers and instead shift funding to recruit and retain a team of full-time research personnel who can be mobilized within or between Divisions. Another issue is improving access to biostatistical supports. To address this, I am working to establish a formal relationship between our Department and the Department of Community Health and Epidemiology to provide cost-effective, timely biostatistical support. These are just two of the issues identified. In future Bulletins, I hope to shed light on others. Stay tuned.

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

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 Department of Surgery

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

Congratulations to our residents who completed the Clinician-Investigator Program.

Dr. Dominique de Waard (Division of Cardiac Surgery) defended her Master's thesis in the Medical Research Graduate Program entitled "Implementation of Staphylococcus aureus decolonization in cardiac surgery patients" in June 2024.





Dr. Ashley Robinson (Division of General Surgery) defended her Master's thesis in Clinical Health and Epidemiology entitled "Relationship between institutional and individual surgical volumes and outcomes for index conditions in pediatric surgery: a Canadian population-based study" in June 2024.

Dr. Shahriar Seddigh (Division of Orthopaedic Surgery) defended his Master's of Applied Science thesis in Biomedical Engineering entitled "Comparison of optical 3D scanning technologies for measurement of bone defects in revision total knee arthroplasty" in July 2024.



The Department currently has three residents 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 Clinical Health and Epidemiology and is developing a surveillance strategy for thoracic aortic aneurysms using cardiac CT scan

Upcoming Events

October

October 4: Letter of intent for prospective CIP trainees due Research Day planning and research deliverables scoring committees struck

November

November 8: Operating and Bridge Funding applications due November 20: Division of General Surgery Research Day TBA: CIP trainee presentations to Research Committee

December

December 17: Research Committee meeting to review funding applications

December 20: Call for Research Day abstracts

TBA: Basic science collective strategic meeting

SAVE THE DATE

Department of Surgery Research Day Tuesday, April 8, 2025 Halifax Convention Centre

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. Philippe Tremblay is the new Research Director for the Division of Cardiac Surgery



Dr. Sam Jessula has taken on the role of Research Director for the Division of Vascular Surgery



Dr. Adrienne Weeks is the new Research Director for the Division of Neurosurgery

Congratulations

Dr. Mark Walsh (Division of General Surgery) is a co-applicant on a recently awarded CIHR Project grant \$745,872 entitled "Building a national platform for trust-preserving implementation of normothermic regional perfusion in deceased organ donation in Canada"

Dr. Alison Wallace (Division of Thoracic Surgery) is principal investigator for the AstraZeneca-funded Phase III Tropion-Lung12 clinical trial. Dr. Wallace and her team achieved a remarkable milestone, becoming the first site globally to activate the trial and the first in North America to enroll a patient. This groundbreaking trial, titled "A phase III, randomized, open-label, global study of adjuvant datopotamab deruxtecan (Dato-DXd) in combination with rilvegostomig or rilvegostomig monotherapy versus standard of care, following complete tumor resection in participants with stage I adenocarcinoma non-small cell lung cancer who are ctDNA-positive or have high-risk pathological features," marks a significant achievement for Nova Scotia and highlights the outstanding efforts of the entire team.

Dr. Jim Fawcett (Basic Science Collaborative Lead) was awarded the 2024 Faculty of Medicine Award for Excellence in Research Mentorship of Faculty. Dr. Fawcett was nominated for this award by Dr. Christopher Sinal (Head of the Department of Pharmacology) and our Department's Drs. Alison Wallace and Adrienne Weeks.

Dr. Ashley Robinson (Division of General Surgery) won the Best Clinical Research Award at the Faculty of Medicine Resident Research Day for her work entitled "Relationships between hospital surgical volumes and length of stay for Hirschsprung's disease: preliminary results in a Canadian population-based study"





Dr. Jenna Smith-Forrester (Division of Neurosurgery) won the Best Work in Quality Improvement, Medical Education Leadership, or Administration entitled "understanding post-operative emergency department care for Nova Scotians following posterior spinal decompression: motivations for change"

And Finally...

Thank you to Dr. Ashley Drohan (Division of General Surgery) and Dr. Joseph Corkum (Division of Plastic Surgery) for agreeing to serve as our Departmental representatives on the Nova Scotia Health Research Ethics Board.