



FACULTY OF MEDICINE

## Advancing Family Medicine through Research

Access to primary healthcare is a growing challenge across Atlantic Canada. With an aging population, increasing chronic disease rates, and a shortage of family doctors and nurse practitioners, many individuals struggle to find the care they need. In Nova Scotia alone, over 110,000 people are on the primary care registry waiting for a provider.

## At Dalhousie University's Faculty of Medicine, our family medicine researchers are tackling these challenges head-on.

Through innovative research and data-driven solutions, they are working to strengthen primary care delivery, improve patient outcomes, and support medical professionals in providing high-quality, accessible care. From investigating the impact of social determinants of health to optimizing chronic disease management, our researchers are leading the way in advancing family medicine for the benefit of individuals, families, and communities across Atlantic Canada and beyond.

By investing in this research, we can create a stronger, more sustainable primary healthcare system—one that ensures every individual has access to the care they need when they need it most.

<u>Miss the</u> <u>event?</u> <u>Watch it</u> <u>here!</u>



Whether you are born and bred in Atlantic Canada or arrive in one of our provinces "from away," finding a family doctor or nurse practitioner is a daunting prospect.

A swathe of primary care practitioners who are reaching retirement age, the number of hours the job demands, the administrative burden and the pressure our aging population and chronic disease burden places on these medical professionals contribute to the challenge of how best to deliver primary care in our region.

In Nova Scotia alone, there are more than 110,000 people, just over 10 per cent of the population, on the primary care register waiting to match with a provider. In New Brunswick, the need for a primary care practitioner is almost double – 21 per cent of that province's population, or almost 180,000 people, lack a primary care practitioner.

In Prince Edward Island, almost 35,000 people, or 20 per cent of the population, have registered to try to find a family medicine provider.

Finally, the percentage of those without a family doctor or nurse practitioner is highest in Newfoundland and Labrador, where 30 per cent—about 163,000 people, or almost a third of the population—are waiting.

Adding to the problem, in recent years family medicine has not seemed as attractive a prospect as other options to medical residents when choosing a specialty. In 2018, just 25 per cent of Dalhousie's fourth-year residents chose family medicine, a major barrier to increasing the number of family doctors in the region.

Thanks to intensive efforts on the part of Dalhousie's Faculty of Medicine, that picture is changing. In 2024, 52 per cent of graduating medical students chose family medicine, and the university filled all 91 of its family medicine training seats.

Good primary care is the foundation for wellness. In our universal health-care system in Canada, primary care is also the gateway to accessing specialist treatment. Despite our entrenched Canadian value that excellent medical care is a universal right, access to this care is not equitable.

At Dalhousie, our family medicine researchers are developing solutions to these inequities and determining effective ways to ensure our system works better for everyone – including the health-care providers.



## Family Medicine Research Priorities

Research in family medicine builds the foundation for a better health-care system, in Atlantic Canada, across the country, and around the world. Our researchers – many practising family doctors – lead the way toward healthier families and communities. They advance our understanding of wellness, illness, prevention, treatments, services, and healthcare work-force challenges.

Through the Maritime Family Practice Regional Network, our researchers have access to data from more than 100,000 Nova Scotian patients, giving them information on chronic diseases such as diabetes, hypertension, osteoarthritis, depression, epilepsy, Chronic Obstructive Pulmonary Disease, Parkinson's disease, and dementia. This data will help us manage and treat these illnesses, not only in Atlantic Canada but across the country.

We are also engaged in studies that:

- screen for poverty and examine the impact of social determinants of health;
- examine the relationship between screening for gestational diabetes and maternal and child health outcomes;
- investigate problems coordinating and accessing primary care during the COVID-19 pandemic;
- review the effectiveness of centralized wait lists for getting a primary healthcare provider;
- examine the administrative burden on family doctors and other primary care practitioners, to find solutions that maintain efficient coordination of care in Nova Scotia.

Together, the outcomes of our research will inform high-quality, evidence-based care that improves the health and well-being of people in Atlantic Canada and beyond our borders.



## Meet some of our researchers

**Dr. Emily Gard Marshall** is a professor in the Department of Family Medicine, and Department of Psychiatry. She explores primary healthcare from the perspective of patients, providers, and the health-care system, examining population health, optimization of costs, better patient experiences, and the well-being of primary care providers. Dr. Marshall focuses on access, continuity, and comprehensiveness, such as the effectiveness of centralized waitlists for people without primary care providers. Her research goals are to improve equity and optimize outcomes across people's lifespans. She uses population data and prioritizes vulnerable populations.



Dr. Marshall leads multiple pan-Canadian studies, including a CIHR-funded study to explore the effects of the COVID-19 pandemic on the primary care system: Problems Coordinating and Accessing Primary Care for Attached and Unattached Patients Exacerbated During the COVID-19 Pandemic Year (PUPPY).



**Dr. Ruth Lavergne** is an associate professor in the Department of Family Medicine and holds a Canada Research Chair in Primary Care. The focus of her research is on addressing inequities and strengthening primary care to make it accessible for all.

She is generating evidence to make sure the way primary care is organized, delivered, and supported meets the needs of Canadians. She examines changing practice patterns within the physician workforce.

By analyzing data that the health-care system routinely collects, Dr. Lavergne investigates the ways people currently access care, and how policy changes affect access. She and her research partners collect information through interviews and focus groups with patients, care providers and people who plan health services, to ask questions that matter and generate results that will lead to better health care systems.

## Meet some of our researchers

**Dr. Kevin Pottie** is a family doctor and distinguished professor and Research Chair in Family Medicine at the Department of Family Medicine. His research focuses on health equity and interdisciplinary evidence-based guidelines, particularly as those issues relate to healthcare for immigrant and refugee populations, as well as other vulnerable people. He focuses on how to best address the impact of poverty, homelessness, and disparities in healthcare and conducts systemic reviews and develops patient-centric guidelines for primary care providers.



His current research includes how to ensure low-income patients who could benefit from drugs like Ozempic, which have widespread health benefits in addition to weight loss, have access to these expensive medications.

Dr. Pottie's work also includes integrating clinical pharmacists, health navigators and internationally trained health professionals into primary care practices. He is also interested in the role of AI in primary care.



**Dr. Mathew Grandy** is an Associate Professor in the Department of Family Medicine. He uses data from electronic medical records (EMR) to illuminate patterns of chronic disease and medication prescribing and to better understand how best to treat complex patients in the primary care setting.

Dr. Grandy leads a study on identifying and describing chronic opioid prescribing, utilizing EMR data.

He is also involved in collaborative projects that use machine learning to identify frailty, and in analyzing EMR data on multiple medication prescribing to elderly patients, combined with training for family practitioners on how to improve this practice.

## Meet some of our researchers

**Dr. Helena Piccinini-Vallis** is an Associate Professor of and the Research Director of the Department of Family Medicine and is crossappointed to the Department of Obstetrics and Gynaecology. Her research interests include obesity management in primary care and excess weight gain during pregnancy; gestational diabetes; and patientcentred care, especially during pregnancy.

Dr. Julie Easley is an Adjunct Professor with the Department of Family Medicine, and the Research Director for the Department of Medical Education, Horizon Health Network in New Brunswick, Her research focuses on medical education, primary health care, physician recruitment and retention; primary care capacity and workforce planning; breast cancer; patientcentred care; and patient engagement/empowerment; virtual care; psychosocial oncology; cancer survivorship/follow-up care; and social determinants of health.

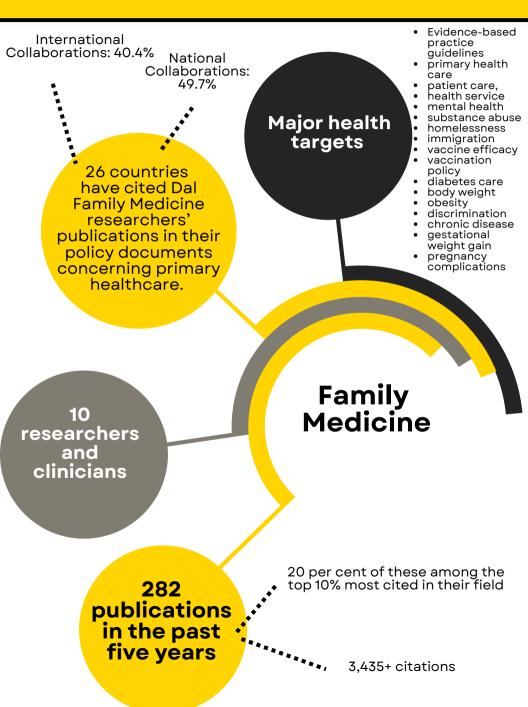
**Dr. Karen McNeil** is an Assistant Professor in the Department of Family Medicine and a family doctor at the Dalhousie Family Medicine Clinic. Dr. McNeil's research interests involve people with intellectual and developmental disabilities. Her current research concerns the barriers and facilitators for the periodic health check in the IDD population. Dr. Barry Clarke is an Assistant Professor at the Department of Family Medicine. His research concerns seniors' care within the primary care system, particularly frailty assessment and management, and systemic and policy interventions. He founded the Long-term Care Frailty program in Nova Scotia called "Care by Design," participating with the department's research team to assess the impact of the program on patients and the health care system. He has also contributed to national research work on how seniors have responded to COVID-19 infection and immunization.

**Dr. Michael Vallis** is a psychologist and Associate Professor in the Department of Family Medicine. He conducts research on motivation, behavioural change, and psychosocial adaptation to chronic disease.

**Dr. Jillian Achenbach** is an Assistant Professor in the Department of Family Medicine. She focuses her research on understanding on barriers and supports for people with intellectual and developmental disabilities in accessing period health checks. She is also a family doctor at the Dalhousie Family Medicine Clinic, which helps educate and support primary care providers in their care of people with intellectual and developmental disabilities.

### Research Snapshot

The Department of Family Medicine's collaborative research projects have been making an impact for more than 35 years



# Your invitation to transform lives

When we invest in the future of research, we invest in the future well-being of our communities, our families, our friends, and ourselves.

Now, more than ever, we are at the cusp of life-changing discoveries. We need our community of generous donors and strategic partners to support the innovative work our researchers, post-graduate students and trainees carry out at the Faculty of Medicine.

Investing in the next generation of researchers, pioneering discoveries, and innovating to improve processes, will ensure Dalhousie leads the way to a better future. If you would like to know more about how you can be part of the transformative efforts of the Faculty of Medicine, reach out today.

# Join Us Today

For more information on how you can make a profound difference through philanthropic giving, please contact:

### Cathrine Yuill

Executive Director of Advancement Faculty of Medicine Email: Cathrine.Yuill@dal.ca Phone: 902-956-0821

### **Carol Murray**

Director, Legacy and Annual Giving Faculty of Medicine Email: Carol.Murray@dal.ca Phone: 902-233-8767

#### Nadine Woon

Director of Development Faculty of Medicine Email: Nadine.Woon@dal.ca Phone: 902-719-9775

### **Elizabeth Conrad**

Development Officer Faculty of Medicine Email: Elizabeth.Conrad@dal.ca Phone: 902-717-2748

### Ignite a future where healthcare knows no bounds.