

# Research

*Like education, research is another priority initiative of #DalMedForward, which aligns with the Dalhousie Faculty of Medicine's fundamental mission to inspire and enable excellence in health care.*

## ASSISTANT DEAN, DMNB RESEARCH UPDATE



Following the limited reopening of our research laboratory in the summer of 2020, we hoped that the 2020-2021 academic year at DMNB might return to normal. Unfortunately, COVID-19 remained with us through the year; however, our research program continued to grow thanks to the perseverance and commitment of our Faculty of Medicine researchers and support staff here in New Brunswick.

We were delighted to welcome Dr. Shane Journey in 2021 as the new J. D. Irving Limited Research Chair in Occupational Medicine. A Dalhousie Medical School graduate, Shane has training and certification in both Occupational and Environmental Medicine as well as Physical Medicine and Rehabilitation. Shane is establishing a nationally networked Occupational Medicine research program here in New Brunswick.

We were also very pleased to welcome Jennifer Skinner, our new research manager at DMNB in 2021. Jennifer joins us from Alberta and brings with her a superb skill set in research administration.

Unfortunately, we said goodbye to some faculty, notably Dr. Ansar Hassan of the NB Heart Centre and our cardiovascular research team, as well as Dr. Amanda Caissie who moved within the Department of Radiation Oncology to Halifax.

I am thrilled to report that our Dalhousie Medicine New Brunswick Research Council continued to provide a forum for discussion, collaboration, and problem solving for Faculty of Medicine researchers across the province. The DMNB Research Council supports four 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.

In addition, our teams have engaged in the DMNB-hosted Digital Network Solutions Health group, partnering with leaders from Horizon Health Network and University of New Brunswick.

Strategically, we have worked with our colleagues in Halifax to develop programs and continued to align with the University of New Brunswick, Horizon Health Network and New Brunswick Community College in planning for the future of health research in New Brunswick. The research teams that make up our groups have worked innovatively over the past year and have made many notable achievements (read more at <https://medicine.dal.ca/departments/core-units/DMNB/research/fom-research-nb.html>).

Our emergency medicine research team with myself and Dr. Kavish Chandra as co-investigators received significant funding awards, including four CIHR awards for national COVID registry projects, selective neuroimaging for head-injured emergency patients who take anticoagulant medication, and the Monitoring Impaired Driving in Canada/Transport Canada Enhanced Road Safety Transfer Payment Program. Dr. Tony Reiman received a substantial grant for a project in which he is a co-investigator: "The Terry Fox Research Institute (TRFI) Atlantic Cancer Consortium Pilot Project for the

Marathon of Hope Cancer Centres Network.” Dr. Daniel Dutton was part of the CIHR Maritime SPOR SUPPORT Unit team who received ongoing Phase II funding.

We were pleased to provide enhanced funding through the Chesley Family research fund, matched this year by the New Brunswick Health Research Foundation (NBHRF) with winning proposals from teams led by Dr. Thomas Pulinilkunnil, Drs. Keith Brunt and Ansar Hassan, Dr. Tsetan Dolkar, and Dr. Duncan Webster.

Other notable funding awards were won by Drs. Colleen O’Connell, Daniel Dutton, Ismael Foroughi, Thomas Pulinilkunnil, Shelley Doucet, and Wendy Stewart.

Our faculty were honoured with several prestigious NBHRF researcher awards this year. The DMNB-affiliated Canada East Spine Centre won New Brunswick Health Researchers of the year 2020. Drs. Petra Kienesberger, Daniel Dutton, and Thomas Pulinilkunnil each received researcher/mentor of the month awards.

Drs. Pam Jarrett, John Thomson, Rob Dunfield, and members of the Canada East Spine Centre each won national research presentation awards.

We would also like to acknowledge the following achievements by DMNB researchers during the 2020/21 academic year:

- Dr. Purvi Trivedi obtained her PhD during the Dalhousie University Spring 2021 Convocation. Dr. Trivedi was supervised by Dr. Thomas Pulinilkunnil, Department of Biochemistry & Molecular Biology.
- Joshua Stanton, one of Dr. Tony Reiman’s trainees, successfully defended his MSc thesis at the University of New Brunswick in June 2021
- Dr. Dipsikha Biswas completed her postdoctoral fellowship.
- DMNB and IMPART researcher Dr. Keith Brunt was appointed as Board President of the Heart & Stroke Foundation of New Brunswick in December 2020.
- NB Social Pediatrics team led by doctor-researcher Sarah Gander launched a non-profit and partnered with the Business Community Anti-Poverty Initiative (BCAPI) to deliver care in the community to pediatric patients.

In terms of publications, it was a busy and productive year, with 50 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 2021-2022 year, when we hope to hold our Research Celebration Dinner and acknowledge these achievements in person.

**Paul Atkinson, FRCPC**

Assistant Dean Research, DMNB

Professor, Faculty of Medicine, Dalhousie University

# A NOTE ON THIS YEAR'S RESEARCH SECTION

## Change in Reporting Period

In previous DMNB annual reports, research activity was based on the fiscal year (March 30 to April 1). In an effort to align more closely with the education component of the DMNB annual report, which reports activity based on the academic year (September 1 to August 31), this year's research section will report on the October 1, 2020 to September 30, 2021 period.

As a result of this change, the period from April 1 to September 30, 2020 represents a gap in reported activity on this and previous annual reports. Research activity for this period is presented below and in the research section of the DMNB website under DMNB Research News & Reports > Quarterly Reports: <https://medicine.dal.ca/departments/core-units/DMNB/research/dmnb-research-news/quarterly-reports.html>

### New Staff and Trainees for the Reporting Period

*Apr 1, 2020 to Sept 30, 2020*

Principal Investigators (PIs)	0
Senior Scientists	0
PhD Students	0
MSc Students	3
Summer Students	0 (COVID-19)
Post-Doctoral Researchers	0
Grant-Paid Staff	1

### Full Complement of DMNB Research Staff and Trainees

*Total Count as of Sept 30, 2020*

Principal Investigators (PIs)	4
Senior Scientists	1
PhD Students	5
MSc Students	5
Summer Students	0 (COVID-19)
Post-Doctoral Researchers	4
Grant-Paid Staff	15

## RESEARCH ACTIVITY 2020-2021

### Research Staff and Trainees

#### New Staff and Trainees for the Reporting Period

*Oct 1, 2020 to Sept 30, 2021*

Principal Investigators (PIs)	0
Senior Scientists	0
PhD Students	1
MSc Students	5
Summer Students	0 (COVID-19)
Post-Doctoral Researchers	0
Grant-Paid Staff	9

#### Full Complement of DMNB Research Staff and Trainees

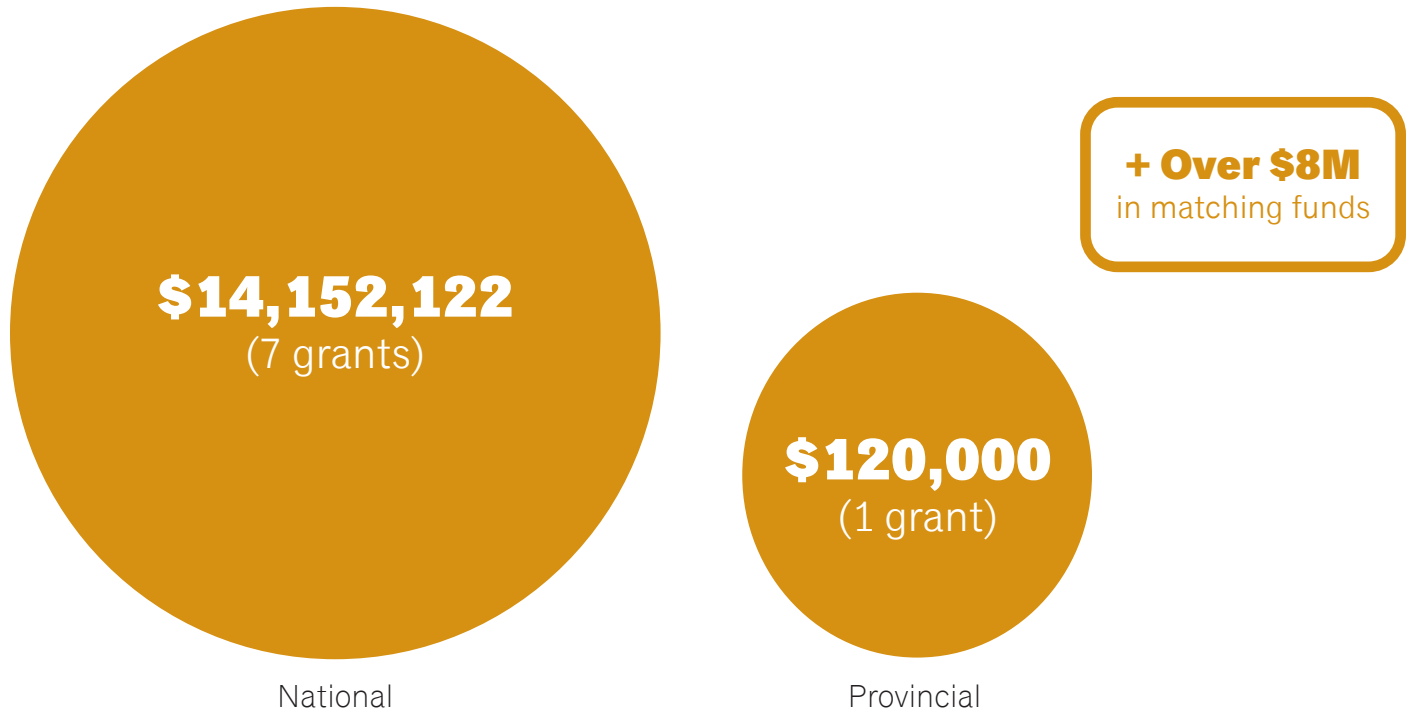
*Total Count as of Sept 30, 2021*

Principal Investigators (PIs)	4
Senior Scientists	1
PhD Students	4
MSc Students	10
Summer Students	0 (COVID-19)
Post-Doctoral Researchers	3
Grant-Paid Staff	18

## Successful Grant Applications Involving DMNB Investigators

### As Co-Applicants

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



### As Principal Applicants

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

**\$453,928**  
(8 grants)

## Publications by DMNB Investigators

**50** \*

Total Papers

\* 11 publications were co-authored by multiple DMNB Investigators

# TRAINEE ACCOMPLISHMENTS

## Graduations



**Dipsikha Biswas**

Supervised by Dr. Thomas Pulinilkunnil, Dr. Biswas completed her postdoctoral fellowship in the Department of Biochemistry & Molecular Biology at Dalhousie University in December 2020.



**Purvi Trivedi**

Supervised by Dr. Thomas Pulinilkunnil, Dr. Trivedi graduated from the Department of Biochemistry & Molecular Biology at Dalhousie University with her PhD in June 2021.



**Joshua Stanton**

Supervised by Dr. Tony Reiman, Joshua graduated from the Department of Biological Sciences at the University of New Brunswick with his MSc in June 2021.