A BRIEF HISTORY

Dalhousie Medical School’s roots stretch back to September of 1843, when the Dalhousie College Act specified that a medical faculty be established within the college. With the support of the premier and a provincially-funded hospital located on the South Common, the Faculty of Medicine began its work in 1868, about 50 years after the founding of Dalhousie University.

The Dalhousie University Medical School’s rich and diverse history has culminated in our position today as one of Canada’s leading medical schools. The medical school has long focused on excellence in medical education. For 154 years, the faculty has been training students to become physicians and scientists, many of whom have made their mark on the national and international stage. Almost as old as the country itself, Dalhousie Medical School has endured two world wars, the Halifax Explosion, and numerous government and physical changes.

An integral part of Maritime Canada since 1868, Dalhousie Medical School’s success has always been linked to our relevance to the communities we serve. Dalhousie Medicine New Brunswick, a distributed medical education program based in Saint John, was launched in 2010 and as of 2023 will train 40 medical students each year. While most Maritime doctors earned their MDs at Dalhousie, our well-trained, highly skilled graduates can be found caring for people of all ages throughout Canada and around the world.
MESSAGE FROM THE DEAN

It has been a remarkable year at Dalhousie Medical School, with inspiring medical advancements, progressive admissions processes, and meaningful engagements with communities across the Maritimes. Over the last year, my admiration for the dedication of our faculty, staff, and learners, who have gone above and beyond in their work, studies, teaching, mentoring, research, leadership, patient care, and volunteer efforts, has only grown.

2021 marked the completion of the Faculty of Medicine’s strategic plan #DalMedForward. This plan paved the way to fulfilling our vision to be internationally leading in medical education and research and being responsive to the health needs across the Maritimes. In October 2021, I was pleased to welcome Assistant and Associate Deans, Department Heads, and administrative leaders across the Faculty of Medicine for our first planning session for the development of our new strategic plan. Since then, we have been consulting broadly with all areas and employment groups of the Faculty of Medicine to better understand your unique perspectives and understand of how we can better support you. Thanks to your input, I am pleased to say we are nearly ready to disseminate the new strategic plan. With your help, we look forward to continuing the tradition of training scientists and medical professionals with a commitment to lifelong learning, excellence in patient care, high ethical standards, and accountability to communities we serve.

In September we announced that Dalhousie University and the Dalhousie Medical Research Foundation (DMRF) would be integrated effective September 30, 2022. The two entities have shared a vision for health research excellence in the Maritimes for over 40 years, and this integration will lead to the creation of an expert team focused on raising even greater funds for medical research at the university.

In early October, in an exciting announcement from the Government of New Brunswick, an additional 10 medical school seats will be added to DMNB. This move is part of a plan to increase the number of seats for New Brunswick medical students within the province. DMNB plays an important role in developing highly trained physicians and scientists who can help address health priorities specific to New Brunswick, and we are excited to have further opportunities to meet the province’s healthcare needs.

This announcement followed news in May 2022 of a partnership that sees Cape Breton University (CBU) sponsor five seats at Dalhousie’s Faculty of Medicine MD Program for qualified rural Nova Scotian applicants including Cape Breton, Mi’kmaq and other Indigenous and African Nova Scotian individuals. The Medical Education Pilot Initiative, which began in September 2022, will allow five successful students to graduate with a Doctor of Medicine from Dalhousie University, and focus on family medicine.

I am proud of all we have accomplished over the last year, particularly in our endeavours to improve upon diversity, equity, and inclusion, but there is more work to be done. We must continue to ensure community representation, disrupting racism and colonialism in all its forms to lead to improved health care for all.

The Faculty of Medicine has proven extremely resilient, and our talented and dedicated faculty, learners, and staff have shown their true strengths over the last few years. With pride, I share some of the many highlights and achievements realized by the exceptional people that make up the faculty. In this report you will find stories indicating the clear progress we are making in our efforts to respond to the health care needs of diverse communities in our region.

I would like to extend my sincerest thanks to our faculty, staff, students, residents, fellows, alumni, patients, donors, and community partners – everyone who is a part of the Dalhousie Medical School community – for your patience and hard work that drove our successes over this past year. Thank you all for your support and dedication.

David Anderson, MD
Dean, Dalhousie Medical School
RESEARCH AT DALHOUSIE MEDICAL SCHOOL

Research is integral to our mission of advancing the quality of health and health care in our communities. With more than 345 medical researchers, 17 collaborative research groups working on close to 900 research projects, Dalhousie Medical School is a major contributor to the world’s medical knowledge. Our graduate programs in the medical sciences offer hundreds of exciting, varied, and challenging opportunities. Innovative research programs and initiatives like the Canadian Center for Vaccinology and the Brain Repair Centre are leading their fields in Canada and around the world.

2021-2022 marked the start of Dr. Eileen Denovan-Wright’s appointment as Associate Dean, Research, and Dr. Paola Marcato’s appointment as interim Assistant Dean, Graduate Studies. As such, much of the year has been devoted to strengthening existing relationships and building new collaborations in order to ensure a healthy a vibrant research community within the Faculty of Medicine.
DALHOUSIE CO-LED STUDY SHOWS COVID-19 PANDEMIC INCREASED VIOLENCE AGAINST WOMEN AND STRAINED SUPPORTIVE SERVICES

The COVID-19 pandemic did more than cripple the healthcare system, increase inflation and financial uncertainties, and create labour market imbalances.

A Dalhousie co-led study has found women experienced more frequent, and often more severe violence during the pandemic, creating new challenges for violence against women services and their clients.

The report, entitled *Adapting the violence against women systems response to the COVID-19 pandemic*, looked at the experience of staff and survivors at violence against women organizations across the Greater Toronto Area during the pandemic. The study was co-led by Dr. Alexa Yakubovich, an Assistant Professor in Dalhousie University’s Department of Community Health & Epidemiology and Affiliate Scientist at the MAP Centre for Urban Health Solutions at St. Michael’s Hospital, and Priya Shastri, an anti-violence advocate with the Toronto Region Violence Against Women Coordinating Committee and Woman Abuse Council of Toronto.

“Service providers told us they were seeing a lot more clients with really severe cases of violence,” Dr. Yakubovich said. “Because of health restrictions and women being isolated at home with abusive partners, there were worse outcomes in terms of struggling to access supports, like counselling, housing, legal support, and appropriate healthcare.”

The study also found that nearly every participating organization had to significantly change its service model due to the pandemic, in many cases without sufficient funding. The mental health of both staff and survivors was in many ways negatively impacted. Organizations often struggled with referrals, including to housing, shelter, healthcare, childcare, and legal supports.

The report speaks to the need for increased funding to violence against women organizations and for strengthening access to housing, health, justice, and social protection systems for women experiencing violence.

Despite the challenges, Ms. Shastri said, many staff went above and beyond to support women, with survivors describing the support as lifesaving. “They do amazing work,” says one survivor who participated in the study. “This organization has kept me alive.”

Dr. Yakubovich, who joined the Faculty of Medicine in 2021 from the University of Toronto’s Dalla Lana School of Public Health and St. Michael’s Hospital’s Centre for Urban Health Solutions, where she conducted post-doctoral research on gender-based violence, has received nearly half a million dollars in funding from the Canadian Institutes of Health Research to expand the Toronto study to all of Ontario, Nova Scotia and New Brunswick, and an additional hundred thousand dollars from Nova Scotia Health to expand into the health system. In summer 2022, a team of researchers, advocates, service providers, and women who have experienced violence began looking at what is working well in violence against women services across the three provinces to inform better policy and practice. The Interprovincial Violence Against Women Project (or the IPV Project), will also evaluate how well these adaptations met the needs of women across a diversity of social backgrounds, including different gender, sexual, and racial identities, to provide guidance to support women experiencing violence both during and beyond public health emergencies.

This work builds upon previous work by Dr. Yakubovich that reported the massive and growing need for safe and supportive housing for women escaping intimate partner violence that is largely or entirely unmet in most countries, including Canada. Published in The Lancet Public Health in November 2021, *Housing interventions for women experiencing intimate partner violence: a systematic review*, found that mental health outcomes improve substantially when there are housing solutions available. Studies show an overwhelming increase in violence against women related to the pressures of the pandemic, as well as an increase in the use of weapons to inflict violence against women.

The systematic review is the first part of a multi-part project, “Bridging the Evidence-Practice Gap in the Housing Response to Violence Against Women,” for which Dr. Yakubovich has received two years of funding from the Social Sciences and Humanities Research Council of Canada (SSHRC). The next stage is to explore how women report experiencing different housing interventions and how service providers feel delivering them. In the final stage of the project, Dr. Yakubovich and her team will assess the acceptability and feasibility of a range of potential policy solutions in the Canadian context.
WORLD-LEADING GERIATRICIAN AND ANTI-AGEISM CAMPAIGNER WINS THE RYMAN PRIZE

Geriatrician, researcher, academic and anti-ageism campaigner Dr. Kenneth Rockwood, a Professor in the Division of Geriatric Medicine, was the recipient of the 2021 Ryman Prize.

The award recognizes Dr. Rockwood’s more than 30 years of research, collaboration and practical clinical work for older adults living with frailty and dementia and his long-term campaign to battle ageism in healthcare.

Dr. Rockwood’s win was announced by the Right Honourable Jacinda Ardern, Prime Minister of New Zealand.

The Ryman Prize is an annual $250,000 international award for the best work carried out anywhere in the world that has enhanced quality of life for older people. It is the richest prize of its kind in the world.

The prize has been awarded seven times and the winner is normally presented with the medal in person – but the COVID-19 pandemic meant Dr. Rockwood could not travel to New Zealand to collect his prize and medal.

Dr. Rockwood said the pandemic meant the health of older people was more important than ever.

“This is a fantastic recognition and the timing could not be better. It will give momentum and recognition to do a whole lot more research and work for a greater good,”

The Ryman Prize attracts a world-class field of entrants each year. Each winner is chosen by an international jury of experts from across many disciplines. Dr. Rockwood was singled out for the 2021 prize for a truly unique contribution to the understanding of ageing.
Three years ago, after being approached with the idea by then Med 2 student, Tammy Selman, Dr. Wendy Stewart, Assistant Dean, Pre-clerkship, at Dalhousie Medicine New Brunswick, and Director of the Medical Humanities-HEALS Program at DMNB, developed a research project that used the viewing of visual art in mental health care. In collaboration with the Saint John Arts Centre, Dr. Stewart applied for and received a $24,992 Social Sciences and Humanities Research Council (SSHRC) Partnership Engage Grant entitled: “Prescribing Art: An Innovative Partnership to Positively Impact Individuals Diagnosed with Depression.”

A number of research studies have looked at the positive impact of art on mental health; however, much of the literature has focused on the use of art therapy rather than viewing art. Dr. Stewart intends to change this with the “Prescribing Art” study. Before viewing the art at the gallery, participants will learn how to look at art in a structured way through an animated video designed by Dr. Stewart in collaboration with the students and the Saint John Arts Centre.

“There’s some data in the literature that suggests if you provide education around any type of art form, people get more out of it and so I felt that rather than just sending them off to the gallery without any guidance, we should be more purposeful. That was the idea behind the animation,” says Dr. Stewart. “What the animation will do is take participants through visual thinking strategies in a fun way with an animated character and they get to watch that just before going around the gallery or viewing the art online.”

All participants will complete measures of mental health and wellbeing before and after viewing the art, and some will participate in an interview. Transcripts of these interviews will subsequently be analyzed to identify common themes.

It is Dr. Stewart’s hope that this study will allow her to contribute data to the literature that really shows the value of the humanities and how it can be used in mental healthcare, as well as provide exposure to this type of research to medical students.
A TINY DEVICE COULD CHANGE THE GAME IN HOW BRAIN CANCER IS TREATED

Inspired by his PhD supervisor who was diagnosed with a brain tumour, Dr. Jeremy Brown was determined to create a better and more precise way to treat these tumours. And that determination led to the creation of a tiny device that could prove to be a game changer in how cancer is treated.

Brown is an affiliate scientist at Nova Scotia Health in the Department of Surgery, and a Professor in Dalhousie University’s School of Biomedical Engineering and Department of Electrical Engineering. What he has created is the world’s first high-resolution endoscopic surgical and imaging probe. Only 3mm by 3mm in size, it uses an ultrafast imaging platform, which allows surgeons to use real-time, high-resolution imaging to detect and reach brain tumours.

Currently, MRI or CT scans are heavily relied on to plan an accurate surgical route. While these are incredibly helpful, there are instances where the brain moves inside the cranium after the MRI has been taken, which can make the original image not as precise as needed. Brown’s device, inserted through a small keyhole created in the skull, is able to provide images that not only allow surgeons to follow an exact path to the tumor, but also help them avoid cutting into healthy tissue and determine if they have left any small pieces of the tumour behind. Eventually these kinds of precise images could allow surgeons to adapt surgical plans on the spot, if needed, and provide them with the reliable way to confirm all cancerous tissue has been removed in the operating room.

The endoscopic and imaging probe was used successfully in the first two in-human surgeries at the Queen Elizabeth II Health Sciences Centre in spring 2022. One of the surgeries was a resection of a brain tumour, and the other involved closing off a brain aneurysm. Brown has approval from Nova Scotia Health’s Research Ethics Board to use the device in an additional six surgeries.

The device will also eventually include a therapeutic tool that will non-invasively vaporize cancerous tissue (essentially turning it into gas bubbles) without the use of heat. Not only will this save healthy tissue from potentially getting damaged, but it has also been proven to initiate a pretty substantial immune response.

Brown and his team have already been conducting tests with this new tool in the lab and hope to roll it out soon.

Brown believes that the ultrasound device could also be beneficial for spinal surgeries. Since these kinds of surgeries require a slightly different angle than brain surgeries, he and his team have already re-designed the probe and started fabricating a prototype over the summer.

It’s clear that this tiny device will have a huge impact on how surgeries on the brain and spine are conducted going forward.
DAL RESEARCHER TO LEAD NEW FEDERALLY FUNDED “NODE” TO IMPROVE HEALTH OUTCOMES FOR SUBSTANCE USERS

Clinical psychology and psychiatry researcher Sherry Stewart will lead a new Atlantic Canadian research “node” dedicated to guiding substance use health policies and practices funded by the Canadian Institutes of Health Research.

Announced by the Honourable Carolyn Bennett, Minister of Mental Health and Addictions and Associate Minister of Health, on June 4, 2022, Dr. Stewart and the Atlantic node will receive $2.4 million as part a new $17-million CIHR investment in the Canadian Research Initiative in Substance Misuse (CRISM). Funding will also support a national study on methamphetamine-use disorder, including research to take place at an Atlantic site in Fredericton, N.B.

The new Atlantic Canadian node joins a network of five nodes that comprise CRISM. In 2015, CIHR established CRISM with nodes in British Columbia, the Prairies, Ontario, and Quebec-Atlantic Canada. The Atlantic Canada and Quebec nodes will now operate independently to focus on issues in each region, while continuing to collaborate with the full network to provide a greater level of understanding of substance use and its origins and treatment at local and national levels.

The Atlantic node of CRISM will focus on three research areas, including youth, mental health-substance use comorbidity, and rural and remote services for addictions. In particular, the node will prioritize projects on the impacts of youth tobacco and cannabis vaping on lung health, psychosocial interventions for co-occurring mental health and polysubstance use problems in opiate substitution therapy clients, and partnerships with Indigenous communities around substance-use service delivery.

Dr. Stewart is a clinical psychologist and Tier 1 Canada Research Chair in Addictions and Mental Health. A fellow of the Royal Society of Canada, she directs the Mood, Anxiety and Addiction Co-morbidity (MAAC) Lab at Dalhousie, and pursues cutting-edge research centred around addiction psychology and emotional disorders, and their co-occurrence with addictions.

CANADA RESEARCH CHAIR TO FOCUS ON GETTING TO THE ROOT OF CHRONIC INFLAMMATION

A Dalhousie medical researcher is shedding light on what causes tissues to chronically swell and will have his investigations boosted with new funding provided by the Canada Research Chairs (CRC) program.

In early June 2022, Dr. Gregory Fairn was announced as a Tier 1 CRC. The CRC program provides the funding necessary for Canada’s post-secondary institutions to attract and retain the world’s best research talent.

Dr. Fairn is attempting to pinpoint the painful truth behind Crohn’s disease, a condition resulting from chronic inflammation in the gut. A recent discovery by Dr. Fairn and his research group should provide Crohn’s patients some hope for a healthier future. Mutations in the “NOD2” gene are a major risk factor for developing Crohn’s disease. The team discovered that NOD2 proteins require the addition of two fat molecules to respond to bacterial threats while also contributing to a healthy microbiome. But in people with the mutant versions of NOD2 the fats aren’t attached.

Dr. Fairn and his team have identified “drug-like” molecules that allow them to modify NOD2’s defects to make it behave as it should. The results have drawn interest from pharmaceutical companies that see promise in the innovation to bring treatment to Crohn’s patients in the future.

Alongside his CRC, Dr. Fairn will receive $322,660 from the Canada Foundation for Innovation and the equivalent amount from Research Nova Scotia for research infrastructure.
EDUCATION AT DALHOUSIE MEDICAL SCHOOL

Dalhousie Medical School trains the next generation of physicians and scientists through undergraduate, postgraduate, continuing professional development, and graduate and postdoctoral training programs. Our new, revitalized undergraduate curriculum ensures students receive a world-class education, responsive to the needs of the communities we serve. We are working hard to evolve our teaching processes to incorporate cultural competencies and the unlearning of inherent biases must be made standard in our curriculum, as well as our professional care. Incorporating anti-oppressive practice into the undergraduate curriculum is a small but meaningful step towards an inclusive and welcoming learning environment for Black, and Indigenous people, and people of colour.

Virtual programming has led to increases of attendance at many of our annual programs. In CPDME, eight sessions of the public offering on Mini-Med School saw almost 1000 attendees!

In July 2022, Dr. Babar Haroon was appointed Associate Dean, Postgraduate Medical Education (PGME), replacing Dr. Andrew Warren, who made outstanding contributions to the Faculty of Medicine as Associate Dean, PGME, over his two terms. He has been an exceptional leader and trusted teacher, and we are so grateful to have had him serve in the position for 10 years.

INDIGENOUS ADMISSIONS PATHWAY APPROVED BY DALHOUSIE MEDICAL SCHOOL

Dalhousie Medical School is now accepting more Indigenous students into their undergraduate medical education program.

A new Indigenous Admissions Pathway was approved for the 2022/2023 application cycle and will help facilitate entrance into the program for Indigenous students by assessing applications using a holistic file review.

Led by Dr. Brent Young, Academic Director for Indigenous Health, and supported by former Keknu’tmasiek Welo’ltimk (pronounced: gag-new-d-muss-seeg well-oh-l-dim-k, a Mi’kmaw phrase that translates to “We Learn Healing”) Program Manager Ms. Hannah Asprey, this new admissions pathway will minimize the barriers that have prevented Indigenous applicants from entering medical school at Dalhousie.

Several national bodies, including the Truth and Reconciliation Commission of Canada, recently called for an increase in the number of Indigenous people admitted to medical school. Working with stakeholders in Indigenous leadership organizations, the Faculty of Medicine responded to the call by forming an Indigenous Admissions Subcommittee to make recommendations relevant to Indigenous admissions policies and procedures.

“Indigenous people are vastly underrepresented in the medical profession,” say Dr. Young. “This creates not only an employment equity issue, but also an Indigenous health equity issue. Dalhousie Medical School in located in Wabanaki and our campuses and distributed sites are situated on the ancestral and unceded territories of the Mi’kmaw, Wolastoqiyik, and Peskotomuhkati Peoples. We honour these treaty relationships, and we are accountable to the communities that we serve.”

Until now Indigenous applicants could voluntarily self-identify to be considered for admission under Dalhousie’s Education Equity Statement and if they met the academic and non-academic requirements, they would be provided admissions offers which are not dependent on rankings. This process has not had the intended effect of increasing Indigenous admissions.
“This model is challenging because we know that Indigenous people and other racialized folks are at a disadvantage when it comes to the GPA and standardized tests such as the MCAT” says Dr. Young. “This is related to several socioeconomic factors including language, access to education, and income. For Indigenous people, these factors are all influenced by racism and the ongoing legacy of colonization in Canada.”

Dalhousie Medical School recognizes that education equity and affirmative action processes are required to increase both admissions to the program, and the number of graduates from underrepresented groups. Aligning with Dalhousie’s strategic plan, Third Century Promise, there is now a stronger commitment to make changes that will open doors where these individuals had previously been shut out. While the program will not do away with traditional testing procedures, under the new Admissions Pathway, Indigenous applicants will now have the opportunity to demonstrate other important qualities and attributes through interviews, personal statements, and supplemental information. This will allow applicants who are just shy of the MCAT or GPA requirements to highlight the many skills that Indigenous people build through perseverance and systems navigation, which are sought after qualities in physicians.

“With the current changes, we can now look at an Indigenous applicant who may be a couple of points away from the minimum criteria and ask if they’ve demonstrated other important qualifications or attributes such as altruism, leadership, and communication,” says Dr. Young. “These are the qualifications and attributes our communities are concerned about when they see their physician, not necessarily what their exact score was on an entrance exam that they wrote six to 10 years before they entered independent medical practice.”

The Indigenous Admissions Pathway will undergo an annual review by the subcommittee, who will continue to engage with stakeholders in Indigenous leadership organizations to ensure applicants are assessed appropriately, with the goal of equity for all Indigenous students.

For more information on the Indigenous Admissions Pathway please visit Dalhousie Medical School Admissions.

Self-identified Mi’kmaw, Wolastoqiyik, Peskotomuhkati, and other Indigenous applicants who can demonstrate a substantial connection to Indigenous communities, especially those in the Maritimes, will take priority beginning with the 2022/2023 application cycle.
PARENT TOT PROGRAM ENGAGES DALHOUSIE’S YOUNGEST EMPLOYEES

A program at Dalhousie University is providing learners with the opportunity to learn, develop, and practice critical pediatric skills by working with real children, adding authenticity to simulated pediatric experiences and interactions that learners may face in clinical practice.

One of the many programs developed and implemented by the Centre for Collaborative Clinical Learning and Research (C3LR) in collaboration with the Faculties of Medicine and Health, the Parent Tot program sees medical students in their second year of training, and both nursing students, and communications science and disorders students in their first year of training, complete mandatory appointment-style sessions with a parent or guardian and their child, in a simulated clinical setting. As the only pediatric training in medical school before entering clerkship, the goal is for learners to increase their comfort level working with children and parents/guardians. Medical students are required to participate in four sessions that include children of differing ages and complaints, ensuring they gain the necessary skills to obtain different histories and complete the appropriate physical exam based on age and situation.

Medical students in the program are guided and supported by a pediatrician through each session. Prior to the arrival of the child and parent/guardian, the student and pediatrician discuss expectations and objectives, and any questions or concerns the student may have. The tutors know to prepare the students to expect the unexpected. Kids will be kids.

Once the child and parent/guardian enter the room, it becomes less like a simulated situation, and more like a real appointment, with children who are typically too young to follow the brief script provided to their parent/guardian.

The Parent Tot program has a database of approximately 100 volunteer families with children in the zero-five age-range. This number is always changing, with children graduating out of the pediatric program, making recruitment ongoing. Considered some of Dalhousie’s youngest employees, the families of the children involved receive payment for sessions that range from one to three hours, with a minimum payment of two hours.
FIRST EVER ULTRASOUND MACHINE LENDING LIBRARY FOR MEDICAL STUDENTS IN CANADA OPENS AT DALHOUSIE MEDICINE NEW BRUNSWICK

The Dalhousie Medicine New Brunswick PoCUS (Point-of-Care Ultrasound) Club is the first ever ultrasound machine lending library for medical students in Canada. Under the guidance of Dr. David Lewis, Associate Professor, Department of Emergency Medicine, Dalhousie University, a group of dedicated Dalhousie Medicine New Brunswick (DMNB) students spearheaded this project in response to the limited in-person practice time with ultrasound machines due to the COVID-19 pandemic.

The ultrasound machine lending library will facilitate more practice time for medical students and offer self-directed learning material to enable skill acquisition outside the traditional classroom format.

Luke MacLeod (DMNB Class of 2022), the ultrasound model for the project, is full of praise for his Dalhousie Medicine New Brunswick PoCUS Club co-members, calling them “highly motivated, creative, intelligent, and friendly.” He also sees their efforts “enhanc[ing] self-directed study and practice of PoCUS for future students.”

“Having this new resource available for students who want to practice ultrasound is very exciting,” said project lead Pat Price (DMNB Class of 2022). “With the increasing use of Point-of-Care Ultrasound, this is an important skill for students to develop.”

Not only is the Dalhousie Medicine New Brunswick PoCUS Club’s library of content helpful to medical students in New Brunswick, but also to anyone in the world interested in learning Point-of-Care Ultrasound.

“Nevertheless, our poster, Novice Guide to Point of Care Ultrasound is as relevant in the Saint John Regional Hospital Emergency Room as it is in a Medical Teaching Unit in Mozambique or an Emergency Department in Seattle,” said Price of the project’s accessibility and ease of use. “This is a project that helps learners quickly review the material before they work with patients.”

MEDICAL SCHOOL CURRICULUM REFRESH PREPARES STUDENTS TO MEET EVER-CHANGING HEALTHCARE NEEDS

Becoming a doctor at Dalhousie looks a bit different in 2022 than it did in years past.

The changes, which were evident during orientation week in August 2022, stem from a multi-year review and refresh of the undergraduate curriculum.

The new changes were motivated by several elements, some informed by the changing realities of the world, some by the practice of medicine in Canada, and others by the growing acceptance of the Medical School’s responsibility to better address equity, diversity and inclusivity in both the education of physicians, as well as the care of patients.

Through extensive internal and external consultations, nine key areas of focus were identified: equity, diversity, and inclusivity (EDI); public health; planetary health (including climate crisis); priority communities; generalism; addictions medicine; movement to competency-based learning for UGME; health systems; and student wellness.

The architecture of the undergraduate curriculum has not changed, with most of the transfer of knowledge continuing through small group discussions, and case-based learning. What is changing is the quality of those cases. Medical students in their first and second year of study work through nearly 200 tutorial cases that feature fictional patients. All 200 cases will be edited
to present students with a more diverse array of patients. This will more accurately represent the diversity of patients that interact with the healthcare system, and also disrupt normative assumptions about who is served and what values are upheld by health care in Canada. Med 1 cases have been implemented this academic year, and Med 2 cases will be ready for 2023/24.

Though the most material changes to the undergraduate curriculum will be found in the updated tutorial cases, all elements of the curriculum were reviewed, and many changes have been made. Learners will see a greater focus on health systems, addictions medicine and the overdose crisis, and a growing field in health sciences, planetary health, which concentrates on the human health impacts of the earth’s natural systems. Lectures and case studies have been added on generalism, reflecting the increased need for family physicians and surgeons in this field who have core abilities characterized by a broad-based practice across a range of settings.

Focus has also been given to student wellness, and the medical school is working to ensure students are supported throughout their four years of training and have developed the skills and healthy habits to serve them through their careers.

Going forward, the medical school will continue to ensure the undergraduate curriculum is constantly renewed to meet the needs of our future physicians and the communities they serve.

HONOURING EXCELLENCE. PRESERVING HISTORY. INSPIRING GENERATIONS.

Second year medical students with an established track record of community leadership, superior communication skills and demonstrated interest in advancing knowledge were recognized on August 25, 2022, with the Canadian Medical Hall of Fame (CMHF) Award. Each recipient receives a cash prize of $5,000 and a travel subsidy to attend the 2023 Canadian Medical Hall of Fame Induction Ceremony in Halifax, Nova Scotia where they will have the opportunity to meet CMHF Laureates and interact with health leaders from across the country.

The Canadian Medical Hall of Fame partners with donors, MD Financial Management Inc. (MD) and Canada’s medical schools to recognize young leaders who exemplify qualities of CMHF Laureates: perseverance, collaboration, and an entrepreneurial spirit. The award recognizes medical students who demonstrate these qualities and show outstanding potential as future leaders and innovators of health care in Canada.

“It is an incredible honour to be counted among so many inspiring leaders creating positive change in medicine and beyond,” says Qendresa Sahiti, the 2022 Canadian Medical Hall of Fame Award winner from Dalhousie. “I am inspired and motivated by their contributions and look forward to the unique opportunities for connection and mentorship presented by this award. I am so grateful and humbled to be recognized for my work and hope to use this award not as a trophy, but as a source of motivation to continue the work of using our privilege to lift others up.”

Born in Prishtina, Kosovo, Qendresa is passionate about health equity, community involvement and advocacy, and improving the post-secondary environment. She holds a Bachelor of Science (Honours) in Neuroscience and a Certificate in Science Leadership & Communication from Dalhousie University. She has published and presented research in trauma and antecedents to mental illness, medical education and the learning environment, and the intersection of art and science. As an immigrant and former refugee, she is particularly interested in newcomer health, and has been heavily involved in organizations that advocate for the wellbeing of marginalized populations.

Each of Canada’s faculties of medicine facilitated the review of applicants and recommended one award recipient.

“It’s hard to imagine how anyone could not be impressed after learning of the many talents and accomplishments of Qendresa Sahiti,” says Dr. Cindy Forbes (MD ’85), president of the Dalhousie Medical Alumni Association. “Her passion for addressing social inequities is reflected in her words and her work, and as I reflect on how much she has achieved and how many people she has already helped at this early stage in her medical career, I am left with a sense of hope and excitement about what she will undoubtably contribute in the future.”
On July 8, 2022, the Wije’winen Health Centre opened its doors to the urban Indigenous community in Halifax, providing future opportunities for medical learners interested in Indigenous health.

An initiative of the Mi’kmaw Native Friendship Centre, the new health centre will boast a full-time academic physician position, becoming the first of its kind in Nova Scotia to host learners formally. Medical students and residents will be offered a comprehensive experience in Indigenous health — something that has not previously existed in the central zone.

Serving patients who have not had options for self-directed care in the past, the centre will serve as a space for urban Indigenous peoples to seek culturally safe primary care. At a time when there are acute doctor shortages, the centre’s opening could not be more timely.

Dr. Brent Young is an Anishinaabe family doctor, the academic director of Indigenous health in Dalhousie’s Faculty of Medicine, and the clinical lead at Wije’winen Health Centre. Dr. Young explains that trauma-informed care is one strategy for providing a culturally safe environment for Indigenous peoples.

Dr. Young expects that one of the takeaways for students will be the recognition that Indigenous people have a long history and prevalence of trauma, and that trauma informs and shapes how they interact with the health care system. He hopes students keep that at the forefront when interacting with their patients and providing care.

The clinic will offer learners structured, formal, Indigenous-focused teaching. “When we talk about social determinants of health, we often speak to housing, employment, access to education and access to income,” says Dr. Young. “We know that those things are influenced or shaped by racism and colonialism. It requires a shift in how we think about and conceptualize the social determinants of health and providing that context to students coming through the clinic.”

Cultural safety is an outcome decided by the patient. It is a fluid concept changing from person to person and over time. Dr. Young therefore expects future learners to have a more reflexive practice, be honest in their self-assessments, and adjust their practice to their patients as needed.

With continued shifts in Family Medicine toward more collaborative models of care, students will be able to rotate through the over 50 wrap-around services at the Mi’kmaw Native Friendship Centre.
The Faculty of Medicine has articulated a vision for improving health in the Maritimes that exceeds its traditional roles of educating physicians and conducting leading-edge research. We seek to build a Faculty that is inclusive and welcoming of diversity, and which appreciates diverse forms of excellence within its members. Our teams work to enhance equitable health outcomes for diverse populations with underrepresented voices in health systems, and engage communities in the design and delivery of our educational programs and in identifying priorities in our research mission.

Over the last several years we have worked hard to serve and engage society in increasingly meaningful, high-impact ways, and it is our commitment to do more.

Progress has been made in the effort to alter the composition of our medical school to better reflect our community. Our new Indigenous Admissions Pathway began accepting students for the 2022/2023 application cycle in June, and in postgraduate education, a pilot project was initiated for equity, diversity, and inclusion support processes for resident selection at Dalhousie.
IN THE SPIRIT OF SOCIAL ACCOUNTABILITY AND COMMUNITY ENGAGEMENT

A program at Dalhousie Medical School is creating opportunities for students and community partners to contribute to the commitment to social accountability and the Faculty’s strategic pillar of Serving and Engaging Society.

The Community-Engaged Service Learning Program is offered during the first two years of medical school and integrates community engagement concepts into classroom-based learning in students’ first year with an optional community-engaged experience and small project contribution in their second year.

This year, 42 Dalhousie medical students, including 34 from Nova Scotia and eight from New Brunswick, participated in the program. They partnered with 24 community-based not-for-profit organizations, many of whom are under-resourced and serve priority communities who may have limited access and experience with health care.

Program manager Sarah Peddle has seen firsthand the value of the program for both students and community partners.

“When students have an opportunity to spend time in community-based settings, it’s the informal conversations that they get to have with people that have the most impact,” she says. “To have future medical professionals in these settings and having conversations with people about what they need from the healthcare system, not only does it provide an opportunity for them to be heard but it can also impact how students practice medicine in the future using these relational approaches to wholistic and patient-centered healthcare.”

When second year medical student Nathalie Ewers was considering her project, she knew early on that a partnership with Imhotep’s Legacy Academy (ILA) could make her initiative come to life. She designed the BIPOC Climbing Initiative to increase accessibility of traditionally outdoor sports and activities such as rock climbing for BIPOC youth, and to encourage STEM (science, technology, engineering, and math) participation by integrating rock climbing and physics education through an engaging PD Day experience. Through Sarah Peddle she was connected with ILA, PLANS, and Keknu’tmasiek Welo’itnimk - We Learn Healing (Indigenous Health) who supported her through the development of her project and ensured the initiative was accessible, inclusive, and enjoyable for youth.

For Matthew Kivell and Dominique Salh, the Community-Engaged Service Learning Program provided an opportunity to connect with the community and develop an understanding of a population who face many challenges in their daily life. Partnering with the Canadian Institute for the Blind (CNIB), their project, Halifax e-Scooter Advocacy Initiative for Individuals Living with Blindness, aims to understand the impact of e-scooter operation and regulation on those who are blind or have visual impairment. Through community engagement, the pair sought recommendations for improved e-scooter regulation with the goal of informing future decisions with the needs of visually impaired individuals in mind.

The idea for their project was borne from the realization that there are serious negative impacts of unregulated e-scooter use for those living with vision loss.

Matthew and Dominique’s work through the Community-Engaged Service Learning Program has already had a real impact for those with vision loss. On April 5, 2022, in response to their collaborative health advocacy letter, the province released a statement making amendments to the Motor Vehicle Act permitting safe operation of e-scooters.
**FACULTY OF MEDICINE INVITES VISITING SCHOLARS TO GUIDE ANTI-OPPRESSIVE PRACTICE**

Dalhousie’s Faculty of Medicine is changing the way it addresses racism in its programs and practices.

The Visiting Scholar for Equity Diversity Inclusion and Accessibility (EDIA) program began in January 2020 when Dr. Gaynor Watson-Creed, the Faculty’s associate dean of serving and engaging society, joined a panel on confronting structural white supremacy in public institutions organized by MacEachen Institute fellow, Ajay Parasram, an interdisciplinary political scientist in the Faculty of Arts and Social Sciences. The session led to further discussions between Drs. Watson-Creed and Parasram who began preliminary talks about a possible White Fragility Clinic. The idea would be to host an online seminar series providing a safe and non-judgmental space to explore issues such as the concept of whiteness and its role in racism, and to build and practice racial resilience in attendees.

Dr. Parasram, though he lacked the formal title, was the first visiting scholar working with Dr. Watson-Creed. In January 2022, Eli Manning began her term as the second visiting scholar in the Faculty. Like Dr. Parasram before her, Dr. Manning shares her time between the medical school and the Faculty of Health where she works in the School of Social Work.

Dr. Watson-Creed and Dr. Parasram decided on a combination communication model for the White Fragility Clinic. Dr. Watson-Creed would be the established medical professional in the room and Dr. Parasram the social scientist, answering technical medical questions and discussing the broader structural analysis of society or history, respectively.

The White Fragility Clinic, which is currently offered to Dalhousie Medical School faculty and staff, as well as local healthcare partners, has emerged the crucial need for the Faculty of Medicine to discuss whiteness as a construct. For those participating in the clinic, particularly those who have attended multiple sessions, the positive changes are already evident.

“What I have seen is a sophistication of people’s racial resilience,” says Dr. Parasram. “We’re starting in one place, which is almost devastating racial fragility as a result of never having to talk about these things, and when people come repeatedly and participate in the conversation we give them the tools, give them confidence, and give them practice space so that they start leading conversations.”

**DAL EMBRACES BLACK STUDIES RESEARCH WITH NEW UNIVERSITY-WIDE INSTITUTE**

There’s a new home for Black studies research at Dalhousie and Dr. OmiSoore Dryden wants everyone engaged in the field to feel welcome — regardless of their area of specialty.

“The Black Studies Research Institute is not faculty specific. It is a pan-university institute centering transdisciplinary and interdisciplinary research in Black studies” says Dr. Dryden, the James R. Johnston Chair in Black Canadian Studies at Dal.

The institute, approved in November 2021 by the university’s Senate and Board of Governors, serves as a centre of excellence supporting the work of current and emerging Black scholars.

By establishing a robust and interdisciplinary research agenda, BSRI will encourage researchers to work across academic fields, including medicine and sciences, which often fall outside of the traditional scope of Black studies.
“We wanted to create a space where those doing Black studies in science, for instance, and those Black scientists interested in expanding their work to really engage in Black studies would have a place to engage with their inquiries,” says Dr. Dryden, a Faculty of Medicine representative on Senate who championed the creation of the institute along with a BSRI committee in response to global activism on Black lives.

While Black studies as a field is often focused on the humanities and social sciences, BSRI — in centering the scholarship and research of the sciences — will create valuable new connections and discoveries.

BSRI’s transdisciplinary approach will amplify Black diasporic research areas in Black Studies, particularly African, Caribbean and Black research scholarship and communities; African Nova Scotian research, scholarship and communities; Black STEM research; and Black feminist, queer and trans research, scholarship and communities.

CANADIAN MEDICAL TEAM PARTNERS WITH QATAR AIRWAYS AND RWANDAIR TO DELIVER LIFE-SAVING CARE IN RWANDA

A Canadian team of 30 Dalhousie-led volunteers, the first in Rwanda, performed 13 life-saving cardiac surgeries at King Faisal Hospital in Kigali, Rwanda, thanks in part to the generous support of the Official Airline Partners, Qatar Airways and RwandAir.

Rheumatic heart disease (RHD) contributes significantly to cardiovascular mortality in children and young adults in many developing countries where it is diagnosed at an advanced stage. In these patients, surgery is required for survival. Rwanda’s ambition is to create an independent sustainable open-heart surgery program through partnership with institutions that have well-established programs.

Led by cardiac surgeons Drs. Keir Stewart and David Horne from Dalhousie University’s Department of Surgery, two Canadian Rwandan Open-heart Project (CROP) teams began their travel to the African country on May 19, 2022 to perform valve replacement surgeries in adults with RHD, and surgeries in pediatric patients with congenital heart
conditions or RHD. Both the adult and pediatric surgeries, which finished early June, have seen great success.

Getting the team on the ground in Rwanda was a major piece in the planning and execution of this very complex mission. It would not be possible without Qatar Airways and RwandAir. Their involvement is vital to the project and CROP’s ability to contribute to ongoing efforts to improve health outcomes for people with cardiac disease in Rwanda.

Dr. Stewart is hoping to continue the partnership with both the King Faisal Hospital for several years, deepening the connection with the Rwandan medical community, and contributing to cardiac surgery education, while also contributing to Rwanda’s goal of establishing an independent, sustainable open-heart program.

In the long-term, the collaboration with Qatar Airways and RwandAir will improve health outcomes and make life-changing care more accessible for Rwandans.

DOCTOR FOR A DAY AT DMNB WORKSHOPS GO VIRTUAL FOR NEW BRUNSWICK MARCH BREAK

Going into 2020, Dalhousie Medicine New Brunswick (DMNB) and the Under One Sky Friendship Centre were keen to expand upon their partnership with plans for a spring tour of the Dr. Everett Chalmers Hospital in Fredericton for interested middle- to high school-age students in the region and a third Doctor for a Day at DMNB event slated for the fall.

Unfortunately, COVID-19 forced DMNB and the Under One Sky Friendship Centre to shelve those plans as they weathered the storm of the pandemic’s early months.

Talks between the two partners, however, resumed in November 2020 and the idea for a virtual event quickly took shape. They were pleased to welcome Dalhousie University’s former Indigenous Health in Medicine Program Manager, Hannah Asprey, to their planning committee and, together, they adapted the popular Doctor for a Day at DMNB event into a five-part series of online workshops hosted on Microsoft Teams for a group of 10 interested students that ran during the week of their March break in 2021.

With the help of two dedicated medical student leads, Tiffany Brooks and Jenny Melanson (DMNB Class of 2022), the planning committee developed a week of programming that gave those interested in pursuing a career in medicine a behind-the-scenes look at the admissions process, the medical student experience, and the importance of integrating Indigenous voices into the study of medicine.

Brooks and Melanson have been involved with the Doctor for a Day at DMNB events since the first one in 2019.

“I am so grateful to be involved,” said Melanson. “We hope to encourage and inspire these middle and high school students to pursue a career in health care. Indigenous voices are important and matter in medicine.”

“To me, planning this workshop was a way to inspire the community that had first sparked my own interest in medicine,” adds Brooks. “It was a way of using an Indigenous way of knowing, Two-Eyed Seeing (working from the strengths of medicine and culture), to inspire students to see themselves in medicine.”

Communications and Outreach Coordinator at the Under One Sky Friendship Centre, Alyse Duffney, echoes Brooks’ sentiments. “The Doctor for a Day event is not just about building knowledge and skills – it’s also an experience which builds confidence and excites students about the prospect of a future in medicine,” said Duffney who has been a key player in the Doctor for a Day at DMNB events since the very beginning. “It fosters Indigenous knowledge and perspectives and empowers Indigenous youth.

“What resonates with me is the hope of providing future generations with Indigenous health care workers who will care for them for years to come.”
A group of scholars and researchers co-led by a Dalhousie professor has joined forces in an effort to re-shape medical and health education in Canada to better reflect the impacts of anti-Black racism on the delivery of care for African Nova Scotians and Black people.

Dr. OmiSoore Dryden, the James R. Johnston Chair in Black Studies and an associate professor in the Faculty of Medicine, serves as co-lead of the Black Health Education Collaborative (BHEC), along with Dr. Onye Nnorom, a family and public-health physician and president of the Black Physicians’ Association of Ontario.

The Black Health Education Collaborative’s research hub is located at Dalhousie and facilitates the development of a suite of educational resources for students, faculty and clinicians/practitioners in health disciplines.

BHEC’s mission is to address anti-Black racism and the interlocking systems that impact the health and well-being of Black communities, including African Nova Scotian communities, across Canada.

BHEC is working with national accreditation bodies to develop national learning objectives on anti-Black racism and Black health.

Dr. Dryden says the fundamental problem BHEC will combat is the persistence of racist falsehoods about Black health. Many of these developed out of colonial racist notions of Black people and are still present in Canada, negatively impacting the care that African Nova Scotian and Black people in Canada receive.

The BHEC will serve as a foundation for all health professionals on critical information about Black health in Canada, and is also focused on continuing professional development and providing clinicians and practitioners with the tools needed that enhance the support for Black patients in Canada.

BHEC originally formed in 2018 and worked throughout the pandemic. In 2021, BHEC received $1.7 million dollars of seed funding from Dal’s Faculty of Medicine and the Temerty Faculty of Medicine and Dalla Lana School of Public Health at the University of Toronto, allowing BHEC to bring on Sume Ndumbe-Eyoh, its first director. Ndumbe-Eyoh is located in Toronto at the Dalla Lana School of Public Health.
### DALHOUSIE MEDICAL SCHOOL

#### BY THE NUMBERS

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RESEARCH FUNDING
HIGHLIGHTS

$95.4 million in total funding (up from $76.1 in 20/21 and $70.3 M in 19/20)

$62.4 million in grants

$33 million Clinical trials and contracts

$2.2 million in CIHR Spring 2021 competition, with a National success rate of 17.7% and a FoM success rate of 10%

$4.6 million in CIHR Fall 2021 competition, with a National success rate of 20.7%, a FoM success rate of 33.3%

38 Research chairs
23 Endowed Chairs
1 Dal Research Chair
14 Canada Research Chairs

Recruitment underway for a Canada Excellence Research Chair (CERC) in area of vaccine equity and a Canada Research Chair in the area of Biomedical Data Science and Personal Medicine (NSERC Tier 2)

2 Successful recruitment Canada Research Chairs in areas of Functional Genomics of Inherited Disease (CIHR Tier 1) and Human Immunology and Inflammation (CIHR Tier 2)

1 Successful recruitment of an endowed chair in the area of Palliative Care Research

2 Successful renewals of Tier 2 CRC

1 Creation of a new endowed chair in the area of Rheumatology Research

2 Dalhousie University Research Professors – Drs. Ratika Parkash and Craig McCormick

3 President’s Research Excellence Awards Emerging Investigator - Drs. Jeanette Boudreau, Leah Cahill, Shashi Gujar

1 President’s Research Excellence Award - Research Impact – Dr. David Kelvin