

THE
VOICE OF
DALHOUSIE
MEDICAL
ALUMNI

FALL/WINTER 2021

VOX MeDAL

DAL'S DNA VACCINE

*TACKLING
PHYSICIAN
BURNOUT*

*CLASS OF '20 SETS
ANOTHER RECORD*

*REMEMBERING
RICHARD
GOLDBLOOM*

**2021
DMAA AWARD
WINNERS**





▲ *Dr. Dayna Lee-Baggley, Dr. Angela Cooper and Dr. Debra Gilin are working together to develop, deliver and test a new physician wellness leadership program. See story on page 44.*

MASTHEAD

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A TIME TO CELEBRATE AND REFLECT

BY DR. KATHY O'BRIEN (MD '87), DMAA PRESIDENT



AS THE HOLIDAYS APPROACH, it's a time for celebration and reflection. We have been living with COVID for almost two years and even now it's difficult to fathom how the world has become so turned upside down. In the midst of it all, there is so much to be grateful for.

I am very proud of the dedication, passion and commitment of all our alumni to their patients, their communities and to Dalhousie Medical School. Just a few days ago, we celebrated some of our most-impressive members of our alumni community during the annual DMAA Alumni Recognition Awards, which were

held virtually for the second year in a row. In keeping with the unprecedented time in which we're living, we did something special this year, bestowing our Alumnus of the Year award on not one but four incredibly deserving individuals. Each of them is serving as the chief medical officer of health for their respective province and they have worked tirelessly and under immense pressure and public scrutiny to keep us safe during the pandemic. You can read about them and our other incredible award recipients a little later in this issue. And if you missed the awards ceremony, you can watch it [here](#).

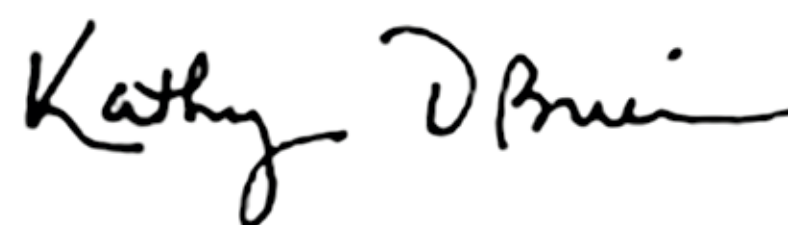
Speaking of events, I'm thrilled to tell you that the Dal Med Gala 2022 is scheduled to take place at the Halifax Convention Centre on March 26, featuring musical guest Big Fish. There is also a CPD event planned for March 25. You should already have received a "save the date" email for the event. More details, including ticket and hotel information, will be arriving in your inbox in the coming days. Following public health guidelines, we are looking forward to seeing many alumni, faculty, staff, residents and students attend, bringing our community safely together to renew old friendships and create new ones.

Since many of our students will not be able to travel home again this holiday season, we are asking you to consider hosting one of them for a dinner in your home over the break. Many of you stepped up last year and the holiday dinners were a huge success, so I encourage you to open your hearts and homes if you are able. Today's students are our future alumni and will benefit from the strong support we can offer now. If you are able to participate, please email medical.alumni@dal.ca.

In closing, I wish to thank all of you for your professionalism, dedication and tireless work in these uncertain times. We

are very proud of your collective response in tackling the challenges of volunteering, teaching, mentoring, research and patient care during this pandemic. Your efforts are clearly making a difference, building hope and leading by example for your colleagues, patients and communities. I wish you good health, comfort and joy as we look forward to the holiday season.

Sincerely,



Dr. Kathy O'Brien (MD '87)
President, DMAA

DAL MED BALL & ALUMNI GALA SAVE THE DATE

~~NOV 20, 2021~~

For real
this time!

MARCH 26, 2022

We can't wait to see you!
More details coming soon



DALHOUSIE
UNIVERSITY

FACULTY OF MEDICINE

GATHERING INSPIRATION FROM EACH OTHER

BY DR. DAVID ANDERSON (MD '83) DEAN, FACULTY OF MEDICINE



AS WE TURN THE PAGE ON AN eventful and memorable 2021, I would like to take this opportunity to thank the Dalhousie Medical School alumni community, once again, for everything you have done throughout the pandemic to keep Canadians healthy and safe.

Throughout this edition of *Vox*, you will read interesting and inspiring stories about alumni, at all stages of their careers, as well as current faculty members, residents and students.

Despite the uncertainty around us, I was delighted to join alumni virtually on November 25 for the annual DMAA Alumni Awards. From clinical care, to

philanthropic support—our graduates have answered the call for their communities, and it was an honour to learn more about their impactful work.

Of note, and for the first time ever, the Alumnus of the Year award was co-presented to four individuals. All four are provincial chief medical officers of health, who have shown their mettle in safeguarding the health of their communities. We are also pleased to recognize the stellar contributions of our two resident leadership award winners, featured on the cover, Dr. Colin Boyd and Dr. Marissa LeBlanc.

On November 24, I had the great pleasure of joining the class of 1960 for a virtual reunion. Having missed the opportunity to get together for their 60th reunion last year, they did not want to let another year go by. It was great to hear stories from their time in medical school and to keep our distinguished alumni informed about the latest changes and improvements at Dalhousie Medical School. It was such a great time that they are already planning an in-person reunion for next year!

This reunion was a stark reminder that, for nearly two years, the way in which we have celebrated and engaged with our alumni has looked much different than years past. While we have made every effort to stay connected, I think people are missing the special energy and excitement of getting together in the same space. This is why I am so thrilled that we will once again come together to celebrate at the Dal Med Gala on March 26, 2022, at the Halifax Convention Centre.

I believe many of us have fond memories from our time in medical school, none more unique than *EUPHORIA!*. As you may be aware, the Class of 2020 has the singular distinction of being the only class to win *EUPHORIA!* in four successive years. As you will read, their trendsetting ways have continued, by becoming the youngest class in Dalhousie University history to establish a class gift, which, when fully funded, will provide a bursary to a deserving Med 2 student who has also been involved in *EUPHORIA!*.

This altruistic act speaks volumes to their commitment to their fellow students, and their sense of paying it forward from the support they received from alumni while they were medical students. The class has set a goal to raise \$25,000 within

10 years, and they are challenging other classes, particularly those in the years after and immediately before them, to step up and create a class project of their own.

Lastly, I would be remiss not to mention the passing of a giant in the field of pediatrics and a towering figure in medical education at Dalhousie University, Dr. Richard Goldbloom. As head of the Department of Pediatrics at Dalhousie Medical School and physician-in-chief at the IWK Health Centre, Dr. Goldbloom became one of the most influential pediatricians in the world. Named a Dal Med Innovator in 2018 to commemorate the 150th anniversary of Dalhousie Medical School, his presence and impact will be felt for generations to come.

Throughout this difficult year we have come to cherish our interactions with friends, family and colleagues more than ever. So, to all our faculty, staff, learners and alumni, I wish you a safe and joyous holiday season.



Dr. David Anderson (MD '83)
Dean, Faculty of Medicine

DMAA Awards 2021

BY MELANIE STARR AND JANE DOUCET

For the second year in a row, the DMAA held its annual awards ceremony virtually. A recording of the November 25 event can be viewed [here](#).

The fact that participants could only see each other on their screens did not diminish the meaning and connection they experienced as they shared in celebrating the contributions and achievements of this year's winners.

Alumnus of the Year Award

IN 2021, THE DALHOUSIE

Medical Alumni Association Board of Directors made an unprecedented decision. In their deliberations to select a recipient of the Alumnus of the Year Award, board members could not help but consider the stellar efforts of the four provincial chief medical officers of health (CMOH) who trained at Dalhousie Medical School. And, they could not in good conscience select just one of those CMOHs above the others to receive the award.

Unanimously, the board decided to grant an Alumna of the Year Award to all four CMOHs, who also happen to be women. Congratulations to Dr. Bonnie Henry (MD '90), Dr. Jennifer Russell (PGM '01), Dr. Heather Morrison (MD '99) and Dr. Janice Fitzgerald (PGM '96), and thank you for your tireless work to protect the health and safety of the residents of (respectively) British Columbia, New Brunswick, Prince Edward Island and Newfoundland & Labrador!

**DR. BONNIE HENRY (MD '90),
CHIEF MEDICAL OFFICER OF
HEALTH, BRITISH COLUMBIA**



For Dr. Bonnie Henry, word of a stealthy new virus out of China was like a reprise of her worst nightmare. As a longtime medical officer of health, she played a key role in managing the response to SARS in Toronto in 2003 and the prospect of another lethal coronavirus making the global rounds filled her with anxiety. “I felt an intense and disturbing sense of déjà vu,” she wrote in her 2021 book, *Be Kind, Be Calm, Be Safe: Four Weeks that Shaped a Pandemic*. “And as it turned out, we were right to be concerned.”

Given BC’s close connections with China, the new virus emerged quickly in Vancouver, thrusting Dr. Henry into the national spotlight as cases began to climb

in spring 2020. Media spokesperson is not a role that comes easily to Dr. Henry, who describes herself as an introvert by nature, yet she handled herself with a reassuring calm that earned her accolades from the media and public alike.

“It’s important to recognize that, while we have all been through this together, we have each come down a different path and we need to be gentle and support each other.”

Her calm exterior belied the tension that has persisted in her gut throughout the many months of the pandemic.

“I don’t sleep very well,” Dr. Henry admits. “I lie awake at times wondering, are we doing enough? Are we doing too much? What is the balance?”

As the pandemic has dragged on, some people have come to resent the public health measures and Dr. Henry has faced a rising tide of criticism and even threats to her life. “The level of vitriol has been intense. The things people will say, especially to and about women leaders, is truly shocking,” she says, noting that she requires full-time RCMP protection. “That part is really hard.”

Support from her fellow chief medical officers of health and her classmates from Dalhousie Medical School’s Class of 1990 has helped carry Dr. Henry through. “I receive notes of encouragement

from classmates, and get together with my CMOH colleagues every Sunday morning,” she says. “We’ve all faced some tough times. It helps to share our frustrations, concerns and ideas.”

Dr. Henry also credits the training in ethics and physician leadership she received at Dalhousie Medical School for her ability to do her job well. “I feel strongly grounded in what I learned at Dal, from such great physicians, teachers and leaders as Dr. Nuala Kenny and Dr. Noni MacDonald. It has really helped me handle issues arising from the pandemic.”

As COVID-19 transitions from a pandemic to an endemic infection, Dr. Henry hopes it will leave a legacy of unity rather than division.

“We are all changed by this. We’ve seen so clearly that, while we may all be in the same storm, we are not all in the same boat,” she says. “It has been hard for us in medicine to see how this virus has affected low-income workers, people of colour and women so much more severely. It’s important to recognize that, while we have all been through this together, we have each come down a different path and we need to be gentle and support each other. I hope that ultimately it helps us to be more understanding as a society.”

DR. JENNIFER RUSSELL (PGM '01), CHIEF MEDICAL OFFICER OF HEALTH, NEW BRUNSWICK



While riding the rollercoaster of pandemic waves has been intensely demanding for Dr. Jennifer Russell (PGM '01), she has kept herself energized by paying close attention to her own needs for alone time and relaxing activities, like exercising, cooking, singing, playing music and connecting with family and friends.

“I’ve really had to take a conscious approach to managing my own energy,” Dr. Russell says. “Early on I realized that, even in the midst of such a crisis, there has to be time to step away and look after yourself and your family. The biggest challenge was ensuring we had the capacity in the organization to allow people to step

away, and then to actually do it. I took advantage of the lulls to exercise more, see my parents, spend time with my kids, to fill that bucket of energy.”

The generally positive response of the people of New Brunswick to the public health messages and measures has also helped to fill Dr. Russell’s tank. In the early days of the pandemic, for example, schoolchildren festooned her house with colourful signs thanking her for keeping them safe, providing a morale boost in the face of a ruthless, shape-shifting foe.

Her background in the Canadian Armed Forces has served Dr. Russell well in her efforts to lead New Brunswick safely through COVID-19: to set effective strategy, manage logistics, marshal resources and make split-second decisions in the face of new information under constantly changing circumstances. “It’s easy for me to tap into that kind of energy and discipline,” says Dr. Russell, who has also worked as a family doctor, a hospitalist and director of a methadone clinic before turning her focus to preventive medicine and health promotion as a public health physician.

As the pandemic continues with the Delta variant as the dominant strain and Omicron gathering steam, Dr. Russell is conscious of managing public expectations. “People are beginning to understand that we are going to have to adjust, as a

society, to living with COVID for the long term,” she says. “But different people have different ideas about what this means. For the time being, it means using all the tools at our disposal and accepting that we are still going to see cases, hospitalizations and deaths.”

Support from New Brunswick’s deputy minister of health, her team and her fellow CMOHs has helped Dr. Russell to navigate the challenges of the past 20 months. “The deputy minister has been so encouraging, my team so dedicated, and my colleagues so supportive,” she says, noting that regular meetings with her CMOH colleagues to vent and share their worries, concerns and burdens has been crucial. “We have definitely leaned on each other throughout the pandemic.”

Of her fellow Dalhousie medical alumnae who share the role of CMOH and the title of 2021 Alumna of the Year with her, Dr. Russell says, “I respect these women immensely and it’s wonderful to be honoured together in this way. It puts a well-deserved spotlight on female leadership in health care.”

**DR. HEATHER MORRISON
(MD '99), CHIEF PUBLIC HEALTH
OFFICER, PRINCE EDWARD ISLAND**



For Dr. Heather Morrison, the biggest challenge leading Prince Edward Island through the COVID-19 pandemic has been a constant worry about being responsible for the safety and health of her fellow Islanders. And with the pandemic dragging on, she and the population she has worked so hard to protect are weary.

“I think it’s a shared feeling among Islanders,” she says. “We did not anticipate that 20 months later, we would still be so significantly involved with this pandemic. It has gone on far longer and been far more difficult than we could have imagined at the outset.”

The need to adapt public health measures to changing realities has also been tricky. “We’re trying to make the best decisions we can with the information we have, for the right reasons, but it’s hard for people to understand the science and rationale when it keeps changing,” says Dr. Morrison of the communications challenge she has faced again and again with every new twist and turn in the pandemic’s unfolding. “The changes we’ve had to make because of the nature of the Delta variant have been difficult, for example.”

The saving grace for Dr. Morrison has been Islanders’ overwhelmingly positive response to the fluctuating public health directives. “It’s been amazing,” she says. “Islanders have been willing to do whatever is required to look out for each other, to do what’s best for the province to keep us all safe. And so the feeling has been, ‘We’ll get through this together.’”

While she is immensely grateful for the positive, kindhearted attitude of most Islanders in the face of COVID-19, Dr. Morrison would prefer to be a little less famous than she has become. “I still find it surprising to be recognized,” she says. “It’s not a comfortable place for me. I had never considered getting into medicine for any recognition.”

As Prince Edward Island’s first female Rhodes Scholar, Dr. Morrison

studied public health policy at Oxford University before receiving her MD from Dal, followed by residency training in community medicine at the University of Toronto. While she has enjoyed working in the emergency room at the Queen Elizabeth Hospital in Charlottetown, she gains great satisfaction from trying to impact larger numbers of people through public health policy and has served as the Island's chief public health officer since 2007.

Of course, no one expects a global pandemic. Dr. Morrison relies on the support of her fellow CMOHs across Canada, and of her fellow Dalhousie medical alumni. "The connections among the alumni community and the physician community in general have been really important to me throughout my career and even more so now," she says, adding that the rock-solid grounding in medicine she received at Dalhousie has prepared her well for the role she now plays.

Dr. Morrison is looking forward to spending more time with her husband and four young children as COVID-19 transitions from global health crisis to endemic virus. "I've spent a lot of time away from them and we've had very little time together for the past two summers in a row," she says. "That's been the hardest thing of all. I miss them and I'm looking forward to more time together."

**DR. JANICE FITZGERALD
(PGM '96), CHIEF MEDICAL
OFFICER OF HEALTH,
NEWFOUNDLAND & LABRADOR**



Dr. Janice Fitzgerald was new to the job of chief medical officer of health for Newfoundland & Labrador when COVID-19 emerged, just getting the feel for her new role when suddenly she was thrust into the spotlight as leader of the province's response to the pandemic.

"It was a steep learning curve," recalls Dr. Fitzgerald. "I've gained and honed a lot of leadership skills, especially in terms of public communication, through the process of leading the response to a public health emergency of this magnitude."

Although overseeing the province's pandemic response has been extremely challenging, Dr. Fitzgerald has learned

that she has what it takes: “I feel like I can do very hard things now, and that I can handle that.”

A family doctor and emergency room physician in rural Newfoundland for many years before going into public health, Dr. Fitzgerald says her family medicine training at Dalhousie Medical School prepared her well for leadership. “It really teaches you how to communicate with people, how to listen to people’s questions and know what they’re really asking about,” she explains. “It was a big benefit for me, for example, when communicating to the media, to have a sense of what people need and want to hear.”

Newfoundlanders’ handling of the pandemic has been a wonderful reinforcement and affirmation of the strong sense of community that prevails on “the Rock.” “People have risen to the challenge, they understand the importance and just do what needs to be done for the health of the community,” says Dr. Fitzgerald, noting that 87 per cent of the eligible population is fully vaccinated and 94 per cent have received one dose. “There’s been a bit of vitriol on Twitter but for the most part people are kind and supportive.”

The loss of her previous anonymity has been a challenge for Dr. Fitzgerald, as has the unrelenting demand for her attention and time, but she has learned to adapt. To

recharge her batteries, she meditates and spends time with family and friends, and she meets often with her fellow CMOHs across Canada to share concerns and exchange knowledge.

The day this February that the number of cases in Newfoundland & Labrador jumped from about two to 200 was one of the worst for Dr. Fitzgerald. “It was a huge eye opener about how quickly this can get out of control,” she says. “It was one of the first big community outbreaks in Canada of the Alpha variant, and it was a shock. But it was amazing to see how everyone came together quickly to bring it under control.”

Another moment that stands out in her mind was the day she announced the first COVID case in Newfoundland & Labrador last March. “I was getting ready to brief the media when we got a call from the lab,” recalls Dr. Fitzgerald. “The first case had just been confirmed and we needed to notify the patient, start the contact tracing and completely change my messaging. We got it all done in about 45 minutes. In a way it was a relief. After all of the dread of anticipating our first case, it was here, and we handled it. It really boosted our confidence. I knew in that moment, ‘We got this.’”

DR. IAN EPSTEIN*2021 YOUNG ALUMNUS OF THE YEAR*

Originally from Toronto, Dr. Ian Epstein (MD '04) moved to Halifax in 1995, at first to pursue journalism at the University of King's College. "I chose journalism as a career that would be rewarding and allow me to give back," he says. However, he had concerns about the competitive journalism job market, so he set his sights on medicine instead.

Bidding journalism farewell, Dr. Epstein completed a Bachelor of Arts degree at Dalhousie University. Then he applied to Dalhousie Medical School, because he wanted to stay in Halifax, and as an added draw because it's the alma mater of his father, Dr. Stanley Epstein (MD '62). As fate would have it, he also met his wife, family physician Dr. Erin Awalt (MD '05), in pre-med.

His natural interest in internal medicine stemmed from growing up hearing his Cape Breton-born father tell stories about his work as an internist and respirologist. "All of the complexity and problem solving that comes with internal medicine appealed to me," he says. Three years of internal medicine residency followed graduation, then two years of gastroenterology residency, both at Dalhousie.

Since 2009, Dr. Epstein has maintained an active clinical practice, with a large focus on IBD and endoscopy. An assistant professor in the Department of Medicine's Division of Digestive Care and Endoscopy, this summer he was pleased to be appointed president of the Atlantic Association of Gastroenterology.

However, his proudest achievement to date is his role as program director of Dalhousie's internal medicine residency training program, where he has helped launch the careers of over 160 residents since 2013. "What an honour to give back to the residency program that trained me to be the doctor that I am," he says. He has led many changes in the program, including the launch of Competence by Design and expanding the regional presence of the program across the Maritimes.

Being named 2021 Young Alumnus of the Year Award is also special. “This award comes not just from the medical school but from the wider medical community and my family’s community,” says Dr. Epstein. “It feels like someone in your family telling you they’re proud of you.”

Although he has been in practice for several years, Dr. Epstein appreciates the “Young Alumnus” nod. “It’s a good reminder that I still have lots of time ahead of me to keep training excellent residents and to give back to the medical school,” he says.

DR. MICHAEL FLEMING

2021 FAMILY PHYSICIAN OF THE YEAR



Dr. Michael Fleming (MD ’78) comes from a family of physicians, nurses and social workers. Growing up, he greatly

admired his maternal grandfather, Dr. Walter Brown, a family physician in rural Ontario. On his father’s side, his cousins, Dr. Ann Collins (MD ’85), past president of the Canadian Medical Association, and Dr. Ian Fleming (MD ’88) are family physicians. And his younger brother, Dr. Barry Fleming (MD ’79), is a general surgeon in Prince Edward Island.

Born in Montreal and having lived in Toronto and Vancouver before settling in Halifax in 1967, Dr. Fleming earned a science degree from Saint Mary’s University, then set his sights on Dalhousie Medical School and becoming a family physician. “Dal has an extraordinary reputation, and it was the only school I applied to,” he says. “While I was there, I was keen to learn as much as I could.”

When Dr. Fleming finished his family medicine residency, he looked for a job in Halifax. His wife, Isobel, was head of pharmacy at Camp Hill Hospital, and they wanted to stay in the city. In 1980, he established the Fall River Family Practice with Dr. John McNab (MD ’79). “Seeing and helping patients is the real reason I chose medicine,” he says. “They are my professional family, and I’ve been privileged to have multigenerational patients.” He was honoured to be named Family Physician of the Year in Nova Scotia in 2015-2016.

In 2013, Dr. Fleming became president of Doctors Nova Scotia. “I’ve always been active in my profession,” he says. At that time, he had held a position on the Doctors Nova Scotia Board of Directors for seven years and had been the director of Family Physician Programs in the Continuing Medical Education office at Dalhousie for 32 years (now 41 years). He also chaired the College of Family Physicians of Canada’s National Committee of Continuing Professional Development from 2002 to 2009.

Although he retired from his family practice in September of 2021 to make room for a young Nova Scotia medical graduate who wanted to come home, he’s planning to continue his work in continuing professional development at Dal. As he closes one chapter of his career, he’s pleased to be named DMAA’s 2021 Family Physician of the Year.

“There are many fantastic Dal medical school graduates who are still in the Maritimes and around the world,” he says. “I believe that my work at Dal in continuing professional development has enhanced my work as a family physician.”

DR. TOM ROBBINS

2021 HONORARY PRESIDENT AWARD



A native of Newfoundand, Dr. Tom Robbins (MD '74) chose to move to the mainland to earn his medical degree at Dal, which he describes as a well-established, reputable medical school.

“We were there to train in all areas of medicine and not necessarily encouraged to become specialists,” he says of his medical training in those days. But after returning to Newfoundland to practice as a generalist at Stephenville’s hospital, he found himself admiring the specialists coming from Corner Brook, including the ear, nose and throat specialist.

Ultimately, Dr. Robbins pursued residency training in otolaryngology at Dalhousie and the University of Toronto, followed by a fellowship in head and neck surgery at the Institute of Laryngology in

London, England. There, he met a “young lady” from Texas, Dr. Gayle Woodson, who became his wife and a fellow academic otolaryngologist. When she returned to her home, Dr. Robbins joined both her and the faculty at the University of Texas, Houston.

Dr. Robbins devoted his career to managing cancer patients, serving with the MD Anderson Cancer Center, University of California at San Diego and the University of Tennessee. His work with the American Academy of Otolaryngology-Head and Neck Surgery and the American Head and Neck Society led to an international classification system for neck dissection, first published in 1991.

At Southern Illinois University, Dr. Robbins became executive director of its cancer institute and the Simmons Endowed Chair of Excellence in Oncology. Serving as president of the American Head and Neck Society and receiving research funding from the National Cancer Institute “validated my work and contributions to the specialty,” he says.

Now living in Merritt Island, Florida, Dr. Robbins and his wife are focused on establishing a teaching program for ENT doctors in Tanzania. He is pleased to be named DMAA’s Honorary President. “When my classmates nominated me, I thought there are many other alumni who are worthy,” he says. “I am truly honoured.”

DR. COLIN BOYD

*2021 RESIDENT LEADERSHIP AWARD,
FAMILY MEDICINE (INCLUDING
ENHANCED SKILLS PROGRAM)*



Dalhousie Medical School was the only place Dr. Colin Boyd (MD '18) considered earning a medical degree. “I grew up in Bedford, so it’s where I felt at home and where I wanted to practice,” he says. “To me, Dal is the pinnacle for medical school.”

In 2020, Dr. Boyd completed his residency in family medicine at the Dalhousie Family Medicine Clinic in Spryfield, NS. “It was a great experience, and I was lucky to be there,” he says. “I first had to learn about the history of the community and understand their needs, so that I could figure out how I could contribute.”

In fact, Dr. Boyd feels that his medical school training helped prepare him to work in the current cultural climate. “It’s very important to understand why the patient has come to you and what they’re worried about,” he says. “We got a very good grounding in that at Dal.”

Twenty years ago, adds Dr. Boyd, the physician-patient relationship was more paternalistic, like “I’m the doctor, here’s the solution.” Today, he says, doctors in community medicine need to work more collaboratively and offer a more patient-centred approach to care.

Currently working at the Dartmouth General Hospital and Cobequid Community Health Centre, Dr. Boyd hopes to practice as a generalist, with a focus on emergency medicine. In residency, he was involved with the College of Family Physicians of Canada members’ interest group for patients with intellectual disabilities—he cites Dr. Karen McNeil (MD ’87) as a mentor—as well as the resident representative on the College of Family Physicians of Nova Scotia’s Board of Governors.

Two medical school research projects in particular led to Dr. Boyd’s interest in patient-centred care. The first examined how geographic differences influence how heart-attack patients access care in rural versus urban Nova Scotia. The second project investigated the path to diagnosis

for ALS patients. “These projects, and others like them, will help inform the care I give to my patients,” he says.

The Resident Leadership Award, Family Medicine (including Enhanced Skills Program) was bestowed for the first time in 2020. Dr. Boyd is pleased to be this year’s recipient. “So much of medicine is working evenings, weekends or after your family has gone to bed,” he says. “It’s nice to be recognized in this way, it makes it feel even more worthwhile.”

DR. MARISSA LEBLANC

*2021 RESIDENT LEADERSHIP AWARD,
ROYAL COLLEGE SPECIALTIES AND
SUBSPECIALTIES*



In her third year at Dalhousie Medical School, Dr. Marissa LeBlanc (MD ’17) discovered her true passion when she fell in

love with psychiatry. “I originally thought I’d specialize in genetics and pediatrics, but I discovered that psychiatry has a lot of unknowns and opportunities for research,” she says. “I also saw the potential to create meaningful relationships with clients and make a real difference in their lives.”

Currently in the fourth year of her residency training and serving as chief resident in the Department of Psychiatry, Dr. LeBlanc recognized junior residents’ need for mentorship in the department’s residency program. In July of 2020, she collaboratively spearheaded the development of a successful non-mandatory mentorship model pairing first-year residents with more senior residents. This has been instrumental in helping them adjust to the demands of postgraduate training.

“Clerkship and residency bring a lot of challenges and changes,” says Dr. LeBlanc. “I felt that I could have benefited from a mentor then, and so far the feedback is that everyone is finding it quite helpful. Part of its success is that it isn’t mandatory—there’s support for the clerks and residents if they want it. The program has highlighted how much of an impact you can have on people and how important it is to be supportive.”

Originally from Dieppe, NB, Dr. LeBlanc earned a bachelor of science degree, with a combined honours in

biochemistry and microbiology, from Dalhousie University in 2006, followed by a PhD in biochemistry in 2010. Postdoctoral research fellowships followed at Dal, the RIKEN Institute in Tokyo (which she describes as a “fun adventure”) and the University of Toronto.

Dr. LeBlanc envisions an academic teaching career where she would also be practicing in the community, with a focus on early psychosis and serious and persistent mental illness. She also plans to continue her genetic research.

The Resident Leadership Award, Royal College Specialties and Subspecialties, was awarded for the first time in 2020. As luck would have it, the inaugural award went to Dr. LeBlanc’s husband, Dr. Leo Fares (MD ’16), a current clinical fellow and anesthesiologist at Nova Scotia Health. The couple now proudly shares the honour.

“It’s so nice to be recognized for something that I love to do and doesn’t feel like work,” says Dr. LeBlanc. “I feel that medical school and residency at Dalhousie has prepared me well to begin the next phase of my career in psychiatry.”

Spotlight on DMNB

Return to DMNB:

DMNB WELCOMES TWO CLASSES OF MEDICAL STUDENTS TO CAMPUS

BY DR. JENNIFER HALL, ASSOCIATE DEAN, DMNB



AFTER ALMOST 16 MONTHS

of our students, faculty and staff learning, teaching and working remotely, it was a pleasure to return to the Dalhousie Medicine New Brunswick building this summer.

This fall, not only were we able to offer an in-person orientation on campus to our Med 1s, the DMNB Class of 2025, but we were also able to reintroduce our Med 2s, the DMNB Class of 2024, to the DMNB building. While the Class of 2024 has had some opportunity to work in the DMNB building for their clinical skills sessions, the majority of their first year of



▲ *New medical students at DMNB attended the 12th annual First Light Ceremony on September 10, marking the start of their journey to become doctors.*

undergraduate medical education activities took place in the virtual environment. In a way, we were able to truly welcome two classes to Dalhousie Medicine New Brunswick this September!

As per tradition, we celebrated our incoming students and the beginning of their journey into medicine in New Brunswick with the 12th annual First Light Ceremony on September 10, 2021. We were fortunate enough to be able to gather in person at the Saint John Trade & Convention Centre for this event and were delighted to be able to expand on last year's First Light Ceremony, which was quite limited due to public health measures at the time. This year, each student was joined by up to three guests of their choice to share in this important DMNB activity, which is one of the many experiences that makes studying at DMNB unique.

The month of October presented us with new challenges due to the fourth wave of COVID-19 in New Brunswick. Even so, DMNB continues to prove the power of small with our ability to be nimble in the face of changing restrictions.

In this issue of *VoxMeDAL*, you will get the opportunity to read about the return to campus from the perspective of one of our Med 2 students, Mario Jones, as well as the induction of Kathleen MacMillan into the Canadian Medical Hall of Fame—the first Dalhousie Medicine New Brunswick student to achieve this national honour!

Happy reading and happy holidays,

Sincerely,

A handwritten signature in black ink that reads "Jennifer L. Hall". The signature is written in a cursive, flowing style.

Dr. Jennifer Hall
Associate Dean, DMNB

National recognition:

DMNB STUDENT RECEIVES CANADIAN MEDICAL HALL OF FAME AWARD

BY ALLIE FOURNIER



IN AUGUST 2021, SECOND-YEAR medical student Kathleen MacMillan was recognized with the Canadian Medical Hall of Fame Award for Medical Students. With this prestigious award comes a cash prize of \$5,000 and a travel subsidy to attend the 2022 Canadian Medical Hall of Fame Induction Ceremony in Ottawa.

A licensed pharmacist now pursuing

a career in medicine, MacMillan is co-president of Dal Med's Class of 2023. She leads the Canadian Federation of Medical Students Atlantic Task Force, serves on the Dalhousie Medicine Admissions Committee, and is involved with the Canadian Association of Radiologists Medical Student Network and various networks within the Association of Faculties of Medicine of Canada. At the onset of the COVID-19 pandemic, MacMillan co-founded Dalhousie Students for Healthcare Providers. As a member of Interprofessional Research Global, MacMillan has co-authored articles for peer-reviewed journals and led the writing of a textbook chapter on interprofessional student leadership. She also co-founded the Dalhousie University interprofessional mini-course, *Battling the Burnout Epidemic*, which teaches students wellness strategies.

MacMillan is the first DMNB student

to receive the Canadian Medical Hall of Fame Award for Medical Students. This award recognizes medical students who demonstrate perseverance, collaboration and entrepreneurial spirit, and show outstanding potential as future leaders and innovators in health care. *Vox MeDAL* recently spoke with MacMillan about her award, how she celebrated, and who her favourite doctor is.

Q How did it feel when you learned you were being inducted into the Canadian Medical Hall of Fame?

A I was thrilled to learn I had been chosen to receive a CMHF Award for Medical Students. There are many amazing medical students with multiple accomplishments here at Dalhousie. I am humbled to have been even considered amongst my peers. I suspect it was a difficult decision for the selection committee.

Q Who was the first person you shared the news with? How did you celebrate?

A That's a tough question, I informed several people at the same time! After finding out, I told my parents and boyfriend Alex. I also immediately contacted Dr. Jeff Steeves, Dr. Stephen Miller and Sarah Melville to share the news, as they were kind enough to write reference letters for me.

To celebrate, our family enjoyed a nice dinner and we had a relaxing evening together.

Q What was it like putting the application for this award together?

A In order to apply, I needed to choose a Canadian Medical Hall of Fame laureate who inspired me the most. I enjoyed reading through different laureate's accomplishments and I was happy to find a truly inspiring laureate with similar values to my own to write about. The application was a team effort and I am so thankful that amazing individuals agreed to write reference letters on my behalf. It really speaks to the support system I have here at DMNB. The New Brunswick Medical Society, Dalhousie, my friends, family and mentors are always so supportive and I am very thankful to all of them.

Q What does it mean to you to be the first Dalhousie Medicine New Brunswick student to receive this honour?

A Being the first DMNB student to receive this honour came as a surprise. I am sure many more DMNB students will be recognized in the future. There are many great leaders here at Dalhousie and to be recognized in this way is humbling. I think this award is

a testament to the support Dalhousie has given me throughout the years. It is an incredibly supportive environment here at Dalhousie, the faculty and staff are always ready and willing to support students with their leadership endeavors.

Q You are currently in your third year of medical school, which means that graduation isn't too far away. What is your dream scenario for residency? After residency?

A I think my dream for residency would be to match to a radiology program, preferably somewhere close to where Alex works and where I could be close to family. I am fairly certain that radiology is the path for me but am still excited to learn about other options. My clerkship experience in Miramichi so far has been amazing and I learn more about different disciplines every day. My primary preceptors, Dr. Swart and Dr. Martin, have been incredible. Regardless of which residency I complete, afterwards I hope to become a clinician researcher who works in NB or NS. I also hope to be involved in my community through coaching sports and/or mentoring future health-care providers.

Q Do you have a favourite fictional doctor, or anyone in real life who inspired you?

A Throughout my entire life, the doctor that inspired me the most is my dad. My dad is a physician who always takes great pride in his work, but also makes time for his family. Growing up, Dad took the time to coach my summer soccer team and take me to sporting events, even if that meant working later in the evening and into the night to catch up. My mom is a pharmacist and she and my dad make a great team. To me, my parents could do anything they set their minds to, which made me believe I could do the same. Through my parents, I learned about the positive impact health-care providers can make on their patient's lives, which is part of the reason I decided to complete a degree in pharmacy and then pursue a degree in medicine myself.

No need for the old normal:

DMNB STUDENT REFLECTS ON THE POSITIVES OF PANDEMIC MEASURES

BY MARIO JONES, DMNB CLASS OF 2024



NOTHING CAN TAKE AWAY FROM the elation of starting medical school. But in 2019 when we were writing our application letters and darting around the country for interviews, I don't think any of us expected that the first day of classes would be from our bedroom desks over MS Teams. Having worked remotely

before medical school, I had some experience and comfort with the virtual environment. But experienced or not, I think we all had our struggles with it.

I can't say it was all bad. There are some major benefits to working from home. You have so much more control over your schedule. There's no mad dash to get ready in the morning. You walk down the hall and open your laptop, and just like that you're in class. It was easy to make a quick snack between classes. There was always fresh coffee. You could even toss in a load of laundry during one of your breaks.

I'm forever thankful for the DMNB team who worked hard and moved mountains to make sure that despite the pandemic restrictions we would still have exposure to the clinical environment and learn clinical skills that are so essential for medical students. As a bonus, this was an opportunity to see some of our classmates a couple times a week.

Since August 2021 we have been back in person at DMNB. The staff have been amazingly welcoming and it's really nice to see your classmates in person more than once a week. In a lot of ways, it's been like a breath of fresh air. The social aspect of being together can't be replaced by Zoom calls (as much as we tried), and case-based learning sessions go much more smoothly when done in person.

Out of necessity, the DMNB team mastered online course delivery—and we found some major benefits. For instance, lectures are better suited to the virtual

environment. I think that having the option to do some work from home while still joining your classmates on a regular basis accommodates the broadest range of learning styles, life stages and living situations.

I don't think that we need to worry about getting back to the previous normal. Our new normal is better.

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COVID-19 **UPDATE**

The scientists' eye view:

DAL VIROLOGISTS SHARE WHAT'S ON THE HORIZON FOR COVID VACCINES

BY MELANIE STARR

The arrival of COVID-19 prompted a sudden reorganization of Dalhousie Medical School's virology and immunology research teams.

ONGOING RESEARCH WAS SET aside and principal investigators and their trainees formed new teams that brought their skills and expertise together in new ways to address the urgent need for solutions to the global pandemic.

To learn more about Dal Med's contributions to this vital effort—including the development of a potentially game-changing new DNA vaccine—*Vox MeDAL* sat down with two of Dalhousie's leading virologists, Dr. Roy Duncan, professor and Killam Chair in Virology, and Dr. Craig McCormick, professor, both in the Department of Microbiology & Immunology.



▲ *Dr. Roy Duncan (left) and Dr. Craig McCormick (right) are two of Dalhousie's leading virologists, working in collaboration with others to develop a temperature-stable DNA vaccine against SARS-CoV-2.*

Q In what way did your research efforts and teams shift after March 2020?

A Roy Duncan: Before I dive into specifics, I want to say that our successes are based on what we already had in place that allowed us to respond so quickly. First, we had a core group of investigators interested in host-virus interactions, with highly qualified trainees in each of our labs. We also had access to key equipment and great core facilities, as well as the Canadian Center for Vaccinology. When COVID came along, we came together as a large group to assess our strengths and from there we organically formed smaller groups based on common interests. For example, Craig and I joined forces

with immunologist Dr. Brent Johnston, head of Microbiology & Immunology, and collaborated with virologists Dr. Chris Richardson and Dr. Alyson Kelvin to form a vaccine-development subgroup.

Craig McCormick: Yes, we were fortunate that some key individuals, especially certain trainees in our labs, were ready, willing and able to switch gears to focus on the pandemic effort. Being in a virology or immunology lab really fuelled their desire to contribute. Many of our trainees volunteered to help with the testing, in addition to bringing their research expertise to the equation.

RD: It wasn't just vaccines, either. Craig and his lab have been working with academic and industry partners to test candidate antiviral drugs and antiviral biomaterials that can be incorporated into masks and other PPE. They just published their first report. It's really quite amazing.

CM: Yes, and then we have David Kelvin working on biomarkers of serious illness with VIDO, the Vaccine and Infectious Disease Organization in Saskatoon, and Chris Richardson's lab collaborating with Roy's lab, Alyson Kelvin's lab and VIDO on a new vaccine platform.

Q We already have several effective vaccines against COVID, why do we need a new vaccine?

A RD: We need as many options as possible to deal with this, to vaccinate the globe and shut this thing down before another variant supplants Delta and gets around the immunity we have. If this happens, such as may be the case already with Omicron, we are going to need new formulations, we are going to need boosters.

The other thing to consider is the big limitation of the mRNA vaccines, which is the cold-storage requirement. Both Pfizer and Moderna require

deep freezes and a cold chain to get the vaccine all the way from the manufacturer into patients' arms. So what do you do when you're trying to vaccinate in developing countries where low-temperature freezers are scarce? You need a vaccine that's refrigerator- or even room-temperature stable.

Q So what is happening in terms of temperature-stable vaccines?

A RD: That's exactly what we've been working on. We also went with a nucleic acid vaccine, like Pfizer or Moderna, but instead of using RNA, we're using DNA. It's the same sort of technology, but instead of delivering messenger RNA into the cells, we deliver DNA. The DNA makes the messenger RNA, which then makes the spike protein you need to mount the immune response. The big advantage of this technology is that it remains stable for days at room temperature and for weeks and even months at four degrees. This will be a great advantage when it comes to global vaccination. The other advantage is that, when you deliver DNA, it keeps making messenger RNA for you, so you can use a lower dose to get the same immune response as a higher dose of mRNA vaccine.

CM: We have a great team working on this: a post-doc from my lab,

a PhD student from Brent Johnston's lab, and a research associate from Roy's lab, who together have the skills to make this happen on the Dalhousie end. The other end of the equation is the collaboration with Entos Pharmaceuticals, a biotech company in Alberta that Roy co-founded some 10 or more years ago.

▼ *Dr. Anna Greenshields and Nicole McMullen are key members of the Dal team developing a DNA vaccine against COVID.*

Q How has the partnership with Entos Pharmaceuticals unfolded?

A RD: Entos was founded to commercialize the technology I developed with them years ago that uses viral proteins wrapped in liposomes to deliver nucleic acids and other agents into cells. We call them fusogenic liposomes. For the past ten years, Entos has been using this technology to develop anti-cancer and anti-aging drug-delivery systems. When COVID landed, we had a conversation about how we could adapt this technology to a DNA vaccine and Entos retooled and re-purposed their entire effort



toward the vaccine, which we've called Covigenix. Our team worked with them to develop the vaccine and tested it in preclinical models here in Halifax. Entos then manufactured the first batches in Alberta, which were tested in phase one clinical trials through the Canadian Center for Vaccinology in Halifax.

Q What is the next step in the development of the Covigenix vaccine?

A RD: The vaccine passed all the safety tests in phase one trials and approval to conduct phase two trials is pending and will be underway before Christmas. They'll be taking place in South Africa. One of the Entos team members is from South Africa and he was able to help facilitate those approvals. It's the perfect location because, to test a

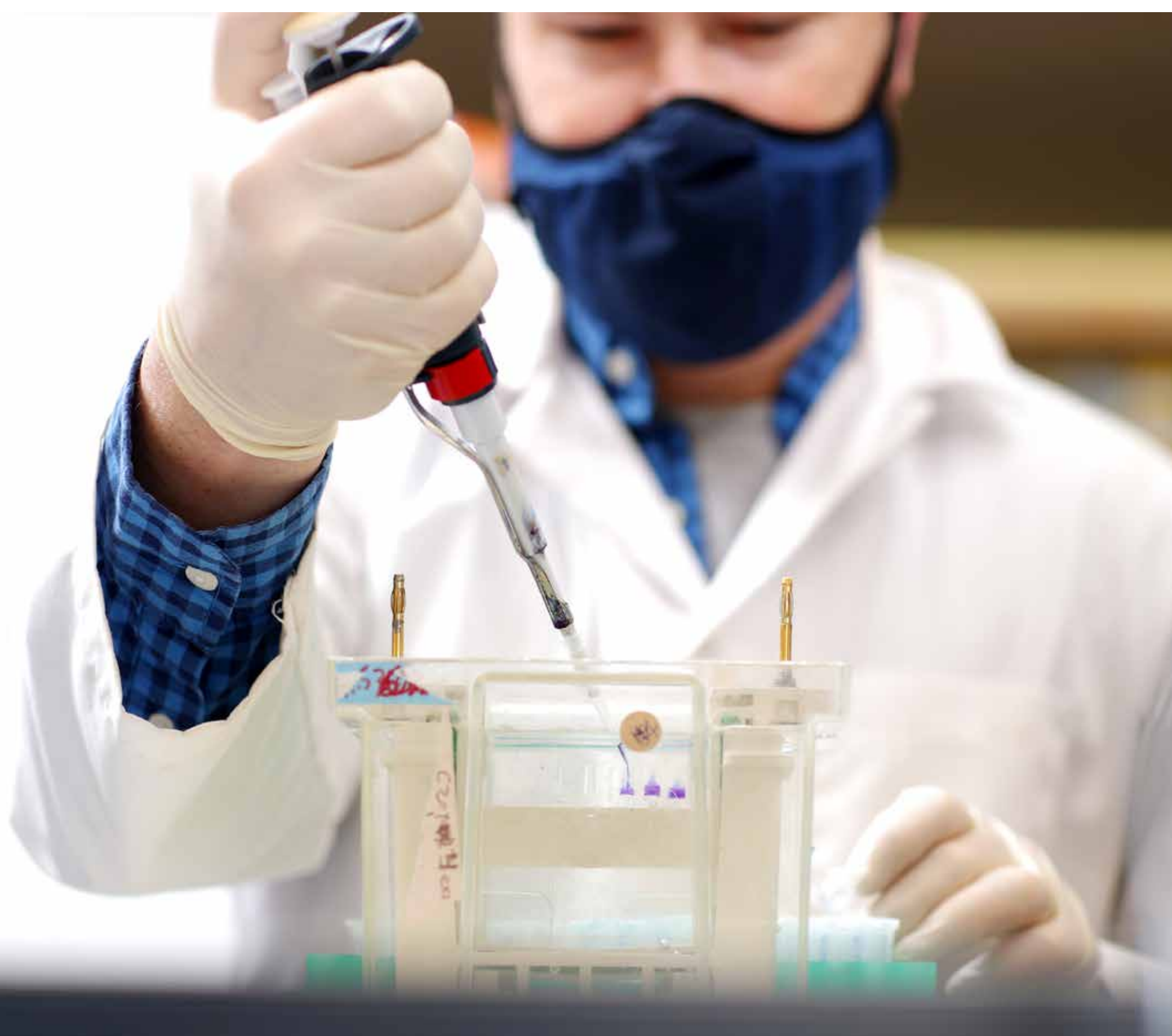
vaccine's real-world effectiveness, you need a large population that is not well-vaccinated, where there are large amounts of circulating virus, which unfortunately is the case in South Africa. Assuming all goes well with the phase two trials, we could begin phase three trials in 2022.

Q Where has the funding come from for the Covigenix vaccine?

A RD: As a small biotech company, Entos does not have deep pockets, so focused investments from government have been a game-changer. We were able to secure \$4.1 million from the Canadian Institutes of Health Research, and are very grateful for additional funding from Research Nova Scotia and Dalhousie Medical Research Foundation. And Mitacs has been a crucial source of funding for our lab personnel.

Q What are some other advantages of this new DNA vaccine?

A CM: The DNA vaccine shares the same advantages as the mRNA vaccines in that it is simple and programmable. If the spike protein changes, all we have to do is type the new sequence into the computer and away we go. Like the mRNA vaccines, it generates neutralizing antibodies and fantastic immune memory.



Q What is the significance of immune memory?

A CM: Well, you have your initial response to the vaccine that generates neutralizing antibodies. Eventually the levels of these antibodies diminish, but this is how our immune system works, since it can't sustain a high alert against every virus it encounters. What's important is the long-term durability of our immune response, our "immune memory." The vaccine teaches our immune system how to make antibodies and other important cells like T cells that attack virus-infected cells. Basically, the vaccine establishes the antibody-producing "factory," but keeps it in "idle" mode until it encounters the virus. If there's an exposure to the virus, the immune system flicks a switch to turn the antibody-producing factory back on.

Experts who study immune memory are very encouraged by what they see in the clinical trial data and longitudinal studies of the mRNA vaccines so far. They think the vaccines will provide durable immune memory lasting for years. This immune memory is already playing an important role in preventing COVID-19 hospitalizations and deaths.

Q Can nucleic-acid vaccine technology be re-purposed for other pathogens?

A CM: Yes! There are lots of viruses that can now be tackled with the mRNA and possibly the DNA technology as well. For example, some of our colleagues are working on an mRNA vaccine for HIV. This would be an absolute game changer. Another big one is cytomegalovirus, CMV, a leading cause of congenital birth defects worldwide, with mother-to-fetus transmission that can cause encephalitis, hearing loss and developmental delays. And then there are all of the other human herpes viruses that we don't have vaccines for.

RD: It's a real paradigm shift in future vaccine development. This technology may even be able to be applied to parasites like malaria, which would be another incredible advance.

Q Will you re-engineer your DNA vaccine to combat Omicron, given that this new variant of concern has emerged in South Africa where you are already going to be testing your vaccine?

A RD: Our current phase two trial is too far advanced to get approval from the regulatory bodies to roll out with an Omicron-specific vaccine right away, but we are already studying this



◀ *Dal's vaccine researchers store viruses and cells in which to grow them in liquid nitrogen.*

variant in preparation for re-engineering the vaccine should Omicron displace Delta. But we also need to know how well the current vaccines will protect us from Omicron, because it does take time to properly test new versions of the vaccine. So, we've modified our virus-neutralization assay so we can determine how well our current vaccine induces neutralizing antibodies against the Omicron variant in animal studies. We're also using this assay and a panel of human sera to see how well people who have either been infected or vaccinated against COVID are able to block infection by this new variant. This will tell us a lot about how effective this new variant is at escaping neutralization by current vaccines. We can modify subsequent vaccine formulas and clinical trials based on these results.

It's also important to note that the vaccines stimulate the production of T cells as well as neutralizing antibodies. The assays we used to quantify T cells in response to all the previous variants show that even if antibody neutralization is not quite as effective, the T-cell responses still work well to hunt out and kill virus-infected cells. So there is reason to believe that even the current vaccines will still be effective at preventing serious illness and outcomes from Omicron.

Q Will COVID be with us forever and, if so, will we need to be vaccinated every year?

A RD: It will take another two years to vaccinate the globe. As we get better vaccine coverage, the chances of more really scary variants emerging will be less. Once that settles down, COVID will be more like a circulating cold or flu virus. The question is, will it be a big enough issue that we have to vaccinate every year?

CM: We just don't know. I'm very interested to see. Vaccinating the kids is the next big challenge. As a parent, I'm very relieved that my youngest is in the 5 to 11 age group that that is starting to be vaccinated now. This will help protect this age group and the staff that work in the schools, while reducing chains of transmission.

People are worried about frequent boosters for the rest of their lives, but this might not be the case. There are lots of vaccines for which the schedule is three doses—for example, the hepatitis B vaccine is three doses that provide long-term protection. COVID vaccines could be similar in the future. We don't know yet, but apart from the influenza vaccines, there are no other vaccines that require annual boosting. The COVID vaccines are doing a good

job providing immune memory for the vast majority. We can be comforted by that. And if it turns out that we do require annual boosters to keep pace with emerging variants, it's a minor inconvenience and me and my family will certainly roll up our sleeves.



▲ *Part of the Covigenix team (left to right): Mark Charman (technician), Nichole McMullen (research associate), Dr. Craig McCormick, Adam Nelson (PhD student), Dr. Roy Duncan, Dr. Anna Greenshields, Dr. Eric Pringle*

COVID biobank:

DR. LISA BARRETT CREATES A NOVEL RESOURCE FOR STUDYING COVID

BY MELANIE STARR

Dr. Lisa Barrett became a household name in the Maritimes through regular media appearances to talk about COVID. She is perhaps less well-known for her great contributions behind the scenes.



OVER THE FIRST AND second waves of the pandemic, Dr. Barrett worked tirelessly to secure the resources and put the systems in place that allowed her to collect blood and other specimens from more than 150 patients who were hospitalized with COVID-19, along with their detailed clinical data.

The Nova Scotia COVID Health Research Alliance provided the funding that allowed Dr. Barrett and her colleagues to set up this biobank for collecting and storing the patient samples. This is now

“This is an incredible resource that we can learn from for years to come.”

available not just to local researchers but to scientists around the globe who want to study how SARS-CoV-2 affects the immune system and how the immune system responds to it.

“This is an incredible resource that we can learn from for years to come,” says Dr. Barrett, an assistant professor in the Department of Medicine (Division of Infectious Diseases) and the Department of Pathology. “Because we were able to gather samples from patients who had never encountered COVID-19 or a vaccine for it ever before, we will be able to study the initial immune response to a brand new pathogen. This is a very rare opportunity.”

Dr. Barrett is working her way through the analysis of specimens, a gargantuan task that is rendering some fascinating—and disturbing—observations.

“SARS-CoV-2 triggers the immune system to respond intensely, and then it just crashes,” she says. “It’s incredible to watch under a microscope. You can see B and T cells that generate virus-specific immunity dying very fast, very hard, until they are all but destroyed. We want to know if they can regenerate and how this plays into both natural immunity and vaccine-generated immunity.”

To the best of Dr. Barrett’s knowledge, there is no resource like this COVID-19 biobank anywhere else in the world. Thanks to her foresight in collecting the specimens when the virus was still new, she and her international colleagues will be able to gain deeper insights into the workings of this problematic virus.

“When you watch the virus infecting cells, it is immediately apparent that SARS-CoV-2 is not the ‘usual’ respiratory virus,” says Dr. Barrett. “It has wide-ranging long-term effects we don’t yet fully understand. It will take a lot of research to understand the complete picture of this virus and how it interacts with the human immune system. But at least we have this resource that allows us to tackle it.”

Ethical dilemma:

DAL ETHICIST AND NS BLACK COMMUNITY QUESTION VACCINE CERTIFICATES

BY MELANIE STARR

Requiring citizens to show proof of vaccination when entering a restaurant, gym, workplace or school may seem necessary in the short run, but could be damaging in the long run.

MEMBERS OF NOVA SCOTIA'S

Black community expressed this opinion at a town hall meeting held over Zoom this September, shortly before the proof-of-vaccination mandate came into effect.

The town hall was moderated by Dr. David Haase, professor emeritus in the Department of Medicine, and attended by Dr. Omisoore Dryden, Dalhousie's James R. Johnston Chair in Black Canadian Studies, Dr. Françoise Baylis, University Research Professor in the Faculty of Medicine, Jason MacLean from the Nova Scotia Government Employees Union, and more than 20 leaders in Nova Scotia's Black community.

Panelists and participants alike expressed concerns that the proof-of-vaccination mandate and its underpinning technology could become a slippery slope that ultimately compromises people's freedom, privacy, safety, and opportunity to participate in society and the economy. It could also, some argued, be used



arbitrarily as a tool of oppression.

“Who’s going to police the policy and what are their biases?” asked one participant, noting that Black people already face discrimination when trying to enter public spaces. “This policy could be used to further marginalize the Black community.”

Dr. Baylis, who has written extensively on the ethics of vaccine certificates and mandates, has concerns with the “directionality” of the proof-of-vaccination mandate.

“Notice how, when I enter an elective public place like a gym, staff are required to ask to see my proof of vaccination,” Dr. Baylis says. “But when I go to my dentist for a non-elective reason like a dental emergency, I do not have the right to require my dentist to show proof

of vaccination. I must supply proof of vaccination to protect others, but do not have the right to require proof from others to protect myself.”

Dr. Baylis is also concerned about the exclusion from society of unvaccinated people, who may have valid health reasons to avoid the vaccine. “Mandatory rapid testing could easily be used to allow people who cannot be vaccinated to participate in elective activities, school and employment,” she says. “There are a number of settings where it is not necessary to make ‘full’ vaccination mandatory, especially when we know that two doses does not confer complete immunity.”

Another concern is that the technology platforms developed to digitize the proof-of-vaccination process will morph into repositories for much more complete medical information, compromising people’s privacy and the security of their personal data.

“It is very expensive to develop these platforms and I expect the temptation will be to expand the scope of so-called vaccine certificates rather than retire them,” she explains. “It is very important that these mandates are used as short-term measures only. We have to ask ourselves, what kind of society do we want to be living in when this pandemic is over?”

A large, light pink heart shape is formed by a grid of small 'x' marks. The heart is centered on the left side of the page, with its right edge tapering off towards the right. The text is overlaid on the lower-left portion of this heart.

FOCUS ON **WELLNESS**

More self-care is not the answer:

PREVENTING PHYSICIAN BURNOUT REQUIRES SYSTEMIC AND CULTURAL CHANGE

BY MELANIE STARR

Even before the pandemic came along to turn up the heat on the pressure cooker of health care, physicians were reporting incredibly high levels of burnout and depression.



IN ITS 2018 CMA NATIONAL

Physician Health Survey report, the Canadian Medical Association stated: “Despite concerted efforts to promote and protect the health and wellness of physicians, the collective state of physician health remains a significant threat to the viability of Canada’s health system.”

More than 25 per cent of physicians in Canada reported high levels of burnout, more than 30 per cent screened positive for depression, and eight per cent had thought of killing themselves that year. Residents were 48 per cent more likely to report burnout and 95 per cent more likely to screen positive for depression than all other physician groups, and female physicians were more burned out and depressed than their male counterparts.

“Given what has happened since this survey, it is safe to assume that levels of burnout, depression and suicidal ideation among physicians are even higher now,” says Dr. Angela Cooper, clinical psychologist and assistant dean of Faculty Wellness at Dalhousie Medical School. “Across departments, there is a sense of burnout which is showing up as emotional exhaustion and even a certain amount of cynicism. Faculty members are still reporting high levels of professional efficacy, which is protective from burnout, yet there is still considerable emotional and physical cost to themselves.”



▲ *Dr. Angela Cooper*

Physician burnout is characterized by emotional exhaustion, depersonalization (of patients, colleagues, others) and a low sense of personal accomplishment. Admonishing physicians to exercise more, do more yoga, meditate more, sleep more or eat better is not the answer, according to Dr. Cooper, who says doctors are caught in the middle of what she calls the “burnout burger.”

On the bottom of the burnout burger is the culture of the medical profession itself: exacting standards demanding superhuman levels of perfection, invulnerability and self-sacrifice. On the top is the health-care system and all of its dysfunction: heavy patient loads, long waits for tests and procedures, complex paperwork and reporting requirements, compensation models that make it impossible to spend

enough time with each patient, and so on. Squeezed in the middle are physicians and their own unique capacities and coping mechanisms.

“We have a perfect storm of perfectionist ideals running up against the realities of the health-care system and that doctors are, in fact, human beings,” Dr. Cooper says. “There is no fail-safe system and we are seeing the fallout now, with the pressures of the pandemic putting more strain on physicians than ever.”

The silver lining of the pandemic is that the impact of being caught in the middle of the burnout burger can no longer be ignored or swept under the rug.

“Physicians and other health-care professionals have maxed out their coping strategies,” Dr. Cooper says. “This is making us face up to the realities of the work that we do, the limitations of the system we are in and the unrealistic expectations our physicians are facing. COVID has irreversibly changed us, while creating an opening for further change, for the better. It is a shared experience, so people are more willing to open up. They feel safer to reveal their vulnerabilities now.”

One of those vulnerabilities is the gap between patient expectations and what doctors can reasonably deliver. “This was reported as the Number One challenge in a recent burnout survey by the Ontario

Medical Association,” says Dr. Cooper.

“Medicine has come so far, but even with all of the advances, it cannot be a miracle every time. We need more honest, difficult conversations about what is and is not possible, and safe spaces for physicians to discuss their feelings about patients dying, mistakes they may have made, or frustrations they are facing.

Research has shown that working with academic and health-system leaders is one of the most powerful levers for creating the kind of culture change that’s needed to support health-care professionals’ wellbeing.

“If leaders allow open discussion and the free flow of ideas, people have the opportunity to thrive,” Dr. Cooper says. “But if they silence open discussion, people become frustrated and resentful and more prone to burn out. It seems so simple, but providing the space and the safety for people to speak up, to be heard and supported by their team, hasn’t historically been part of medicine’s culture of stoicism and self-reliance.”

A sea change is in the making, however, as stakeholders, including Dalhousie Medical School, Nova Scotia Health, Doctors Nova Scotia, and Saint Mary's University, work together to transform professional culture and health-system function to support the people who are the lifeblood of health care. (See story page 44)

Creating conditions for change:

DAL AND SAINT MARY'S TEAM UP TO TEST NEW WELLNESS LEADERSHIP PROGRAM

BY MELANIE STARR

Nearly 50 leaders within the Faculty of Medicine, including the dean and many department heads, are taking part in the Wellness Leadership Program.

THIS PILOT PROJECT, CO-LED

by psychologists and researchers at the medical school and Saint Mary's University, provides six weeks of intensive wellness leadership training and one-on-one coaching to help leaders in health care and medical education learn how to lead the way to a healthier professional culture.

"We are deliberately focusing our efforts on affecting organizational and system-level change," says Dr. Angela Cooper, the medical school's assistant dean of Faculty Wellness. "It's not fair, or effective, to rely on employees or learners to change their mindset or behaviour towards improved wellness. We are working with leaders who can set the tone and lead by example to create psychologically safe work and learning environments."

Dr. Cooper is co-leading the Wellness Leadership Program with Dr. Dayna Lee-Baggley and Dr. Debra Gilin, psychologists and researchers at Saint Mary's University



▲ *Leading the way to physician wellness leadership (l to r):
Dr. Dayna Lee-Bagley, Dr. Debra Gilin and Dr. Angela Cooper*

who have already developed a similar program for leaders in the home-care sector.

“Participants in our home-care project experienced significant wellness gains and have been able to maintain them several months out,” says Dr. Lee-Bagley, who also has an appointment in Dalhousie’s Department of Family Medicine. “We hope to see comparable results with our participants at the medical school.”

Drs. Cooper, Lee-Bagley and Gilin are not relying on participants’ self-reports to

confirm their wellness gains. In addition to surveying them before, during and after the six-week training and coaching program, they are also equipping them with Fitbits to monitor their resting heart rate while they sleep.

“Resting heart rate during sleep is higher when stress levels are higher, and cannot be controlled by the individual,” notes Dr. Gilin. “It provides us with an objective measure of changes in participants’ levels of stress.”

The first group of 20-plus Faculty of

Medicine leaders completed the Wellness Leadership Program in late October. The second group will finish just before Christmas.

“We’re so grateful for this unique collaboration and the support from Saint Mary’s.”

“Feedback from the first group has been overwhelmingly positive so far,” says Dr. Cooper, noting that basic science departments as well as clinical departments are involved. “They report that they are showing up differently for their teams, that they have more psychological flexibility, new skills and more tools to help them

create safer, more connected environments where it’s okay to speak up, to ask questions, to let people know when they are struggling, or to reach out for support.”

Even though it is early days, Drs. Cooper, Lee-Baggley and Gilin have high hopes for the potential impact of trauma-informed leadership skills in health care.

“We’d like to offer this to Nova Scotia Health, to leaders in nursing, and to other groups within health care,” notes Dr. Lee-Baggley. “We’re getting a lot of requests to take this forward to the teams, not just the leaders. At some point, we’d like to make this much more widely available.”

Saint Mary’s University has thrown its



support behind the project as an act of gratitude and a meaningful contribution to the wellbeing of health-care professionals in Nova Scotia. The university has provided internal grants to students who are working on the project, as well as IT support to create and run the platforms required.

“We’re so grateful for this unique collaboration and the support from Saint Mary’s,” Dr. Cooper says. “It is all coming from a place of giving.”



DAL MED ALUMNI, WE NEED YOUR HELP!

Promoting Leadership in health for African Nova Scotians (PLANS) aims to increase the representation of African Nova Scotians in the health professions—including medicine. This initiative is strongly supported by our dean and faculty, but we need the support of Dalhousie’s Black medical alumni to truly have an impact.

If you are a Dal Med alumnus who self-identifies as Black or of African descent, please provide your information [here](#). Please send this link to other Dal Med Alumni who also self-identify as Black or of African descent.

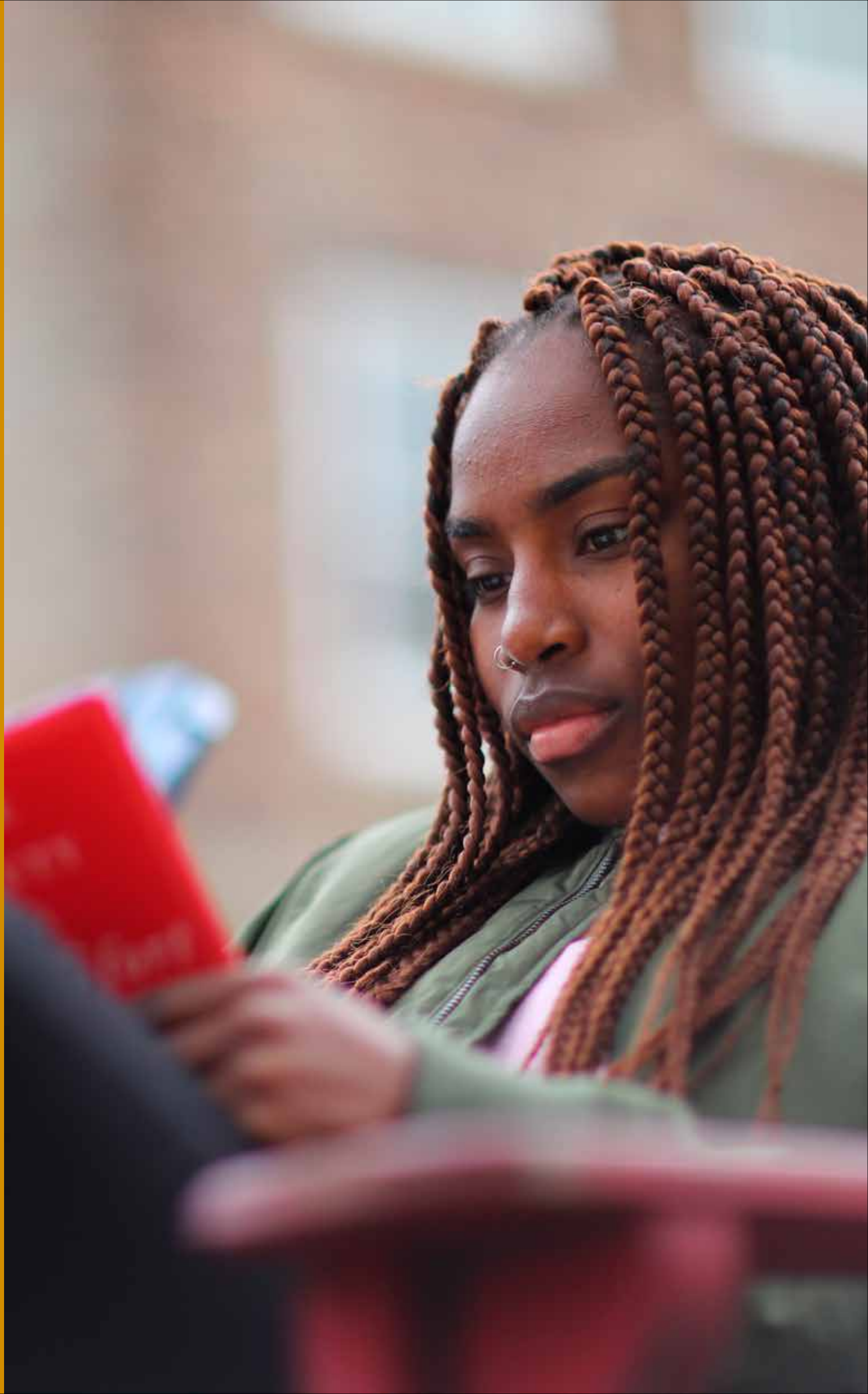
Your information will help us to build an accurate picture of Dalhousie’s Black medical alumni community. In addition, by connecting with us we can keep you informed of our activities and provide opportunities for you to be engaged in the work of PLANS. This would include mentorship of African Nova Scotian medical students and showcasing your experiences at community events.

If you prefer, please feel free to call or email us to provide your information or to discuss how you can be involved with PLANS and support the next generation of African Nova Scotian medical practitioners. Please note that your personal information will only be used within PLANS. There is no obligation on your part for ongoing connection or involvement with the work of PLANS.

Thank you in advance for your assistance!

Sarah-Ann Upshaw, Program Manager PLANS and Dr. David Haase, Co-Chair PLANS Advisory Committee.
Email: plans@dal.ca Phone: 902-494-7831

To learn more about PLANS, visit www.dal.ca/health/plans.



The following tribute has been shared by Dalhousie president, Dr. Deep Saini

Remembering chancellor emeritus,
DR. RICHARD GOLDBLOOM

Since news broke that Richard Goldbloom had passed away, many Nova Scotians have been sharing memories and stories of someone who was a founding father of modern pediatrics, a beloved community leader and Dalhousie chancellor emeritus.



THESE TALES FOCUS LESS ON

Dr. Goldbloom's stature as a towering figure in health care and education in our region and around the world, and instead speak to the warm, kind and generous man whose love and care for others informed all the great things he achieved in his 96 years. He would surely be humbled by the outpouring of kindness he and his family have received in response to his passing.

Dr. Goldbloom was born, raised and educated in Montreal, completing his medical studies at McGill University where he met and married the love of his life, Ruth, with whom he would share 66 years.



Committed to a full-time academic career at McGill, he was recruited to Halifax and to Dalhousie in 1967 to serve as head of the Department of Pediatrics and inaugural physician-in-chief and director of research at the then-under-construction IWK Health Centre.

It is difficult to imagine health care in this region without the IWK Health Centre—yet many of its innovations came from the imagination and inspired leadership that Dr. Goldbloom provided for nearly 20 years. By bringing top research and clinical talent to Halifax and implementing a family-focused approach, the centre became a world-

renowned exemplar for pediatric health care. The centre's vital partnership with Dalhousie continues to this day, built on the foundation Dr. Goldbloom helped establish.

In addition to his clinical leadership and the mentorship and support he provided countless students, Dr. Goldbloom was a prolific scholar, publishing over 140 scientific research papers across a diverse range of topics. He was editor of the definitive textbook in the field, *Pediatric Clinical Skills*, now in its fourth printing, and relied upon by generations of medical students.

He was inducted into the Order of Canada, the Order of Nova Scotia and the Canadian Medical Hall of Fame and received the Queen's Golden and Diamond Jubilee medals along with several honorary degrees, including one from Dalhousie (LLD '00).

Dalhousie was honoured to have Dr. Goldbloom serve as its fifth chancellor from 2001 until 2008, performing our most important ceremonial role with his trademark warmth and care and taking extra effort to make convocation ceremonies more personal for our graduates. Serving as chancellor was one of the many community contributions that coloured Dr. Goldbloom's life.

He began the *Read to Me* program, which for nearly 20 years has provided

free books and reading resources to the family of every baby born in Nova Scotia. He was president of the Atlantic Symphony Orchestra (reflecting his lifelong love of music and talent as a pianist), the first board chair of the Waterfront Development Corporation of Halifax and founding chair of the Discovery Centre. Among his favourite engagements: chairing the Maritime Rhodes Scholars Selection Committee for

15 years, helping select some of the region's brightest students—including many from Dalhousie—for their next great adventure.

Dr. Goldbloom titled his 2013 memoir *A Lucky Life*. As lucky as he considered himself to be, surely this city, province and university were equally lucky and then some for having the good fortune to count him among our best. His full obituary can be found [here](#).



▲ Photo courtesy of the IWK Foundation

*Tackling anti-Black racism
in health care and education:*

NATIONAL RESEARCH COLLABORATIVE TAKES ACTION

BY MATT REEDER

Scholars and researchers co-led by a Dalhousie professor have joined forces to re-shape medical and health-care education in Canada, forming the Black Health Education Collaborative (BHEC).

**BLACK
HEALTH
COLLABORATIVE**



THE BHEC IS COMMITTED TO ensuring that health-care education programs better reflect the impacts of anti-Black racism on the delivery of care for African Nova Scotians and Black people.

Dr. OmiSoore Dryden, James R. Johnston Chair in Black Studies and an associate professor in Dal's Faculty of Medicine, serves as co-lead of BHEC, along with Dr. Onye Nnorom, a family and public health physician and president of the Black Physicians' Association of Ontario. Dr. Gaynor Watson-Creed, family and public health physician and associate dean of Serving and Engaging Society in Dal's Faculty of Medicine, is a member of BHEC, as is Dr. Barbara Hamilton-Hinch in Dal's School of Health and Human Performance.

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

BLACK HEALTH EDUCATION COLLABORATIVE



Dr. OmiSoore Dryden



Dr. Barb Hamilton-Hinch



Dr. Gaynor Watson-Creed



Dr. Onye Nnorom

“It is my hope that our work influences the culture of medical education through new structures that specifically address Black health and wellness,” Dr. Dryden says. “I hope that health learners will develop the skills necessary to provide appropriate care to African Nova Scotian and Black communities across the country. And it is my hope that health educators will develop and update their skills to better equip our health learners.”

BHEC’s resources will include Black health and Black population learning objectives for medical and health education and be grounded in critical race theory—an analytical framework based on the understanding that race is not a natural, biologically grounded feature of people but rather socially constructed and used for oppressive purposes. BHEC is currently collaborating with the Medical Council of Canada in developing these learning objectives for medical students across the country.

BHEC originally formed in 2018 and worked throughout the pandemic. Earlier this year, BHEC received \$1.7 million in 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.

“By prioritizing and funding this urgently needed initiative with Dr. Dryden’s leadership, we will build a health research mandate for Black Canadians that is collaborative, interdisciplinary and nationally recognized, by equipping health professionals across the country to better respond to, treat and ultimately improve the health of African Nova Scotian and Black Canadians,” says Dr. David Anderson, dean in the Faculty of Medicine.

Fellow Dal-based BHEC member Dr. Barbara Hamilton-Hinch, assistant

vice-provost Equity and Inclusion and an associate professor in the School of Health and Human Performance, supports the inclusion of African Nova Scotian and Black voices through the development of first-person storytelling resources that document experiences of people seeking, accessing and creating resources and services.

“The importance of first-person voice cannot be understated,” says Dr. Hamilton-Hinch. “The strength, resilience, coping mechanisms, historical trauma and pain is best heard through the voices of the African Nova Scotian and Black community.”

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

“Even though there has been an increase in Black students within medical school, and there has been some curricular movement, much more is needed,” she says. “This is the gap BHEC plans on addressing.”

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.

“When we hear things like, ‘Black people have thicker skin or denser muscles or their nerve receptors are duller and therefore they don’t feel pain in the same way,’ those things are all based upon systemic colonial tropes,” she says.

The BHEC will serve as a foundation for all health professionals of critical information about Black health in Canada.

“Black health and Black life is intricately connected to the spaces and places in which we live. It is necessary to disrupt the belief that health disparities are biologically based. This simply is not the case. The social determinants of racism, specifically anti-Black racism, must be taken into consideration,” says Dr. Dryden.

BHEC is also focused on continuing professional development and providing clinicians and practitioners with the tools needed to enhance support for Black patients in Canada.

“We need to focus specifically on African Nova Scotian and Black peoples because of our unique histories in Canada and understand how those histories continue, in the present day, to negatively impact health outcomes for our communities,” says Dr. Dryden.



Two in one:

ORIENTATION WEEK 2021 ENCOMPASSES CLASS OF 2024 AND CLASS OF 2025

BY MAGGIE FLEMMING, DMSS PRESIDENT 2021-2022

Throughout the pandemic, Dalhousie Medical School has been able to maintain orientation week activities for new medical students and this year those activities were kindly supported by the Dalhousie Medical Alumni Association.



GIVEN THE VIRTUAL

orientation week experience last year, many students in the Class of 2024 had not had the opportunity to spend time with each other outside the learning environment. A generous donation from the DMAA allowed the class executive to arrange several events to facilitate bonding and community in the class. The Med 2s hosted a barbecue, relay games and trivia night in Nova Scotia and a picnic and Oktoberfest dinner in New Brunswick. Attendance at these events was fantastic and the students were overjoyed to spend time with their classmates before going back to school.

The incoming Class of 2025 was treated to a week of events that allowed them to get to know Halifax, or Saint John, and their classmates. Thanks to the DMAA, the Med 1s had a back-to-school barbecue in Nova Scotia and the New Brunswick students worked their way out of a tricky escape room. The Med 1s are still talking about how meaningful it was to have this opportunity, and they really appreciate the lasting impact of the connections they made.

Students were incredibly grateful to have the opportunity to meet with and socialize with their classmates. The Dalhousie Medical Students' Society sincerely thanks the DMAA for its generous support!

DAL MED BALL & ALUMNI GALA SAVE THE DATE

~~NOV 20, 2021~~

For real
this time!

MARCH 26, 2022

We can't wait to see you! More details coming soon



DALHOUSIE
UNIVERSITY

FACULTY OF MEDICINE



A new EUPHORIA! record:

CLASS OF 2020 BECOMES MED SCHOOL'S YOUNGEST-EVER TO ESTABLISH A CLASS PROJECT

BY BARRETT HOOPER

The MD Class of 2020
is making history
yet again.

▲ *The Class of 2020 is Dalhousie's first MD class ever to win EUPHORIA! four years in a row.*

A YEAR AGO, THEY BECAME the first class to win *EUPHORIA!* for four consecutive years. Now, they are the youngest class in Dalhousie history to establish a class project. Their goal is to raise \$25,000 before their 10-year reunion to create a bursary to provide financial support to a medical student in their second year who has participated in *EUPHORIA!*.

“Our class graduated during the COVID-19 pandemic and as a result, most of our year-end celebrations were cancelled. As a team, we wanted to find a special way to celebrate from afar!” says Dr. Tess Robart (MD ’20), class co-president. “A *EUPHORIA!*-related bursary seemed like the perfect footprint for the Class of 2020 to leave behind.”

“We were all very cognizant of the support that previous classes have provided to students. That was solidified for me at the Dal Med 150 Gala, when they brought out the Challenge Cup and talked about classes having raised \$100,000 or \$200,000,” says class co-president Dr. Patrick Holland (MD ’20). “We drew inspiration from the Class of ’83 and the fund they established.”

Dr. Holland also drew inspiration from the Class of ’91, which established the Dr. Jeff Sutherland Research Award in

▼ *Class of 2020 co-president,
Dr. Tess Robart*



Neuroscience in honour of their classmate, a physician, author, motivational speaker and ALS advocate who lives with the disease. The Class of ’91 has raised more than \$100,000 to date. “It percolated in the back of my mind and then I talked to my dad about it,” he says, referring to his father, Class of ’91 alumnus Dr. Bernard Holland. “I saw how important the award was to him, that his class is able to give back in this way. But I don’t think he expected we’d get to it so soon. I hope we get to the point where we are able to have as much impact as what that class is doing, but right now we are starting with smaller goals and getting some momentum going.”

According to class treasurer, Dr. Kelcy McNally (MD ’20), “*EUPHORIA!* was such a big part of our class and so meaningful, it just seemed automatic that we would create this bursary and it would be connected to *EUPHORIA!*”

Drs. McNally, Robart and Holland were all actively involved in *EUPHORIA!*: Dr. McNally was part of the class’s backstage crew, Dr. Robart joined the DMNB group skits each year, while Dr. Holland played trumpet, saxophone and took on a variety of acting roles.

“Our cohort had an exceptional number of artistically talented students who helped pave the way for our class’s *EUPHORIA!* enthusiasm and winning record,” says Dr. Robart.

Every year since 1969, Dalhousie medical students have taken a break from their studies to put on a variety show and entertain sold-out crowds. Not only does the show provide an entertaining break from the classroom and clinic, but there's some competition involved, too. All four classes each perform for 30 minutes, with one class crowned the winner for their efforts and talent. But the event's real *raison d'être* is a noble one: to support Maritime charities. More than \$800,000 has been raised by *EUPHORIA!* thus far.

"*EUPHORIA!* is our annual fundraiser and is so important to the students not just for the fun but for the impact it has. Since we were not able to have a live, in-person show this past year, it became important to make sure that the tradition and the important fundraising aspect of *EUPHORIA!* continues," says Dr. Holland of the connection between the variety show and the bursary.

"When I think back on our four years of med school and our best memories as a class, *EUPHORIA!* was definitely Number One. The fundraiser brought us together more than anything else," says Dr. Robart. "Hopefully, the bursary will encourage students to keep the fun alive while also providing a bit of much-needed financial support to students."

The Class of '20 also hopes their bursary encourages other classes to establish fundraising projects of their own. "Our class is a little bit competitive and we'd like to encourage other classes to give back, too," says Dr. McNally.

▼ *Class of 2020 treasurer,
Dr. Kelcy McNally*



Adds Dr. Holland, "We're throwing down the gauntlet for the classes of 2018, 2019 and 2021 to try and match us."

To learn more about Dalhousie medical alumni class projects, please contact [Jessica Farrell](#) at (902) 220-8717.

A champion of healthy competition:

DR. ROBERT MACKENZIE SAFEGUARDS YOUNG ATHLETES' HEALTH

BY BARRETT HOOPER

Dr. Robert MacKenzie (MD '06) has taken his passion for sports into his medical career, working with elite young hockey players as team doctor.



▲ Dr. Robert MacKenzie (MD '06)



WHEN MONTREAL CANADIENS goaltender Carey Price voluntarily entered a residential treatment program for substance abuse in October, he followed Olympic gymnast Simone Biles and tennis champion Naomi Osaka as the latest high-performance athlete to make their mental health struggles public. In a prepared statement, the NHL superstar admitted that his decision to seek treatment was the result of years of “neglecting my own mental health.” It’s a conversation that Dr. Robert “RJ” MacKenzie (MD ’06) is glad to see happening.

“I was very proud of him when he stepped forward. It takes tremendous courage to look at yourself and recognize that there’s a problem. He recognized the steps he needed to take for his own health and for his family,” says Dr. MacKenzie, a diehard Habs fan with close ties to the hockey community. “He showed what kind of an athlete he is and what kind of person he is. He’s able to help all of

us by saying, ‘Hey, these are some of the difficulties I’m having right now, but the important thing is that I’m going to go and get help.’ And that is helping us reduce the stigma around mental health and it’s going to help young athletes with similar experiences.”

The health of athletes, both physical and mental, is something to which Dr. MacKenzie is very much attuned. When he isn’t in the emergency department at the Cape Breton Regional Hospital, he can often be found at Sydney’s Centre 200 arena, where he serves as team physician for the Cape Breton Eagles of the Quebec Major Junior Hockey League. He’s also the team doctor for Hockey Canada’s national under-18 program and served as the doctor for the Program of Excellence U18 summer showcase last summer in Alberta.

“It might sound like a cliché, but it’s really an honour and a thrill to be involved with Hockey Canada, and it’s a privilege

to work with so many great young players as they grow and develop,” he says. “Even at their age, they are all high-performance athletes who show tremendous dedication and drive that you don’t typically see, and that can also come with a lot of pressure.”

These are some of the top prospects in Canadian hockey—many with NHL careers in their future. Dr. MacKenzie works very closely with them, from conducting player physicals and treating injuries to overseeing COVID protocols. He also plays a more informal role in monitoring their mental wellbeing.

“There are resources in place for all the players, whether with the Quebec Major Junior League or with Hockey Canada, that if they are dealing with a particular problem or challenge there are supports available to them,” Dr. MacKenzie says. “And they also trust their team physicians so that when they need to talk with somebody, they’ll do that as well, and we’ll go for the proverbial coffee, because at the end of the day they’re still very young men, they’re away from home, and there are lots of stressors.”

A native of Albert Bridge, NS, Dr. MacKenzie took a circuitous route to his medical career. The son of health-care professionals—his mother was a nurse and his father was Dal Med alumnus Dr. Donald “DE” MacKenzie (MD ’58)—he “grew up in that

atmosphere” but wasn’t immediately inclined to follow in their footsteps. After completing his undergraduate degree he wrote both the MCAT and LSAT, and applied to both medical school and law school at Dalhousie. Wait-listed for medicine, he ended up going to law school. “After I finished law school I put my application in again at medical school and I was lucky enough to be accepted,” he says. “I was always interested in emergency medicine and sports medicine.”

It seems Dr. MacKenzie likes to stay busy. In addition to being involved in hockey—which has taken him to tournaments across Canada and as far away as Ufa, Russia, for the Junior Club World Cup—he’s also heavily involved in his community, including working at Cape Breton University clinic, the youth health centre at Riverview High School and the Canadian Forces Station Sydney. He also recently accepted the position of emergency medicine co-lead for the Eastern Zone.

That doesn’t include the time he spends with his wife, Colleen, who is a Dal grad and occupational therapist in mental health, and sons Kaden, an avid snowboarder, and Braedy, a competitive hockey player.

“It’s a little bit too busy right now,” he says with a chuckle. “But when you are following your passion, it’s a lot easier.”

Medical assistance in dying:
**UPTAKE IN THE PRACTICE OF
MAiD AND INVOLVEMENT BY
PHYSICIAN SPECIALTY IN NS**

BY DR. ELIZABETH MUNN AND DR. EMILY GARD MARSHALL

Canada's federal legislation on medical assistance in dying (MAiD) was enacted in June 2016.

Editor's note: The DMAA is proud to provide financial support for the Dalhousie Medical Journal, a student-run peer-reviewed biannual publication designed to increase medical student and resident participation in research and writing. We are pleased to print an abridged version of this article, which appears in full in the current issue of the [DMJ](#).



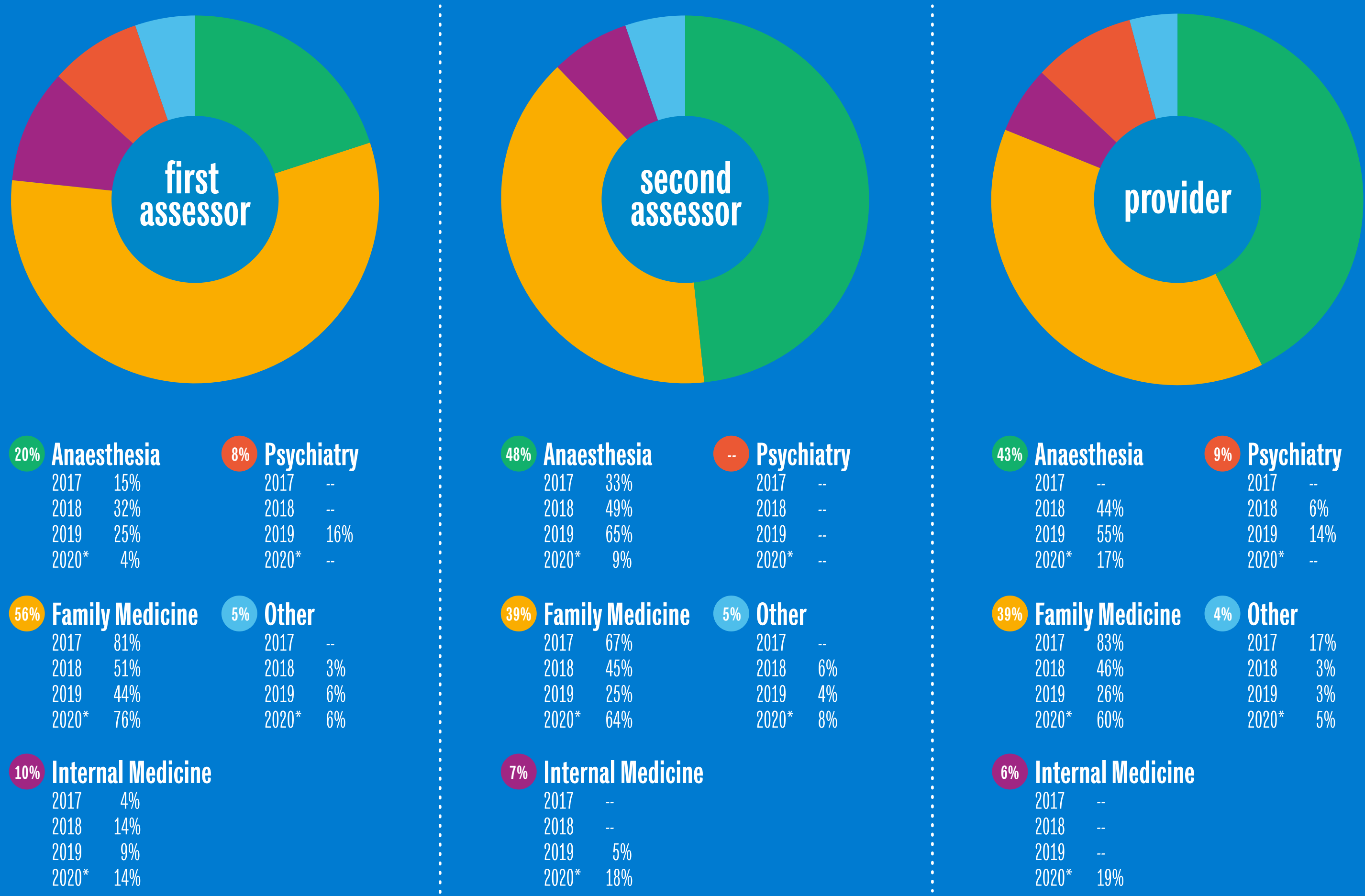
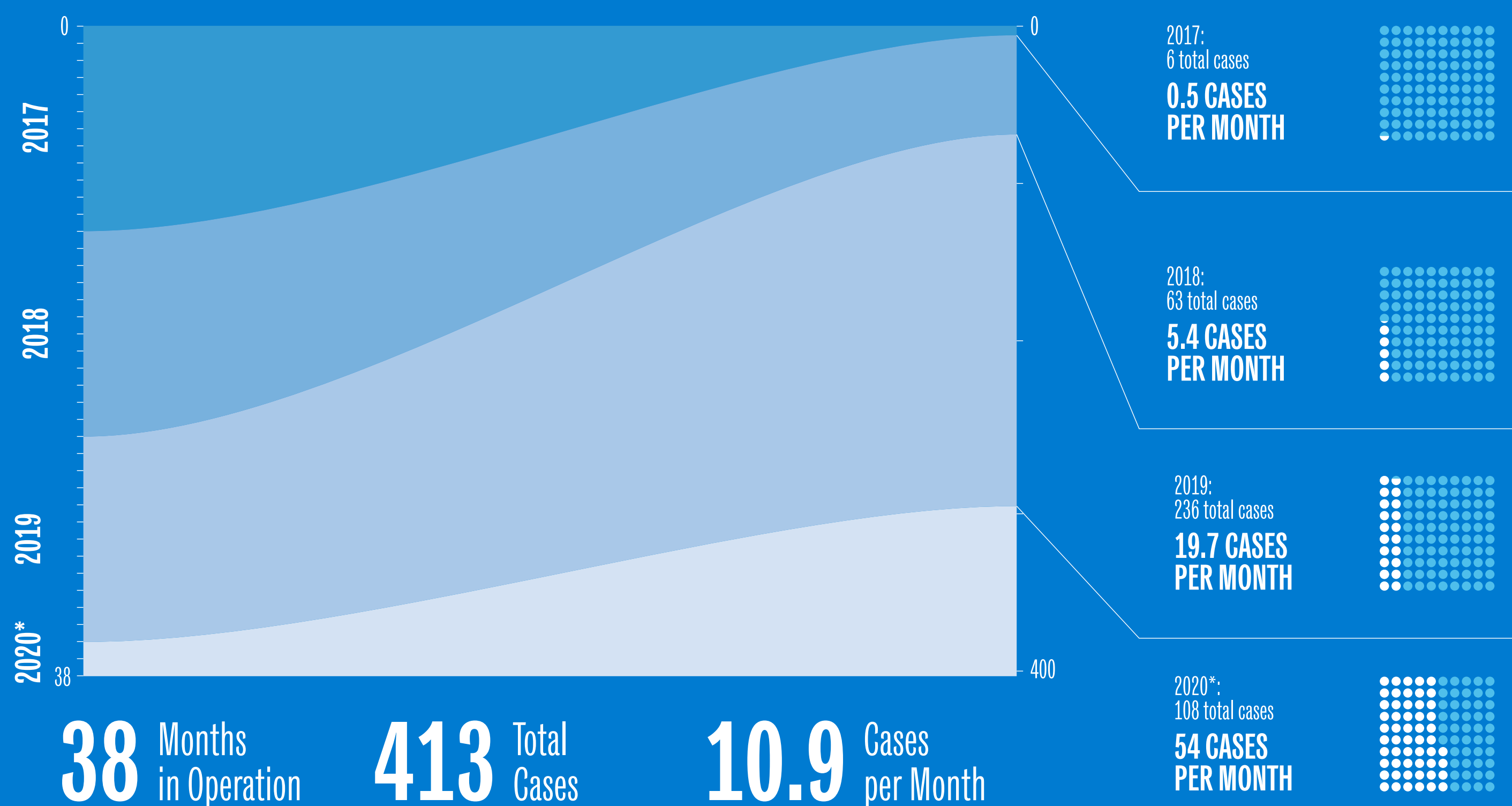
►
*Dr. Elizabeth Munn (top)
and Dr. Emily Marshall*

IN DOING SO, CANADA joined several countries, American states, and other jurisdictions where MAiD is now legal in some form. In Canada, MAiD refers to the prescription of medications to cause a person's death, to be administered by a provider or by the patient themselves. In Nova Scotia, the MAiD procedure is administered intravenously by the provider. The process requires assessments by two independent clinicians, typically physicians or nurse practitioners. In Nova Scotia, referrals are sent to a centralized MAiD Coordination Centre to be triaged and referred for assessment. The first assessor determines a patient's eligibility against a set of criteria, the second assessor confirms the patient's eligibility, and one of these assessors may then provide the procedure. The 2016 criteria limits eligibility to adults with a "grievous and irremediable medical condition," which is considered serious and incurable; causing an advanced state of decline and intolerable suffering; and whose natural death is reasonably foreseeable. These adults must have capacity to make medical decisions, and make the request for MAiD voluntarily. On March 17 of 2021, the criterion of reasonably foreseeable natural death was removed, and mental health was excluded as a medical condition until March 17, 2023.

According to Health Canada Reports, nearly 22,000 Canadians have received MAiD since the enactment of federal legislation. The average age of MAiD recipients is in their 70s, with an almost equal distribution between women and men. Malignancy has been the most common primary diagnosis, representing approximately 60 per cent of cases, depending on the province or year. Neurodegenerative and cardiorespiratory diseases comprise smaller proportions of MAiD services. In 2020, private residences accounted for 47.6 per cent of MAiD administration settings, and 28 per cent took place in hospitals.

The legalization of MAiD represents a significant change in practice for health-care providers in Canada, in particular for family physicians. In the 2019 Health Canada report, which provided data on the specialties of MAiD providers for the first time, 65 per cent of all providers were family physicians. In the 2020 Health Canada report, 68.1 per cent of MAiD procedures were provided by family physicians. It is less clear how involved family physicians are as MAiD assessors and referring physicians, as this report does not differentiate provider specialty for each role (assessor versus provider). Family physicians are well-placed to be involved in all aspects of the MAiD process as a specialty that emphasizes patient values

TABLE 1. INVOLVEMENT IN MAiD BY PHYSICIAN SPECIALTY AND ROLE OVER TIME

**TABLE 2. TOTAL MAiD CASES IN NOVA SCOTIA BY YEAR**

* Data from 2020 includes January and February only

Source: **Nova Scotia Department of Health and Wellness**

** Data reported as proportion of total MAiD cases for each year

† Percentages shown without frequencies as some cell counts are less than 5

and context and is privy to the specific details of patient illnesses and disease trajectories. They are also a primary point of contact with the health-care system, and thus may play an important role in MAiD access and uptake.

This study presents all data to date on MAiD in Nova Scotia based on an analysis of administrative billing codes. It describes the uptake of MAiD and physician involvement as a first assessor, second assessor, and provider by specialty from 2017 to early 2020.

METHODS

The Nova Scotia Department of Health and Wellness provided the study team with anonymized, aggregate billing code data tables of MAiD provision by physicians from January 1, 2017 to the end of February 2020. Reporting is based on the calendar year (January to December). Billing data for MAiD services provided by nurse practitioners are not available as they are paid via contract and do not submit billing claims for this service. Data for 2020 were only available for January and February, and so no comment can be made through these data about the impact of the COVID-19 pandemic on MAiD provision in Nova Scotia.

DISCUSSION

Our data are in agreement with the 2020 data from Health Canada that family physicians are the specialty most often providing MAiD (68.1 per cent of providers). The federal report on MAiD identifies the primary specialty of providers involved in MAiD provision being family medicine, followed by palliative medicine, nurse practitioners, anesthesiology, internal medicine, critical or emergency care, oncology, and psychiatry.

Based on our data, family physicians are also heavily involved in first and second MAiD assessments in Nova Scotia (56 per cent and 39 per cent of all first and second assessors, respectively). Anesthesiologists are also heavily involved in MAiD as first assessor, second assessor and provider. This is likely due to their familiarity with the processes and medications involved in the provision of MAiD as well as their experience providing care for patients with complex and chronic health concerns. Our data also suggest there are specialties that are less commonly MAiD providers but are still involved in conducting first and second assessments, such as internal medicine.

It is also important to consider how the physician workforce may impact MAiD access and uptake. A recent study in Nova Scotia found that there was no significant difference in completion of MAiD services

for those with or without a family provider among patients who have requested MAiD. However, this interpretation does not include patients who wish to request MAiD services but were unable to because they did not have a provider or for other reasons. A small Canadian study found that patients experienced barriers such as a lack of information about MAiD, issues around final consent, stigma associated with MAiD, and others. The barriers in Nova Scotia associated with MAiD access and uptake is an important area for future research.

There was an increase in MAiD cases each year in Nova Scotia from 2017 to 2019 observed in our data. Although the data from 2020 are incomplete, they suggest an increase for 2020. This is in keeping with provincial trends reported by Health Canada. On a national level, rates of MAiD have also increased year after year, from 0.6 per cent of all deaths in 2016 to 2.5 per cent of deaths in 2020. According to the second annual report on MAiD in Canada, there was a growth in MAiD cases of 34.2 per cent between 2019 and 2020. Proposed reasons for this initial rise and subsequent plateau include changes in reporting requirements, physician comfort, patient interest, public awareness, and/or population changes. Further research is needed to explore how the new MAiD legislation and changes

to eligibility criteria for MAiD impacts provision.

CONCLUSION:

Our findings support data reported by Health Canada that shows year after year increases in rates of MAiD since federal legislation was enacted in 2016. Existing literature suggests family physicians are highly involved as MAiD providers, and this study documents that they are similarly involved in MAiD assessments. The specialty of MAiD assessors is not currently reported by Health Canada and not otherwise available in the literature. Whether the specifics of the family physician workforce in Nova Scotia, or nationally, affects MAiD uptake and access remains to be seen. This is an important area of study given the proportion of patients with no family physician or limited access to their provider. Future research on MAiD in Nova Scotia could be directed at gaining a better understanding of the demographics of physicians involved in MAiD, including such aspects as payment models, gender, and years in practice. A qualitative inquiry could provide important insights on patient barriers to accessing MAiD and physician barriers to providing MAiD.



New frontiers in cancer care:

DAL PARTNERS WITH INDIA TO DEVELOP NEW CANCER IMMUNOTHERAPIES

BY DAYNA PARK

Frontiers is Dalhousie University's ground-breaking cancer immunotherapy initiative in India.

THE FRONTIERS INTERNATIONAL collaborative research program is committed to developing new cancer immunotherapies—which stimulate the immune system to detect and destroy cancer cells—and to making these therapies affordable for use around the world.

Working diligently to bring this project to life, Dalhousie researchers, including Dr. Shashi Gujar and Dr. Alice Aiken, have established several partnerships in India and around the world with academic institutions, hospitals and private industry collaborators.

Dalhousie Medical Research Foundation (DMRF) has been helping to support early-career scientists, like Dr. Gujar, through funding, community engagement and leadership opportunities, so they can continue to build their careers and conduct life-changing research.

“Dr. Gujar represents the future of cancer research efforts in Nova Scotia,” says Dr. Alice Aiken, vice president Research and Innovation at Dalhousie University. “He has established international research connections that are leading to new and better ways to diagnose and treat cancer. Supporting early-career cancer researchers like Dr. Gujar is critical to ensuring that there is continued progress against this disease in the years to come.”

►
Dr. Shashi Gujar, cancer researcher

Over the next five years, Frontiers will build on existing partnerships and establish new collaborations with academic, clinical and industrial partners across the globe, with a focus on collaborations in India. Given that India’s health-care industry serves one sixth of the world’s cancer patient population, this vast subcontinent is a critical partner for Dalhousie in this endeavour, with a large sample of patients available for treatment and clinical testing, and a biotech industry that has the necessary infrastructure to support the development of new cancer immunotherapies.

This means that researchers can test these new therapies immediately, with enough cancer patients in the





*Dr. Alice Aiken, vice president
Research and Innovation*

population to conduct proper clinical trials. In addition, given the currency exchange between Canada and India, the cost to develop and produce new cancer immunotherapies in India will be substantially less than if they were produced in Canada.

With all these factors taken together, partnering with India will allow Dalhousie researchers to develop, test and bring new cancer therapies to market faster, and to offer these therapies at a lower cost, for use in populations around the world.

DAL MED ALUMNI, **WE NEED YOUR HELP!**

K'we/Hello Indigenous Alumni.

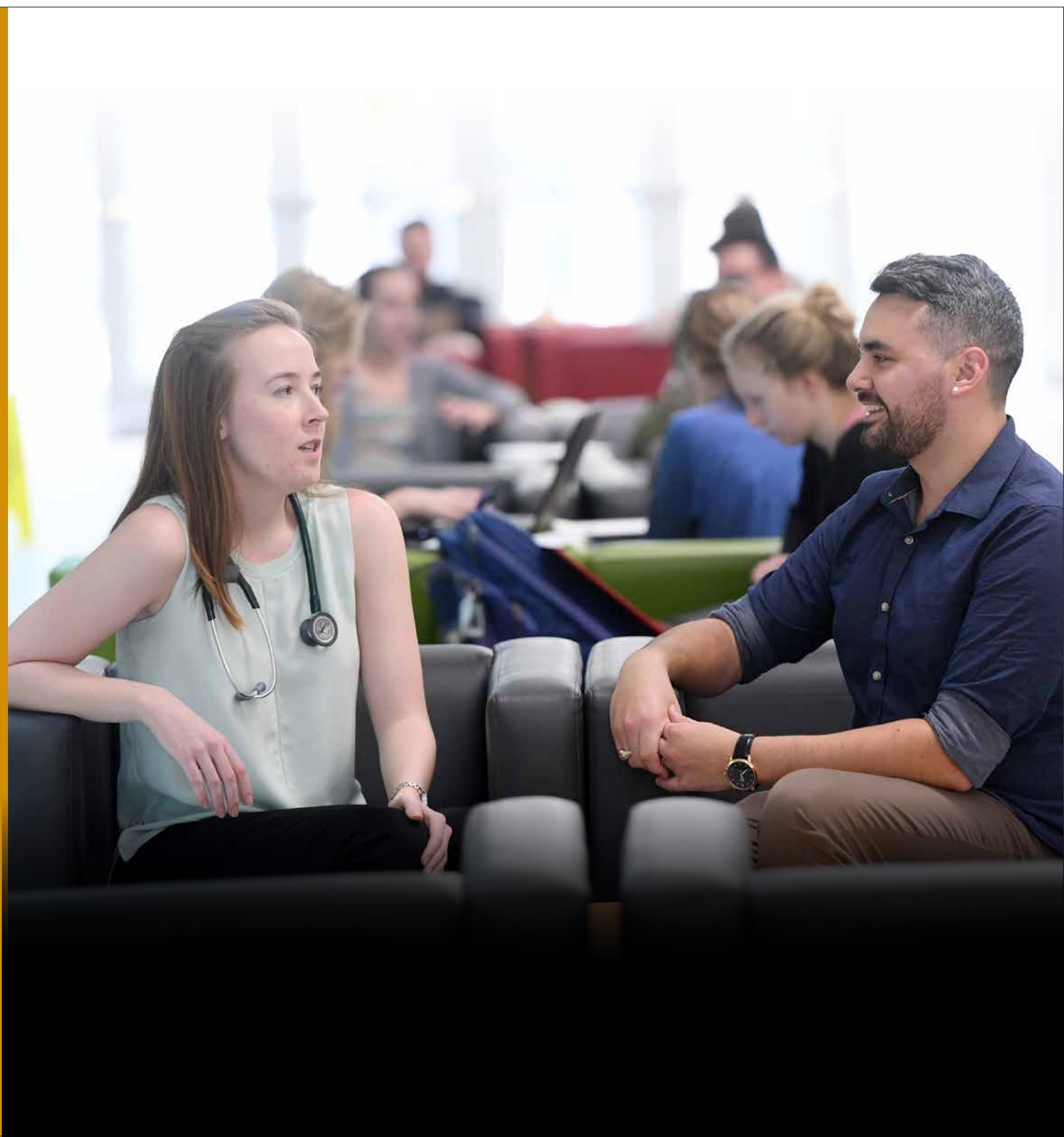
Indigenous Health in Medicine (IHIM) is looking for Dalhousie medicine alumni who self-identify as Indigenous who would be interested in supporting Indigenous undergraduate students' pathways to medical school, as well as current Indigenous medical students.

IHIM seeks to increase the representation of Indigenous students in medicine through recruitment, community collaboration and partnerships. It also advises the dean of medicine to fulfill the social accountability mandate to the Maritime Indigenous community.

If you are a Dal Med alumnus who self-identifies as Indigenous, please call or email us to discuss how you can be involved with IHIM and support the next generation of Indigenous medical practitioners.

Thank you in advance for your support!

Hannah Asprey
Program Manager, Indigenous Health in Medicine
ihim@dal.ca



From trainee to trainer:

DR. PAOLA MARCATO FOSTERS NEXT GENERATION OF CANCER SCIENTISTS

BY JILL MACCANNELL

An investment in student trainees is an investment in the future of medicine, and Dalhousie's Dr. Paola Marcato is living proof.



STARTING OUT AS A STUDENT

trainee in the Cancer Research Training Program at the Beatrice Hunter Cancer Research Institute (BHCRI) in 2004, Dr. Marcato quickly built the skills she needed to conduct world-leading research in the field.

Today, thanks in part to support from Dalhousie Medical Research Foundation (DMRF) donors, Dr. Marcato runs her own cancer research lab at Dalhousie Medical School, working on innovative treatments for breast cancer. Dr. Marcato's work aims to identify ways to destroy cancer stem cells—the cells programmed to proliferate and invade nearby tissues, leading to metastasis.

"The trouble with our existing treatments is that you could kill all the regular cancer cells with chemo and radiation, but still be left with the cancer stem cells, so the cancer will reoccur," says Dr. Marcato. "My team has identified a marker on breast cancer stem cells that's strongly associated with invasive cancers, which is a marker we can use for both diagnosis and treatment. Some of our discoveries in the lab have already been pursued as clinical targets, and we continue to innovate new treatment options targeting these specific and deadly cells."

Dr. Marcato's work also involves the establishment of a breast cancer tissue bank, in partnership with cancer surgeons and researchers Dr. Carman Giacomantonio and Dr. Lucy Helyer. The breast cancer tissue bank allows for the examination of cancer stem cells from women across the Maritimes.

Today, as a senior scientist at Dalhousie

Medical School and the BHCRI, Dr. Marcato is proud to mentor young trainees in her lab as part of the Cancer Research Training Program. Over the past eight years, she has mentored over 30 trainees as they pursue important cancer research—a calling she considers one of the most rewarding contributions of her career.

"I know how important the BHCRI's Cancer Research Training Program was for me as a young researcher, and it's a privilege for me to give back by helping to train the scientists of tomorrow," Dr. Marcato says. "By assisting my students on their path to research breakthroughs, we can create new treatments that impact real lives together. There is nothing more meaningful to me than this, and I am grateful to DMRF donors for making this possible."



Out in the cold:

DAL RESEARCHER EXPLORES WOMEN'S HOMELESSNESS CRISIS WITH AN EYE TO POLICY CHANGE

BY MELANIE STARR

Women and children are being left out in the cold when it comes to shelter from domestic violence, according to new research out of Dalhousie Medical School.

Dr. Alexa Yakubovich

IN AN ARTICLE PUBLISHED IN *The Lancet Public Health* to coincide with International Day for the Elimination of Violence Against Women on November 25, 2021, lead author Dr. Alexa Yakubovich reports there is a massive and growing need for safe and supportive housing for women escaping intimate partner violence. This need is largely or entirely unmet in most countries, including Canada.

Dr. Yakubovich, an assistant professor in Dalhousie Medical School's Department of Community Health & Epidemiology, conducted a systematic review of the international literature to see what policies and programs have been evaluated around the world that provide housing to women who have fled their homes to protect themselves, and often their children, from violent intimate partners.

The most startling finding, says Dr. Yakubovich, is that of the 24,000 records they scoured, she and her team found only 34 studies. "There is a huge lack of resources going into studying this problem and evaluating potential solutions, nothing even close to the scale of the problem," she says. "We also found a huge gap in evaluations of longer-term housing solutions for women experiencing violence. Most of what's available is short-term emergency shelter, which is typically mandated for only a month of safe housing."



Dr. Yakubovich and her colleagues found little evidence of any negative impacts of housing solutions on women. In terms of the positive impacts, they found that mental health outcomes improve substantially when there are housing solutions available. "Women feel safer and experience less stress, their anxiety and depression are relieved, and they are more likely to feel supported in leaving their violent partner when they have viable housing options," she says. "This has become even more important since the advent of the pandemic and the resulting increase in violence against women."

Studies show an overwhelming increase in violence against women related to the pressures of the pandemic, reflected in a dramatic uptick in reports to police, calls to domestic abuse hotlines, demand for women's shelters and visits to hospital.

"Service providers report not just an increase in the number of clients since the pandemic began, but also in the severity of the violence," says Dr. Yakubovich, noting that there has also been an increase in the use of weapons to inflict violence against women. "Women are at high risk of extremely poor outcomes, including serious injury, chronic pain and even death if they stay in their homes, but they may have few viable options for housing should they decide to go."

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.

"It's really clear there is an urgent need for a gender focus in housing policy from coast to coast in Canada," says Dr. Yakubovich. "Intimate partner violence is the Number One cause of women's homelessness, yet we are still waiting for a national strategy to address gender-based violence, let alone coordinated action for the homelessness that results."

The United States, United Kingdom and Australia have more developed housing policies and coordination across sectors to address women's need for shelter from violence, she says, while in Canada a lack of focus on this issue and a lack of coordination across housing, health care and women's advocacy sectors hamper progress and keep women in danger.

"Most homeless shelters in Canada are oriented towards men and can be scary, even dangerous places for women and their children," notes Dr. Yakubovich. "And we lack policies to support 'stay at home' models where the violent partner is removed and the victim is given tenancy and protection."

Nova Scotia is making progress with its new provincial housing strategy, says Dr. Yakubovich, noting that Adsum House, a shelter in Halifax for women and children escaping violence, was involved in its development. Even so, there are no measures in the strategy to specifically address women's homelessness, a gap

Dr. Yakubovich says needs to be addressed: “It’s a win that we have a housing strategy in Nova Scotia. Now let’s get more sectors and organizations involved in refining this strategy to address the unmet needs of women who need immediate and long-term housing solutions that are safe, affordable, and support them to heal.”

Dr. Yakubovich joined Dalhousie Medical School this year 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. Prior to her stint in Toronto, the Winnipeg native and Rhodes Scholar completed her PhD in evidence-based social intervention and policy evaluation at Oxford University in the UK. During her PhD studies, she volunteered at a domestic violence services centre in Oxfordshire, inspiring her to focus her future research efforts on the health and housing impacts of intimate partner violence on women.

WANTED: STORY IDEAS FOR VOX MEDAL

We are looking for tips and leads to help us create great content for Vox. Send us your ideas for newsworthy, topical or human interest stories, along with contact names and emails of the people involved, so we can put on our reporter’s hats and follow up.

If you’re feeling really ambitious and want to pen a story yourself, please let us know! We welcome submissions of short articles (800 words or less) from alumni and can guide you on the front end as to how you can best focus your story.

Send your ideas to Barrett Hooper:

barrett.hooper@dal.ca



Global perspective:

NEW PSYCHIATRY HEAD ASPIRES TO ENHANCE DAL'S INTERNATIONAL IMPACT

When Dr. Vincent Agyapong arrived in Halifax in August, he got his first taste of the salty East Coast air.

ARRIVING FROM ALBERTA, where he was the director of the Division of Community Psychiatry at the University of Alberta and the Edmonton zone chief for Community Mental Health for Alberta Health Services, he assumed the position of head of the Department of Psychiatry at Dalhousie and chief of the Department of Psychiatry Central Zone for Nova Scotia Health on September 5.

He sees moving to Dal as “the perfect opportunity to serve the people of Nova Scotia, the Maritimes and the world at large, and to help expand access



to quality mental health care through leadership of service.”

Dr. Agyapong was born and raised in Koforidua, capital of the eastern region of Ghana. He completed his undergraduate medical training at the Kwame Nkrumah University of Science and Technology in

Kumasi, Ghana, and his basic training in psychiatry at the Dublin Royal College of Surgeons Rotational Training Scheme in Ireland. He was appointed an assistant professor of psychiatry at the University of Dublin Trinity College in 2009 as part of a psychiatry specialist program at St. Patrick's University Hospital. He rounded out his training with a doctorate in concurrent mood and addiction disorders in 2012, before heading across the Atlantic to Canada in 2013 where he had accepted a position at the Northern Lights Regional Health Centre in Fort McMurray as a consultant psychiatrist.

Looking forward, Dr. Agyapong has some broad goals in mind for the Department of Psychiatry. He would like the department to work collaboratively with stakeholders to expand access to addiction and mental health services, improve upon the quality of care and standardization across the province and beyond. He would also like to build on the strong reputation the department has in the areas of research and education by

extending the international reach of its education and research programs. To this end, he hopes to recruit additional faculty with diverse research and educational experience and expertise, and also explore opportunities to develop new education and research programs. "Establishing an International Diploma in Clinical Psychiatry and a clinical fellowship program at Dalhousie University will be some of the important mechanisms by which we can close the psychological treatment gap at home in Nova Scotia and around the world, especially in low- and middle-income countries," he says. "Furthermore, the department can become a global leader in education and research by expanding the reach of our master's and PhD programs to global learners through leveraging the power of technology and partnerships with academic institutions and health authorities around the world. It is therefore the goal to establish a centre for global mental health at Dalhousie University to coordinate international mental health education and research."

Editor's note: This story is abridged and reprinted with permission from the Dalhousie Department of Psychiatry.



16th Dalhousie Mini Medical School Program
January 26, 2022- March 16, 2022
Wednesday evenings from 1900-2000 (AST)
Microsoft Teams meeting
Join on your computer or mobile app

[Click here to join the meeting](#)

This will open a webpage, where you'll see two choices: join using the app (if installed) or join on the web instead. **If you join by web use Google Chrome or Microsoft Edge.** For more information on TEAMS, [please see here.](#)

If the above link doesn't open, try <https://tinyurl.com/255dfewj>

DATE	TIME	PRESENTATION
January 26, 2022	7 to 8 p.m.	"It's ok being sensitive: What Borderline Personality Disorder can teach us about our reactions in the pandemic" Dr. Deborah Parker
February 2, 2022	7 to 8 p.m.	"Deciding for others: Context matters" Dr. Christy Simpson
February 9, 2022	7 to 8 p.m.	"All about allergy: From sneezes to wheezes and everything in between" Dr. Lori Connors
February 16, 2022	7 to 8 p.m.	"Shoulder instability: Current concepts and controversies" Dr. Ivan Wong
February 23, 2022	7 to 8 p.m.	"Cannabis and your health: The good, the bad, the ugly!" Dr. Stephen Miller
March 2, 2022	7 to 8 p.m.	"Trust your gut (doctor): A day in a life of a gastroenterologist" Dr. Ali Kohansal
March 9, 2022	7 to 8 p.m.	"Memory and age: What's normal, what's not and what you can do about it" Dr. Alison Dixon
March 16, 2022	7 to 8 p.m.	"COVID-19: What have we learned two years into the pandemic" Dr. Todd Hatchette

Contact: anabela.sardinha@dal.ca



Be Kind, Be Calm, Be Safe:

DR. BONNIE HENRY CAPTURES EARLY DAYS OF PANDEMIC IN BOOK FORM

BY MELANIE STARR

Inspired by her sister's recognition that she had not only a front row seat but a vital role to play in an historic unfolding, Dr. Bonnie Henry (MD '90) worked with her sister, publisher Lynn Henry, to pen a first-person account of the early days of the pandemic.

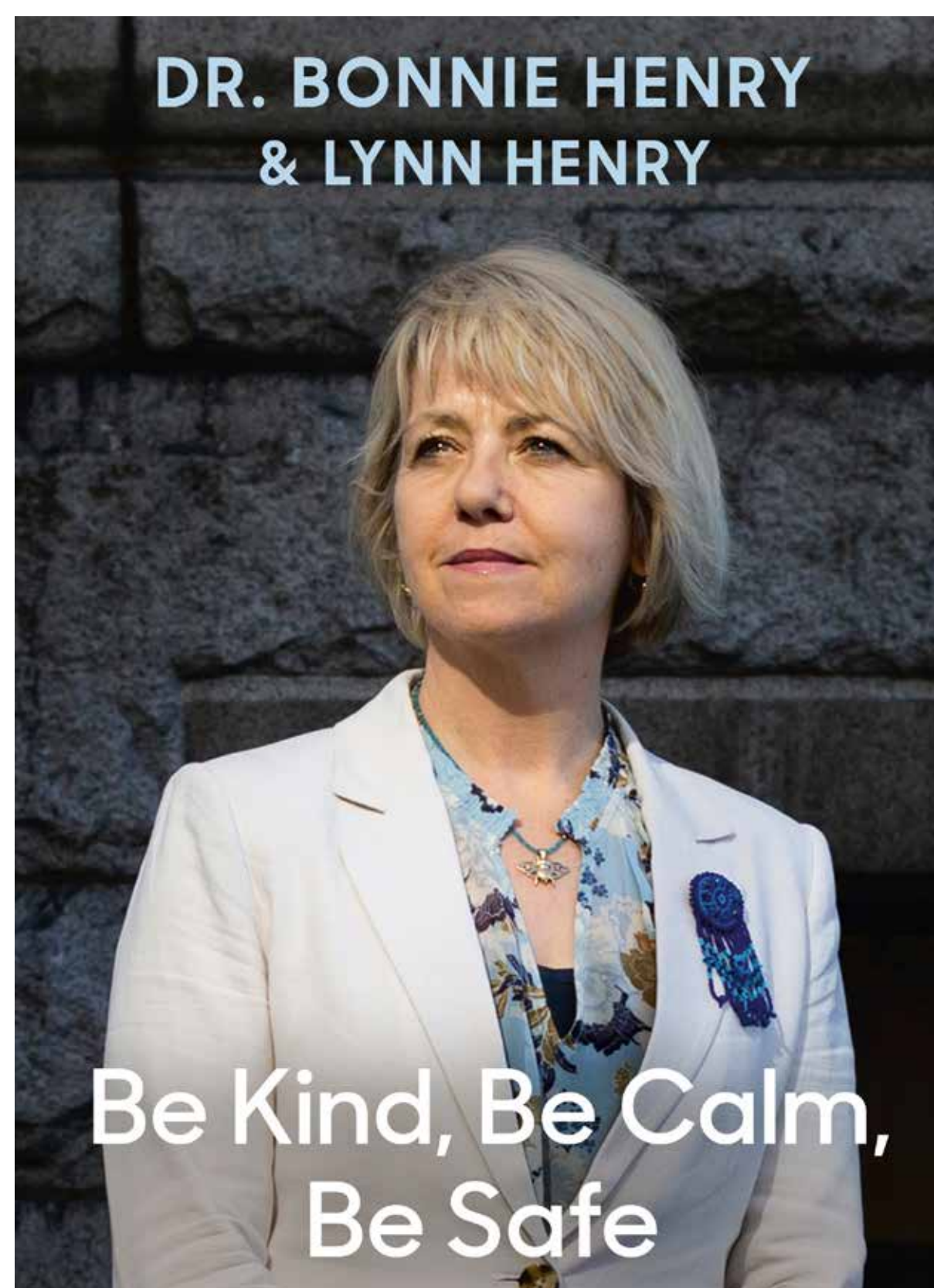
BE KIND, BE CALM, BE SAFE:

Four Weeks that Shaped a Pandemic, was published by Allen Lane, an imprint of Penguin Canada, in early 2021.

Opening with a heavy atmosphere of impending catastrophe, *Be Kind, Be Calm, Be Safe* takes readers behind the scenes of Dr. Henry's mounting concern as reports of a severe atypical pneumonia leaked out of China, and her actions as the culprit virus emerged more quickly than expected in her home province of British Columbia. With rare honesty, she shares her inner turmoil and fears, the challenges she faced and the steps she took as the province's chief medical officer of health throughout the first six months of the pandemic.

In *Be Kind, Be Calm, Be Safe*, Dr. Henry traces in illuminating detail the recent history of pandemics and the role of public health agencies and international collaboration in communicable disease surveillance, pandemic preparedness and public health protection. She also explores the roots of vaccine hesitancy and the devastating effect this has had on humanity's ability to stop the spread of SARS-CoV-2.

As in her own personal response to the pandemic, Dr. Henry urges readers to remain calm, kind and optimistic, and to seek the gold to be found in the lessons learned from this challenging virus.



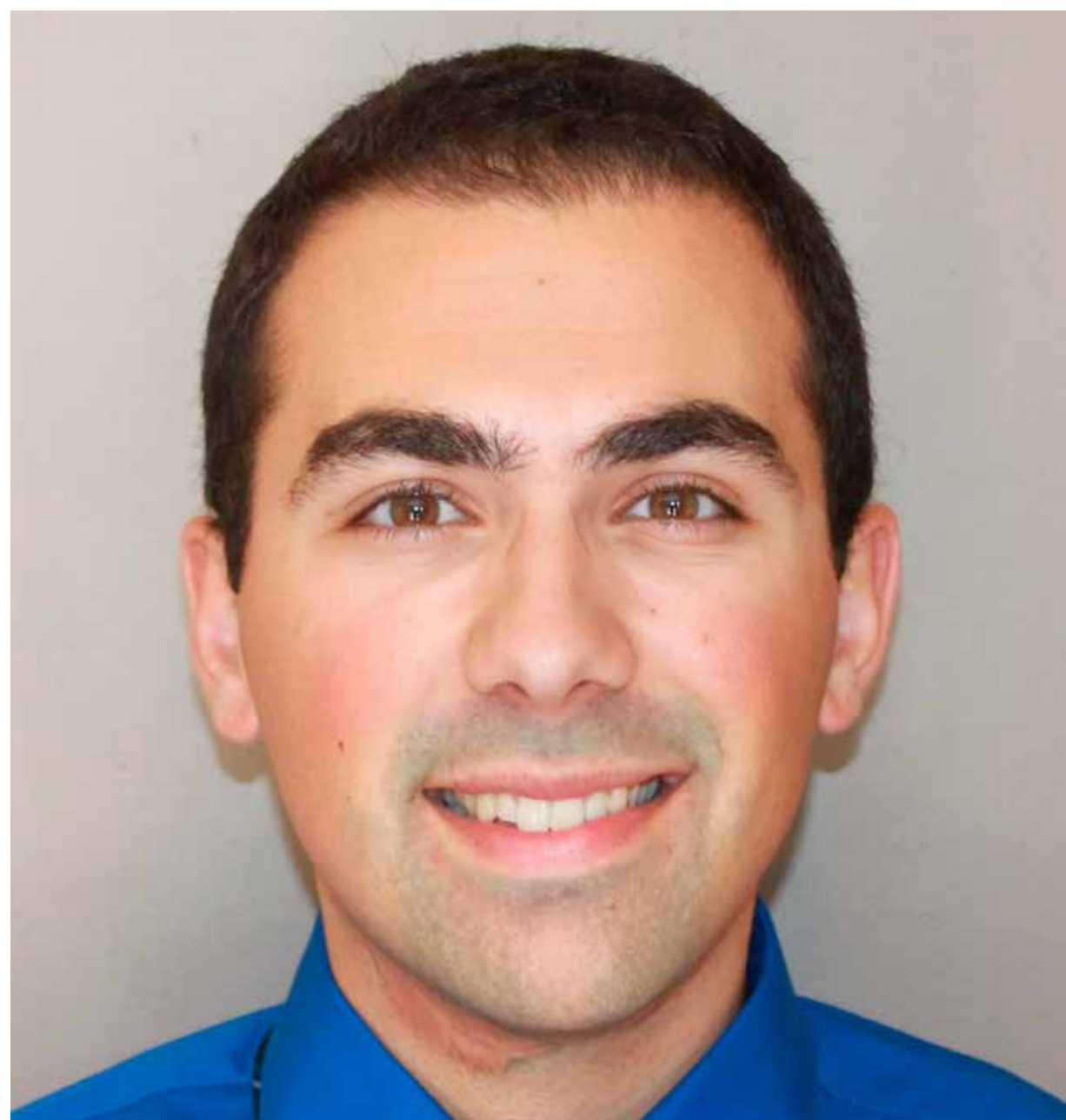
As she writes in her epilogue, “Over these months we’d also learned that crises such as this pandemic can bring out both the worst in human nature and, fortunately, the best... pandemics can lead to altruism, which we’ve seen in such acts as dropping off food for neighbours, caring for others’ children, and supporting the food banks... I’d learned that tipping people towards such kindnesses was one of the most important roles I needed to play... I believed that by recognizing our need for connection, compassion, and community, acknowledging that we’re in this together, and cultivating a sense of common purpose we would build a resilience that would support us all through this storm.”

Rewarding excellence:

DMAA-SPONSORED AWARDS RECOGNIZE TOP-QUALITY RESIDENT RESEARCH

BY MELANIE STARR

The DMAA sponsors two Faculty of Medicine Research Awards, one for best work in clinical research and one for best work in fundamental science.



▶
Dr. Eredit Celo (top) and Dr. Abraham Nunes

THE NOMINEES FIRST MUST

win their departmental research day. The Faculty of Medicine Research Office then assigns five reviewers to examine and score their submissions. This year's deserving winners are Dr. Abraham Nunes (PGY5, Psychiatry), Best Work in Clinical Research, and Dr. Eredit Celo (PGY4, Ophthalmology & Visual Sciences, Pharmacology), Best Work in Fundamental Science.

Dr. Nunes worked with his faculty mentor, Dr. Martin Alda, to advance the work toward identifying reliable biomarkers of lithium response in patients with bipolar disorder (BD). By examining two large international databases, they discovered very strong genetic differences between the “best clinical exemplars” of lithium response, and the “poor clinical exemplars.”

These differences were so strong, they enabled the researchers to predict the relative probability of lithium response between the two groups with 90 per cent accuracy—an extremely important distinction given the high effectiveness

of lithium in treating those people with bipolar disorder who respond to it. “Our results are the strongest such predictive biomarkers yet reported in psychiatry,” Dr. Nunes reported in his submission. “Our study provides further evidence that excellent lithium responders may be a distinct group of patients with BD.”

Dr. Celo worked with faculty mentors, Dr. Mel Kelly and Dr. Bal Chauhan, to explore the potential effectiveness of HU308—a synthetic derivative of the cannabinoid, CBD—in treating uveitis, a potentially blinding inflammation of the eye caused by infectious or autoimmune diseases. The researchers administered HU308 drops in rats with endotoxin-induced uveitis, then examined their eyes under a high-powered microscope.

“We found that eyes treated with HU308 had significantly less inflammation than eyes treated with plain saline drops, or with HU308 vehicle,” explained Dr. Celo in his submission. “This result lends further support to the possibility of using cannabinoids to treat uveitis in humans.”

CLASS NOTES

Have a professional accomplishment you'd like to share with the alumni community?

Please contact medical.alumni@dal.ca

1980s

Dr. Alison Brand (MD '84) has been recognized as a Member, Order of Australia (AM), for her service to gynaecology, medicine and medical organizations and, in particular, her contributions to the field of gynaecological oncology. Dr. Brand is director of gynaecological oncology at Westmead Hospital in Sydney, Australia.

antibody therapeutics. Currently, Dr. Badley serves as chair of the Mayo Clinic's COVID-19 research task force.

Dr. Chi-Ho (Ban) Tsui (MD '95) has become a university medical line professor in the Department of Anesthesiology, Perioperative and Pain Medicine at Stanford University.

1990s

Dr. Andrew Badley (MD '90, PGM '91) was appointed to Immunome Inc.'s COVID-19 advisory board. Immunome Inc. works with its own human memory B cell discovery engine platform to develop

Dr. Heather Morrison (MD '99) was inducted into the Order of Prince Edward Island. Along with the distinction of being PEI's first female Rhodes Scholar, Dr. Morrison has served as that province's chief public health officer since 2007.

Your class is calling



Wondering how you can connect with your former classmates but unable to get together in person?

Consider organizing a virtual reunion.

Contact the DMAA alumni office for details on how to organize your online reunion

medical.alumni@dal.ca

902-494-8800

2000s

Dr. Mark MacMillan (MD '06) is the new president of the New Brunswick Medical Society. Dr. MacMillan will serve a one-year term as president and act as the English-language spokesperson for the society.

Dr. Robert (RJ) MacKenzie (MD '06, PGM '08) was announced as the team physician for Hockey Canada's national under-18 summer showcase.

2010s

Dr. Thomas Brothers (MD '17, PGY5 Internal Medicine) and **Dr. Dax Bourcier (PGY1 Pediatrics)** each received a Canadian Medical Association Young Leaders Award (Resident and Student, respectively), in recognition of their exemplary creativity, initiative and commitment to making a difference at the local, provincial/territorial or national level.

Dr. Henry Annan (MD '18, PGY2) received the Dr. Jock Murray Award for Resident Leadership in Global Health as part of the 2021 Dalhousie University Global Health Awards for his leadership in health policy and delivery of care for marginalized populations.

Faculty

Dr. Noni MacDonald (Professor, Pediatrics) has become a fellow of the Royal Society of Canada, which recognizes outstanding scholarly, scientific and/or artistic achievement. Dr. MacDonald is an active member of the Canadian Center for Vaccinology, which she co-founded in 2004.

Dr. Douglas McMillan (Professor Emeritus, Pediatrics) received the Dr. John Savage Memorial Award for Leadership in Global Health as part of the 2021 Dalhousie University Global Health Awards for his outstanding contributions to the health of women and children, locally and globally, including the developing world.

Dr. Ashley Miller (Assistant Professor, Medicine) received a Canadian Medical Association Young Leaders Award (Early Career), in recognition of her exemplary creativity, initiative and commitment to making a difference at the local, provincial/territorial or national level.

Dr. Sarah Wells (Assistant Dean, Medical Sciences) has been reappointed for an additional five-year term.

IN MEMORIAM

The DMAA acknowledges the passing of our alumni with sincere sympathy and gratitude for their contributions to medicine. If you know of anyone to note in this section, please contact medical.alumni@dal.ca.

Dr. Erwin (Srole) Goldberg (MD '60)

Passed away April 19, 2020

Dr. George C. Jollymore (MD '63)

Passed away October 19, 2021

Dr. David Carson Murray (MD '63)

Passed away October 28, 2021

Dr. Ralph B. Lilly (MD '64)

Passed away October 20, 2021

Dr. John Robert Dill (MD '76)

Passed away October 14, 2021

Dr. Scott James Murray (MD '80)

Passed away August 28, 2021

Dr. Sohrab Lutchmedial (Faculty)

Passed away November 8, 2021





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