

Faculty of Medicine

**Dalhousie Medicine
New Brunswick:
*Research Report***

2021-2022



DALHOUSIE
UNIVERSITY

DALHOUSIE MEDICINE
NEW BRUNSWICK



Research

ASSISTANT DEAN, DMNB RESEARCH UPDATE



Research within the Faculty of Medicine in New Brunswick continued to recover and grow through 2021-2022. Our research council established terms of reference, creating a collaborative forum for health and medical research strategy, our research laboratory was able to fully re-open in 2021-2022, our graduate students were once again able to meet in person, and we expanded our research groups to five, adding a digital health research and innovation group. Once again we saw some staff changes, with the temporary departure of Jennifer Skinner on parental leave and the arrival of Kim Wilms as her replacement as research manager. Congratulations Jennifer and welcome Kim!

We were deeply shocked and saddened by the unexpected and sudden passing of our colleague Dr. Sohrab Lutchmedial in late 2021. Sohrab continues to be missed as a leader and innovator in cardiovascular medicine in Atlantic Canada, as well as a mentor for many in our research family.

It has been satisfying to see the continued growth of our Dalhousie Medicine New Brunswick Research Council, providing a forum for discussion, collaboration, and

problem solving for Faculty of Medicine researchers across the province.

The DMNB Research Council supports five main groups:

1. Discovery Science Research Group, chaired by Dr. Thomas Pulinikunnil
2. Health Services Research and Population Health Group, chaired by Dr. Daniel Dutton
3. Clinical Research Group, chaired by Dr. Pamela Jarrett
4. Educational Research Group, chaired by Dr. Kavish Chandra (chair elect Julie Easley)
5. Digital Network Solutions Group, chaired by Dale Vandenborre

The past academic year has seen continued strategic planning within the Faculty of Medicine and the Medical Research Development Office. We are confident that the updated strategic plan will acknowledge the strengths and potential for growth for medical research at DMNB.

In collaboration with our colleagues in Halifax, 2021-2022 saw the successful launch of the Research Colloquium, which included three mentor-mentee teams from our New Brunswick faculty.

Locally, we have continued to work closely with our colleagues at the University of New Brunswick, Horizon Health Network, New Brunswick Community College, and the New Brunswick Research Foundation supporting developments such as the Integrated Health Initiative, and the proposed Health and Technology District.

The research teams that make up our groups have worked innovatively over the past year and have made many notable achievements including grants, prizes, scholarships, national and international presentations and publications.

We were pleased to be able to re-institute our annual celebration of research at our Research Celebration Dinner in the spring of 2022, when we were able to acknowledge many of these achievements in person.

Dalhousie Medical Research Foundation Lewis and Atkinson Award for Emergency Medicine and Point of Care Ultrasound - Eric Plant and Daniel Hanscom for their PoCUS Club initiative.

Dalhousie Medical Research Foundation annual grant of \$100,000 to support research and research teaching efforts of the Faculty of Medicine at DMNB:

- Dr. Kimberley Barker and Michelle Reddin for their “Newcomer Health Clinic” project Department of Biochemistry & Molecular Biology.
- Dr. Keith Brunt, Thomas Pulinilkunnil, Tony Reiman, and Petra Kienesberger for quantitative protein imaging equipment and software to support biomedical and translational research that goes beyond cardiometabolic and oncological sciences, encompassing broad applications in diverse biomedical research areas, including inborn error of disease research, nanomedicine, and immunology
- Dr. Pamela Jarrett, Dr. James Wagg, and Joshua Shanks for their “Outcomes in Older Adults with Isolated Hip Fractures: An Analysis of Frailty and the Outcomes of Isolated Hip Fractures in Older Adults at the Saint John Regional Hospital”

We were pleased to continue to provide enhanced funding through the Chesley Family research fund, again matched by the New Brunswick Health Research Foundation (NBHRF) with winning proposals from teams led by Dr. Kavish Chandra and Dr. Duncan Webster.

Other notable funding awards were won by Dr. Dutton and Brunt.

Our faculty were honoured with several prestigious NBHRF researcher awards this year, with each receiving “Researcher of the Month”.

October 2021 – Dr. Daniel Dutton
January 2022 – Dr. Shelley Doucet (Adjunct)
February 2022 – Dr. Paul Atkinson
April 2022 – Dr. Stephen Lewis
June 2022 – Dr. Edward Abraham
July 2022 – Dr. Alli Murugesan (Adjunct)
August 2022 – Dr. Keith Brunt

We would also like to acknowledge the following

achievements by DMNB researchers during the 2020/21 academic year:

- Dr. Logan Slade obtained his PhD in Biochemistry. Dr. Slade was supervised by Dr. Thomas Pulinilkunnil, Department of Biochemistry & Molecular Biology.
- Three of our faculty, Drs Sarah Gander, Jean-Francois Legere, and Pam Jarrett were awarded NBHRF Clinical Research Scholarships.

In terms of publications, it was a busy and productive year, with 66 peer-reviewed publications recorded by DMNB researchers across the spectrum of topics addressed by our faculty and representing significant outputs within each research group at DMNB. This high level of research output represents our work nationally and internationally, and impacts biomedical and medical science significantly.

I wish to thank all who continue to contribute to our research program within the Faculty of Medicine here in New Brunswick, and we look forward to continued DMNB research success in the 2022-2023 year.

Respectfully submitted by,

Dr. Paul Atkinson, MB, MA, FRCPC
Assistant Dean Research, DMNB

RESEARCH ACTIVITY 2021-2022

Research Staff & Trainees

Full Complement of DMNB
Research Staff and Trainees
Total Count as of Sept 30, 2022

Principal Investigators (PIs)	5
Senior Scientists	2
Post-Doctoral Researchers	3
PhD Students	4
MSc Students	8
Summer Students	8
Volunteers	10
Grant-Paid Staff	16

Funding Awarded to DMNB Investigators

\$11,287,718

In total



National



Provincial

As Principal Applicants

New Funding Awarded During the Period, Reflected as Full Grant Amounts

\$6,988,881

As Co-Applicants

New Funding Awarded During the Period, Reflected as Full Grant Amounts

\$3,703,892

Publications by DMNB Investigators

66^{*}

Total Papers

* Publications were co-authored by multiple DMNB Investigators

Research Funding Awarded (PIs Only)

Publications by PIs (Peer-Reviewed): 38

19 Dr. Tony Reiman



7 Dr. Keith Brunt



4 Dr. Dan Dutton



2 Dr. Thomas Pulinilkunnil



2 Dr. Petra Kienesberger



Presentations by PIs

Dr. Petra Kienesberger	2
Dr. Thomas Pulinilkunnil	1
Dr. Dan Dutton	2
Dr. Keith Brunt	-
Dr. Tony Reiman	-



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