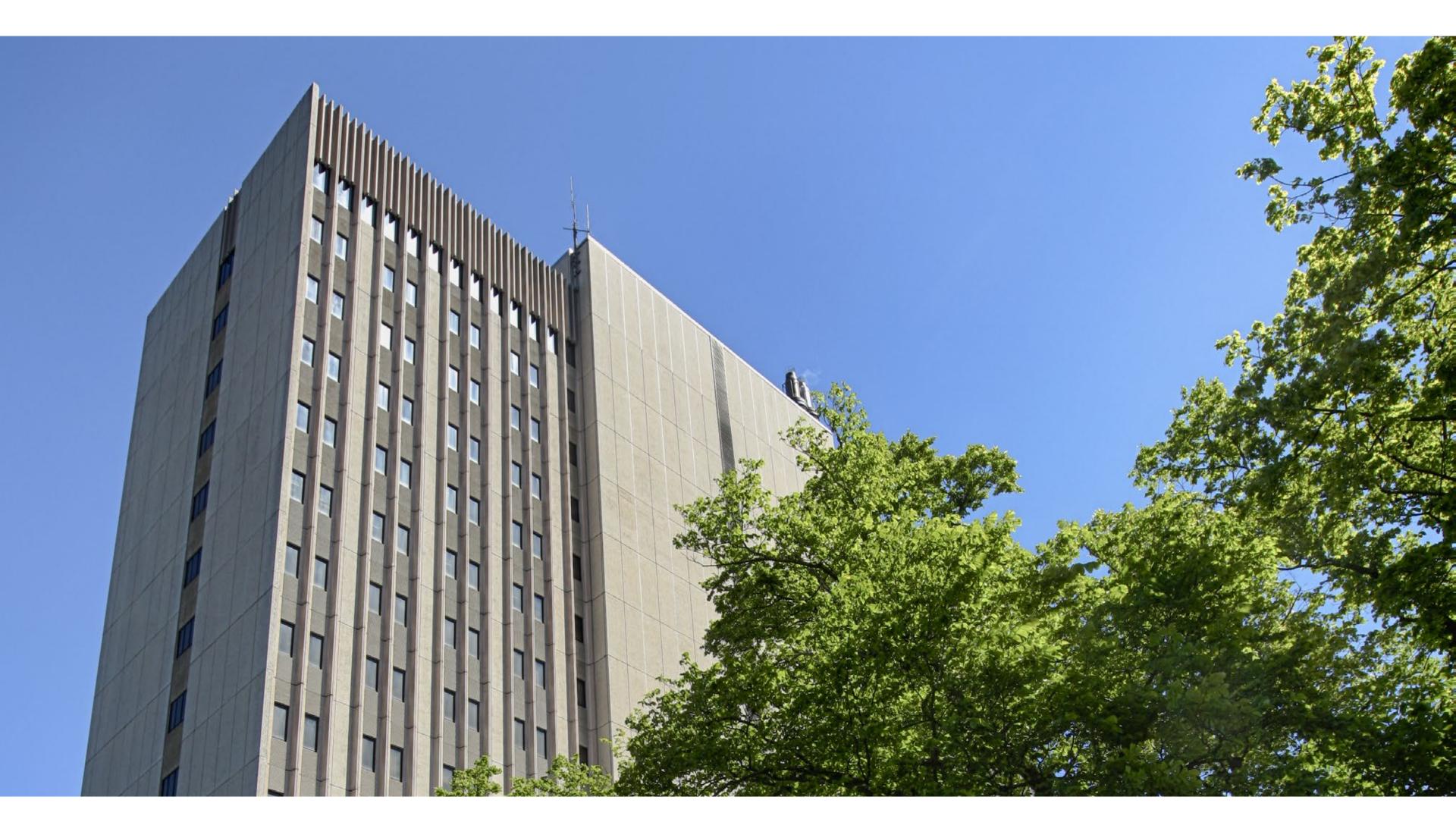
THE VOICE OF DALHOUSIE MEDICAL ALUMNI

SUMMER 2020







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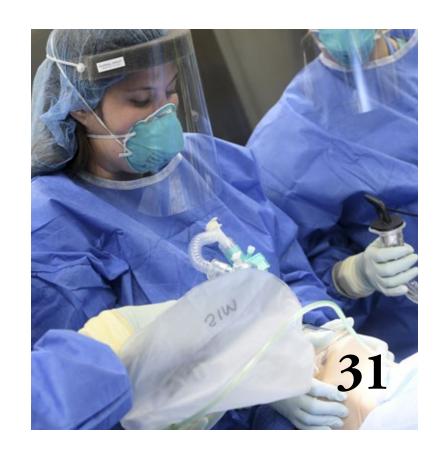


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RESPONDING TO A CRISIS, MAKING PLANS FOR THE FUTURE

BY DR. PEGGY LEIGHTON (MD'77), DMAA PRESIDENT



SO MUCH HAS CHANGED since our last issue of *VoxMeDAL*. Many of the events and celebrations that we had planned to share with you in this issue have been cancelled, and it is unclear when things may return to some sense of "normal."

Over the past few weeks and months, we've heard countless stories about our alumni who are going above and beyond to care for their communities and help flatten the curve of COVID-19. Some

of our retired alumni have volunteered to return to practicing medicine, some are working tirelessly on research to develop vaccines and treatments, others are working on the frontlines in long-term care facilities and hospitals, while new physicians who have just graduated recently are facing challenges they may never have expected to encounter so early in their careers. We couldn't possibly share every story in this issue of *VoxMeDAL*, but we must express how incredibly proud we are of our alumni's response to this pandemic.

Summer is usually a very busy time for us as we prepare for the DalMed Gala in the fall. Unfortunately, we won't be able to get together with you in person this year. But a virtual celebration is being planned to recognize the achievements of our alumni award winners, including the recipients of our newly introduced resident leadership awards, so stay tuned for more information about that. Although it is disappointing that the gala must be cancelled this year, hopefully everyone can plan to get together again in the fall of 2021 for the DalMed 153 Gala.

Many of our classes who would have been celebrating milestone reunions this year have postponed their celebrations until next year. Even if you are unable to see your classmates in person, I encourage you to reach out to each other to connect virtually in the meantime. If you need help accessing your class list, you can still contact the DMAA office at 902-494-4816 or medical.alumni@dal.ca for assistance.

I also want to recognize that 2020 is DMNB's 10th anniversary. Although this milestone anniversary cannot be celebrated as planned, we are incredibly proud of all the achievements DMNB has made in just 10 short years and look forward to special coverage of DMNB's history in our next issue of *VoxMeDAL*.

The DMAA has been working on improving *VoxMeDAL* and we are looking for your input. A survey is being circulated to alumni via email. Please take a few minutes to answer the survey and give us your feedback—your thoughts about what we should keep, what should change, and any story ideas you would like covered. We hope you enjoy this digital edition of

VoxMeDAL and look forward to rolling out a refreshed version of VoxMeDAL this fall.

In closing, I would like to express my thanks for the opportunity to be president over the last two years. While helping to plan two successful galas of 1,200 and 500 attendees, I have spoken with and met many alumni, from the Class of 1950 to the most recent graduating class, and reconnected with lots of old friends. With your support, I am confident the DMAA can continue to foster communication and expand alumni participation and engagement with the Faculty of Medicine.

Sincerely,

Leggy Leyhton

RISING TO THE CHALLENGE WITH COURAGE AND DETERMINATION

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



AS YOU MAY WELL be aware, the COVID-19 pandemic has presented unprecedented challenges to Dalhousie Medical School. Amid this uncertainty, our faculty, students, staff and alumni have demonstrated a level of professionalism and dedication to their educational and

professional duties that is truly impressive.

Medical education looks much different today than it did only a few short months ago. Our instructors and learners adapted quickly to finish the academic term online, and we are thrilled that our third-year clerks were able to return to their clinical clerkships on June 8. It is important to note that while their education was temporarily interrupted, our medical students stepped up to the plate to help support the health care system in the Maritime provinces. Their work certainly has not gone unnoticed, and their efforts are commended.

On May 21, it was my great pleasure to celebrate the four years of hard work and accomplishments of the Class of 2020 with our first-ever Virtual Convocation. One of the changes to convocation this year as a result of COVID-19 was the opportunity for me to address the class, which was a great honour and something I will cherish for the rest of my career.

change to research activities within the Faculty of Medicine. Our researchers have been funded both nationally and locally to lead the way in developing and testing COVID-19 treatments, including the first Canadian vaccine clinical trial at the Canadian Center for Vaccinology at the IWK Health Centre. In this edition of *VoxMeDAL*, you will learn a great deal more about the extensive research efforts underway here at Dalhousie and with our partners at NSHA and the IWK, to both understand and respond to this new and threatening virus.

As critical COVID-19 research has been allowed to continue, I must acknowledge the sacrifice of our many scientists and graduate students who have had their research programs disrupted due to the pandemic. Putting their research on hold has not been easy. You will be glad to hear that the research wheels are back in motion now, with a phased safe-return process begun on July 2 that will see our cancer,

neuroscience, cardiovascular and many other researchers back at the bench.

Thousands of Dalhousie medical alumni are making a profound difference in one of the most challenging times in our world's history. To all involved with the management of the COVID-19 pandemic, I offer my sincere thanks for all that you are doing to keep us safe.

Sincerely,

David Randusen

CLASS of Craduates Virtually

Class of 2020 breaks the mold with Dal Med's first-ever virtual convocation.

IT'S A TRUE SIGN of the times when 118 freshly minted doctors "receive" their degrees by means of a giant live broadcast, beamed out from campus to the graduates and their families in their homes.

That's how the Class of 2020 rolled with convocation this year, making history for the second time in just a few months. In February, the Class of 2020 made another kind of history, winning Euphoria! for the fourth year in a row, the first medical class to accomplish this feat since the famous med student variety show hit the stage in 1969.

There was no stage for graduating MDs to walk across on May 21, but the Faculty of Medicine and Class of 2020 leaders took every step to provide an appropriately dignified convocation ceremony to mark



the milestone achievement of successfully completing medical school.

"We were committed to providing an event that would be a meaningful and special celebration for our classmates," says Dr. Brianne Robinson (MD'20), one of the key student organizers. "Based on how many friends, family and faculty tuned in to watch the event, and the outpouring of positive feedback we received, we are proud to say Dalhousie Medical School's first virtual convocation was a success!"

The virtual event—recorded from the Collaborative Health Education Building with all due respect to social distancing—began with a prayer offered by Elder Geri Musqua-LeBlanc, coordinator of the Elders-in-Residence program at Dalhousie University. A number of other

university officials also offered their congratulations to the graduating class:
Dalhousie's president, Dr. Deep Saini;
Senate chair, Dr. Kevin Hewitt; chancellor, the Honourable Scott Brison; Dalhousie
Alumni Association's president, Dr. Brian
Johnston; and Dr. Teri Balser, provost and VP academic.

One of the very meaningful traditions of the medical convocation—the reading of the Hippocratic Oath—was performed by Dr. Joanne MacDonald, assistant dean of Student Affairs. Dean of Medicine, Dr. David Anderson, then took to the lectern to express his pride in the Class of 2020 and to announce the name of each graduating medical doctor.

Musqua-LeBlanc,
Coordinator,
Elders-in-Residence
program

Also in keeping with tradition, graduates heard from their chosen valedictorian, Dr. David Hung (MD'20), selected for his inclusive personality, leadership in bringing the class together through Euphoria!, and proven ability to entertain. While his speech was peppered

with inside jokes and hilarity, he also hit more sombre notes, calling on his classmates to be powerful advocates for their patients and the social changes that are needed for health equity to truly be achieved. A portion of Dr. Hung's speech is excerpted below:

To us 2020 represents the start of a new chapter when we graduated medical school and began residency... But, unfortunately for many, 2020 represents a year of tragedy, sadness and hardships. From the patients who succumbed to COVID-19, to the tragedy in Nova Scotia, which claimed 22 innocent lives, to the murder of Ahmaud Arbery and the ongoing racial injustices it represents, to those still fighting for the rights of Wet'suwet'en Nation, 2020 has been synonymous with pain and suffering.

I stand here, knowing full well that words will never be able to take the pain away or to right the injustices. But for change to occur, it would take action, based in determination, perseverance and teamwork. Our legacy doesn't end with this piece of paper and two letters attached to our names, it extends through the lengths of our careers and beyond. We have to take this drive and motivation for success and continue to help those who aren't as privileged as we are. Recognizing that, yes, even between us, there are inequalities in opportunities and privilege. Still, we are in a position nonetheless to advocate for our patients and our communities who do not have a voice like we do. We are in a position to advocate for social or policy-based change or showing empathy and understanding for a patient who has fallen on challenging times, our callings will unfold for us individually, but we must continue to find ways to help others. And as we do so, we should always remember how deeply rooted our family is as a class and reach out to one another for help. Find out which avenues of change inspire us most, and not stop until we accomplish the impossible, because together we are stronger.

—EXCERPTED FROM DR. DAVID HUNG'S VALEDICTORIAN ADDRESS, MD CLASS OF 2020

The new Dr. Hung also made a point of acknowledging the hard work of Dr. Brianne Robinson (MD'20) and event co-organizer, Dr. Alexandra Hetherington (MD'20), in pulling together an unprecedented event—virtual convocation—in an unprecedented time.

"Dr. Robinson and Dr. Hetherington were faced with the insurmountable task of delivering a convocation amidst these extraordinary circumstances, and I just want to say that you both have done a fantastic job," he said, going on to thank the medical school's faculty and staff as well: "Today is not just a celebration for us alone, but one to be shared with all of those who got us here. The ones tuning in to this very broadcast, who are beaming with pride and cheering as your name is read aloud with 'doctor' in front of it for the first time, the same people, who, in

many ways have given up their own lives so that through our work we can go out and help the lives of others."

Like all graduates of Dalhousie
University this spring, the MDs of 2020
received their parchments in the mail.
While this mode of delivery may lack the
gravitas of that long-awaited walk across
the stage in cap and gown, the graduates
took it all in stride.

"We made the best out of an unfortunate situation," says Dr. Hetherington. "We were forced to get creative, relying on the talents of our classmates to bring this event together. With the support of the Faculty of Medicine and the administration, we were able to create an event that recognized the amazing achievements of our classmates."

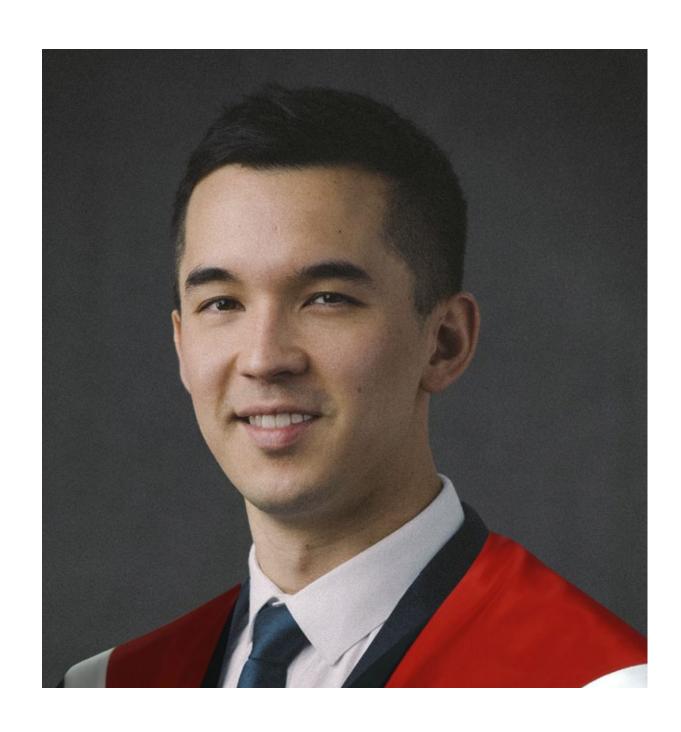
David Hung: FROM HOLLYWOOD TO HALIFAX

BY JASON BREMNER

David Hung was sitting in Kanye West's office when he learned he would be attending Dalhousie Medical School.

BORN IN PALO ALTO, California, and raised in Halifax, David originally set his sights on becoming a skateboard video director. Armed with a camera at a young age, David and his friends started to make music videos, commercials, short films and even a feature film, in addition to medical education videos with his physician father, Dalhousie anesthesiologist Dr. Orlando Hung (MD'83).

"I feel like in film there's these really



fast-paced and high-stakes environments," says David. "That was where I thrived."

While working on filmmaking projects in Halifax, David completed a BA with honours in theatre at Dalhousie but decided to follow that need for high-stakes into a career as a paramedic.

Although working as a paramedic in NSHA's Central Zone for four years allowed him to follow his passion for a

fast-paced environment and his inherent interest in medicine—filmmaking options in Halifax were limited.

David and his friends, Tyler and Jacob, made the decision to move to Los Angeles to follow their filmmaking dreams. Over a span of two years, they began working with superstars such as Kanye West, Travis Scott and Kylie Jenner.

This eventually led to the Netflix original documentary, "Look Mom I Can Fly," on which David worked as an editor and cinematographer.

Even with this success in the industry, the pull to medicine remained. With the support of mentors such as Dr. Ron Stewart, a close family friend, David finally decided to apply for medical school.

Fast-forward to sitting in Kanye West's office. At the time they were just finishing up work on the music video for the hit song "Famous," and were uncertain what the next job would be and where the next pay cheque would come from.

"When I got that letter, it was a huge relief," says David. "It was something that not only represented hard work and determination that everyone who applies puts in, but it represented stability, which is something I think I was looking for at the time."

Four years later, and David graduated from Dalhousie Medical School as valedictorian of the Class of 2020 and

began preparing to start his residency in emergency medicine in Halifax.

He's travelled the world learning what makes a strong leader and observed the collaboration it takes to make a hit record—which is a nice correlation to working in interprofessional teams.

While from the outside it seems that he has been chasing the thrill of filmmaking with stars, or the high-acuity world of emergency medicine, it's been those closest to him that have kept him grounded and helped him survive medical school.

"My wife-to-be, Meghan, was a huge part of my success. Being able to have a person to talk to, to go on adventures with and experience life together outside of the hospital, was the key to my wellness," says David. "Now we have a beautiful daughter, Violet, and spending time with her is what matters most."

David Hung and his parents,Orlando and Jeanette



Tiffany Richards:

FAMILY MEDICINE WITH A COMMUNITY FOCUS

BY JASON BREMNER

Tiffany Richards' mom started calling her "Dr. Richards" when she was four.

WHILE GROWING UP IN the tight-knit, predominantly Black community of West Prince in Truro, it seemed like everyone around Tiffany had an inclination that she would graduate from medical school, saying things like "You should go to med school," or "You're going to be a doctor one day."

Well, that day was Thursday, May 21, 2020. Tiffany's journey to convocation was one that was shared by her entire community.

"My community has been so supportive—every time that I went home someone would stop me to ask how



medical school was going and to tell me they're proud of me," says Tiffany. "That constant encouragement made such

"That constant encouragement made such a difference on the most challenging days. I would not be where I am today without them."

Because Tiffany credits her momentous accomplishment to the encouragement

and support she received from her community, she has dedicated her time in medical school and her future career to giving back and inspiring others.

While at Dalhousie, Tiffany worked closely with the Health Association of African Canadians – Student Organization (HAAC-SO), an organization whose mandate is to improve the health of Black Nova Scotians. This allowed her to spend several evenings visiting predominantly Black communities and talking to youth about careers in health care. During the current COVID-19 pandemic, Tiffany has also been virtually tutoring kids in her hometown.

"It's very important to me that my example encourages other Black Nova Scotians to pursue careers in medicine," she says. "I want my community members to know that this is absolutely within our realm of possibilities—and I will be right there cheering them on—just as our community has done for me over the years!"

Tiffany's future career will also be community focused, as she has always had her sights set on family medicine. Her interest is primarily in community-level health and disease prevention.

"I want to support communities and individuals to eat well, exercise and ensure that they have access to medication and resources they need, like family doctors," says Tiffany. "Things that will help people delay chronic illness. Family medicine is the perfect place to do this kind of work."

Christian Digout: FROM TEAGHER TO STUDENT

BY JASON BREMNER

Ten years into a career as a high school math teacher, Christian Digout was inspired to change professions after experiencing first-hand the profound impact and difference a physician could have.

A career in medicine was something he had considered during his undergraduate degree, but it was merely an idea, one that he had pushed aside to pursue a career

in education. However, it was a personal experience with the medical system and the support of a physician that renewed that interest from years ago and sparked the difficult decision to apply to medical school.

"Switching careers was scary because I was married with family and I knew it would have a significant impact on them," says Christian. "It wasn't easy, but my wife and I sat down and we worked out a plan."

Having been out of school for several years, the transition to medical school wasn't easy, and he found that having young children meant having to plan ahead. The first four months of medical school were overwhelming and thoughts of whether he had made the correct decision crept into his head.

Switching careers and returning to school with a young family presented challenges. Finding a work-life balance can be difficult under normal circumstances, but with two young daughters, it was important for Christian to stay involved

in his children's lives. By making detailed study schedules, he managed to find the time to coach t-ball, go kayaking and biking as a family.

Sometimes his classmates would question how he managed to study with a young family, but Christian attributes his success to his wife and two daughters making things easier.

"Anytime I needed a break, they were there to do something with, which made me more focused and productive," says Christian. "Coming home to hugs from my girls after a busy and tiring call shift helped me switch focus."

Despite planning and scheduling, sometimes medical school took precedent, causing him to miss weddings, social gatherings, and even birthdays.

"Two of my first call shifts were on my kids' birthdays, and since I was in the emergency department, I snuck away briefly to the ambulance bay to sing them a happy birthday," says Christian. "I'm sure the paramedic was wondering what I was doing in the ambulance bay until she heard me singing."

With medical school now complete, he was relieved to learn that he matched to family medicine in Halifax, meaning he won't have to uproot his young family.

Christian looks back on his time as a teacher not as a hindrance to his medical career, but as a valuable learning experience that helped him better appreciate the importance and responsibility that practicing medicine represents.



▲ Christian Digout (right), and his family (left to right) Pamela, Katherine and Alexa

Alexander Clark:

SINGING FROM ST. JOHN'S TO SAINT JOHN

BY JASON BREMNER

It's no surprise that the Class of 2020 won its historic fourth straight Euphoria! competition, especially considering the music background and preparation of Euphoria! co-chair and new DMNB grad, Alexander Clark.

BORN IN ST. JOHN'S, N.L., and raised in Riverview, N.B., the thought of pursuing a career in medicine never crossed Alex's mind. As a serious trombone



player, his undergraduate and master's degrees were in music, but after tearing a muscle in his lip, which required surgery, he was forced to switch his focus to singing.

Alex went on to perform in over a dozen operas with different companies in Canada and the United States, all while studying singing. During this time, he had the opportunity to learn about the science of singing and to work one-on-one with

people, teaching them to sing and helping them with their voice issues.

After presenting his master's thesis at a laryngology conference (laryngology is the study of the larynx, also known as the "voice box"), he decided pursuing a career in medicine would be his next challenge.

As a music major, the sudden switch to a scientific field presented initial challenges, but it also uniquely equipped him for certain aspects of becoming a physician.

"I think the largest influence towards my medical studies was towards communication and knowing how to work with patients to figure out problems with their health," says Alex. "Through my studies, I could see lots of parallels between teaching voice lessons and the patient-physician interaction."

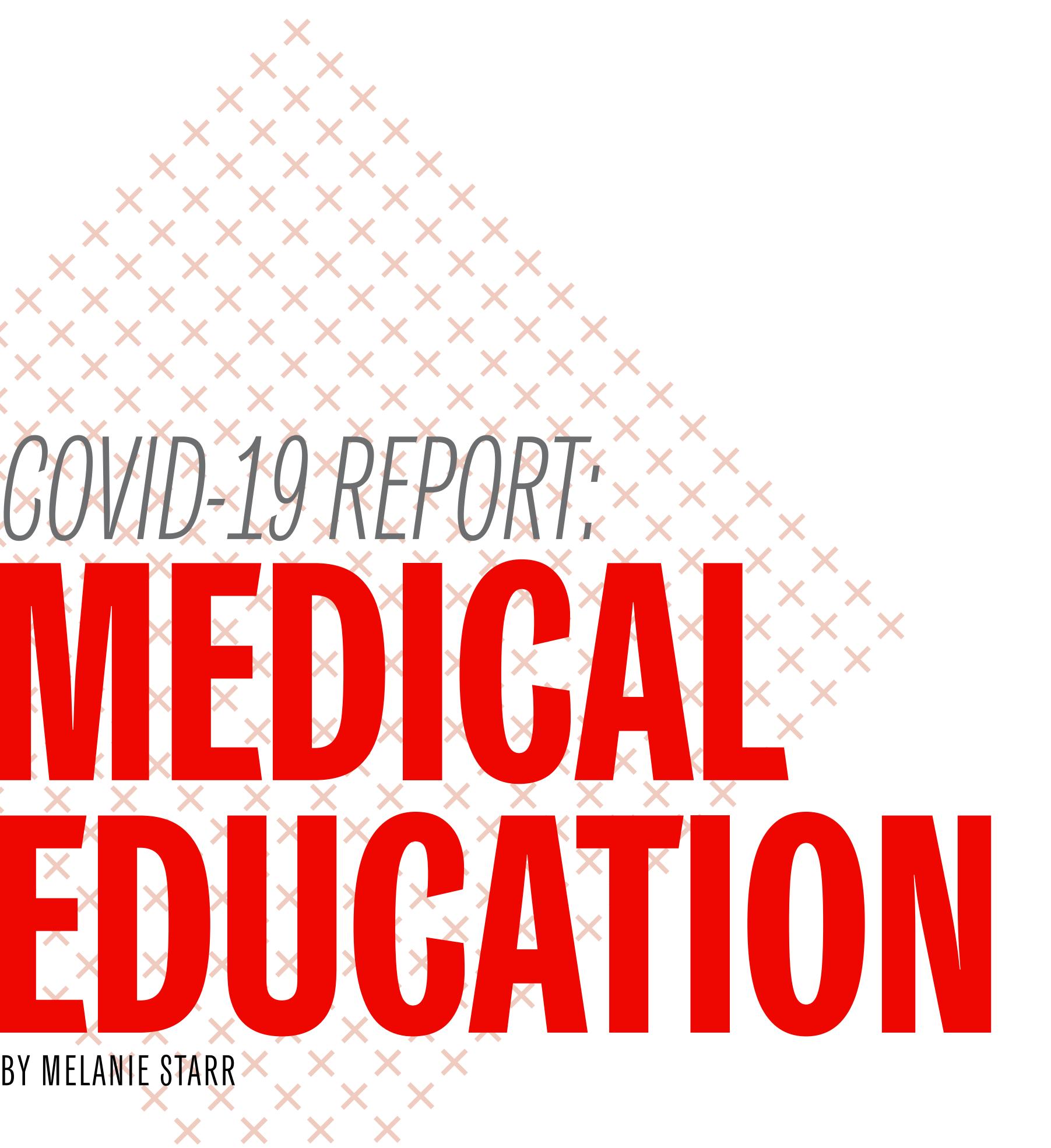
The highlight of Alex's medical school career was participating in the student-run variety show-competition, Euphoria!. What makes this experience even better for Alex is the fact that the Class of 2020 is the only medical school class to win the competition for four straight years.

"While it was tough at times

collaborating with fellow med students in Halifax, working through disputes, and juggling rehearsing with studying, everyone in the class was so grateful for it in the end," says Alex. "I think it really taught us how to work as a team, how to communicate and problem-solve as a group, and we enjoyed being pushed beyond our comfort zones."

If Euphoria! was one of Alex's most memorable experiences at Dalhousie, the overall educational environment at DMNB was the most impactful—from the small class sizes to the hands-on and independent approach to clerkships. Alex hopes to return to New Brunswick once he completes his residency in otolaryngology in Halifax.

Wherever his career takes him, there is no doubt that Alex will be practicing medicine with a smile and a song.





Dal Med takes

UNDERGRADUATE MEDICAL EDUCATION ONLINE

Dal Med mounts rapid response to COVID-19

It required an almost-Herculean effort, but Dal's first- and second-year medical students barely missed a beat in their training after stay-at-home orders took them out of their lecture halls and simulation classrooms back in mid-March.

"By Friday the 13th, we knew med students would not be coming back to the classroom after March break," says Ian Taylor, director of MedIT Technology Services. "We worked over that entire weekend to be ready to deliver live academic events remotely the following Monday, and then took it from there."

MedIT quickly moved Med 1 and 2 lectures and tutorials online using MS Teams, an online collaboration platform that allows students to interact with each other and their tutors with ease.

"We tried to take the technology stress out of the equation," Taylor explains. "People were already feeling the pressure, whether they were medical students working from home with roommates or family around, or faculty members on the frontlines of care. Our job was to make the technology easy."

Students adapt to learn-at-home protocols

Despite the stressful circumstances, medical students adapted quickly to the new mode of curriculum delivery, says Med 2 class president, Prathana Nathan.

"It's going very smoothly, our lectures and tutorials are rolling out on a schedule, and we can see our classmates, ask questions, have discussions from our laptops at home," Nathan said in an interview in April. "It's clear that MedIT and faculty are working hard to keep it as normal as possible; students are grateful."

Even so, a survey conducted by Nathan and other student leaders revealed that medical students found the new conditions to be challenging.

"The pandemic came with all kinds of changes and stressors that did not exist before, including going on grocery runs that feel like a mission, worrying about family members and watching the constant inpouring of news," Nathan said.
"We helped students adjust to this new normal with peer-to-peer support and professional support from Dal Med's amazing Student Affairs team. Caring for one another during these unprecedented times goes a long way!"

The hands-on learning so vital to medical training presented another challenge, but faculty members and MedIT found creative workarounds. These included producing a series of

learning modules for the Skilled Clinician program, using the talents of simulated patient educators. These are trained staff members with the creativity and expertise to write scripts and/or play the part of the patient in simulated clinical encounters, so students gain the necessary history-taking and clinical decision-making skills.

"Many of our simulated patient educators have performing arts backgrounds, and others are experienced health professionals," says Dr. Stephen Miller, an emergency physician and the assistant dean who oversees the Skilled Clinician and Interprofessional Education



programs."They are doing a fantastic job. We have already produced modules of various clinical scenarios, from taking a sexual history to working through musculoskeletal and integration scenarios, and are planning more. Student feedback has been very positive and they are asking for more of this type of learning to augment their Skilled Clinician content."

As Dr. Miller explains, the modules include learning materials such as videos, evidence-based guidelines and self-assessment tools that guide students through the correct processes and cue them to evaluate their own performance. "Depending on the topic, they may need to complete quizzes and small written assignments to demonstrate their grasp of the material and the procedures and techniques they should consider in patient management," he says, adding that faculty members are working hard to provide input and feedback on the modules as they're produced.

Some aspects of hands-on learning that are typically completed in Med 2 will have to be creatively folded into Med 3 for these

students, says Dr. Miller, noting that the musculoskeletal component, for example, will be developing an MSK boot camp with hands-on training that students will have to complete prior to beginning their clerkship rotations.

New PPE requirements and public health measures restricting how many people can be together in a space pose multiple challenges to running the Objective Structured Clinical Examination (OSCE) med students must complete each year. In response, MedIT and the OSCE team are developing a virtual OSCE platform.

"While the history will be relatively straightforward to assess in this manner, the physical examination aspects will be more complicated to assess," notes Dr. Miller. "It is a work in progress, but a necessity in our current reality. None of this will be perfect, but we will make sure the students receive the necessary preparation for each stage of their training as they go."

Medical students

STEP UP TO SUPPORT THE FRONTLINES

Within a week of social distancing measures going into effect in Nova Scotia in March, a cadre of first- and second-year medical students had already volunteered to provide day-to-day assistance to frontline health care workers.



EACH STUDENT WAS MATCHED

with a person or family to help, solely and consistently, throughout the crisis, with such pressing tasks as child care, dog walking and grocery runs.

"The students took a lot of pressure off our health care professionals, who were already facing so much pressure and stress," says Prathana Nathan, who was involved in coordinating medical student volunteer initiatives. "We heard a lot of appreciation."

The medical students also took it upon themselves to flush out any un-utilized supplies of PPE that were lying around in shuttered paint stores, salons, health clinics, dentists' offices and other places that had supplies of gloves, masks and gowns on hand.

"Students made cold calls and made arrangements to pick up the protective equipment and deliver it to NSHA," notes Nathan. "It was just one more thing we could actually do to help out, at a time when we didn't have much control over our lives."

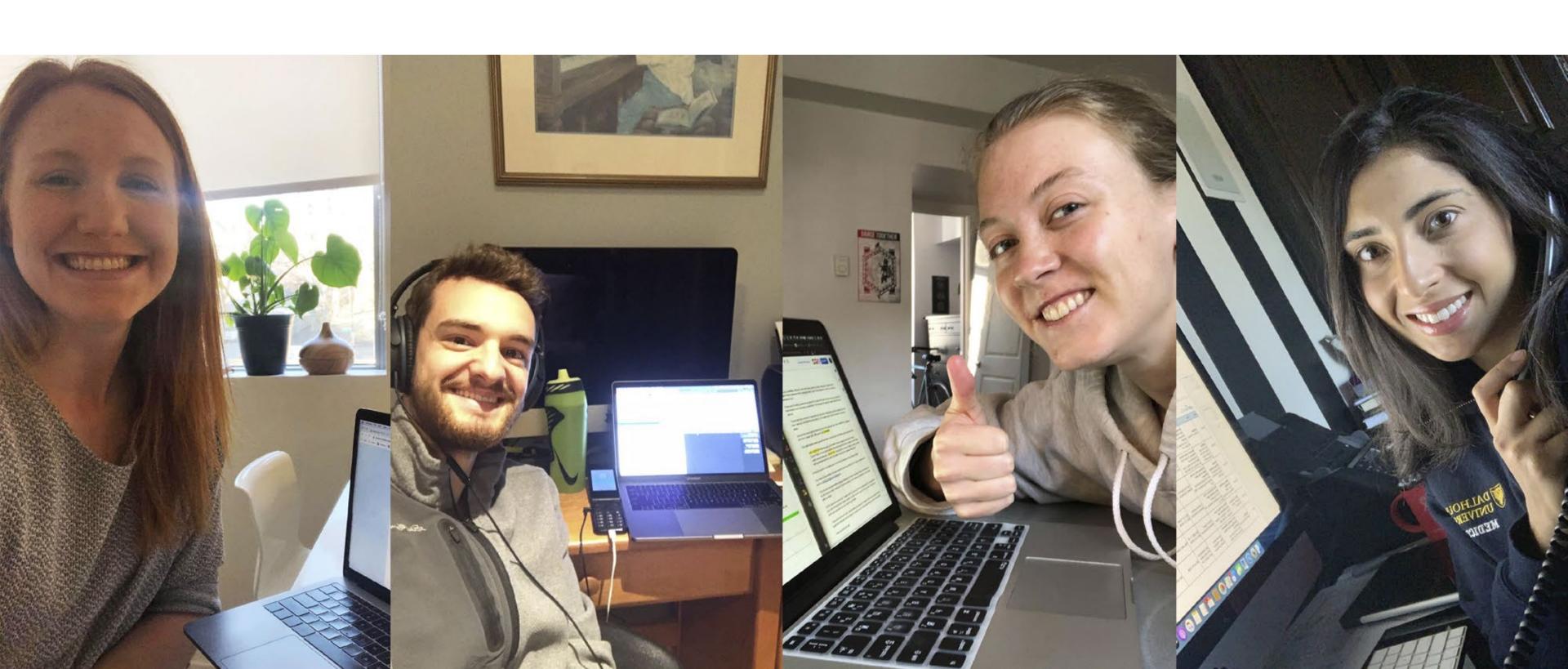
A new kind of hands-on learning experience:

CLERKS PLAY A VITAL ROLE IN PANDEMIC RESPONSE

THE NEWS IN MID-MARCH that the medical school would be postponing its clinical clerkships due to COVID-19 was nerve-wracking for students in Med 3. While Med 4 students were finishing up the last of their integration work before heading off on their residencies, Med 3s were in the thick of their clinical training. Having to stop in their tracks was an unwelcome twist, but the clerks made the most of it by stepping up to help in the pandemic response. As it turns out, they played a vital role in testing and screening.

"We began running two phone lines: Nova Scotia Health Authority's phone line for health care staff to call to see if they should be tested for COVID, as well as a similar line for independent physicians, nurse practitioners, and staff of the IWK and long term care facilities," says Michael Mackley, co-president of the Med 3 class. "These are like the 811 line for the public to call, but are reserved for health care workers to streamline the testing process for them."

The students began working from a "virtual call centre," each in their own home. More than 105 Med 3 students in Halifax got involved, with more being trained for future needs, while Med 3s in



Saint John began planning a similar effort in New Brunswick.

"In addition to helping people determine their need for testing, we are advising them about returning to work, and following up with people who did test positive to monitor them daily through their illness at home," Mackley says. "Learners have turned out to be an unexpected yet incredibly valuable workforce we were able to mobilize quickly. It's rewarding to be able to provide such crucial assistance in a crisis of this magnitude."

As "the curve" became flatter and flatter in May, clerks began preparing to return to their clinical learning rotations, which re-commenced on June 8. Part of that preparation involved training Med 1 and Med 2 students to replace them on the phone lines.

"We're excited to have the pre-clerks join the lines, and they're excited to get involved," Mackley says. "We had a short period of overlap, but now that we clerks are back in our rotations, the first- and second-year students will be running the show for the summer, with support from Occupational Health."

The clerks were relieved to head back to the "new normal," and feel safety measures in place at the hospitals provide plenty of protection. There are still many questions to answer, but Mackley says he and his classmates are confident that faculty, staff and students will be able to work through the challenges together.

"We went back to compressed rotations—our remaining two blocks would have been 12 weeks, but now they will be eight," Mackley notes. "These will be followed by our full slate of electives. At this point it is unclear whether we will be travelling for those electives. The entire process for matching to residency programs will also change for our class: the timeline has been pushed back several months, and all of our interviews will be virtual for the first time ever."

▼ FROM LEFT TO RIGHT: Alison Harding, Ryan Densmore, Kelsey Holt, Emily Chedrawe



▲ Dr. Patricia Marks, Dr. Laura Wade, Dr. Catherine Coxe

Necessity is the Mother of Invention:

GOVID-19 TRAINING PAVES THE WAY TO NEW DIRECTIONS IN CPD

While weekend refresher courses will not likely fall by the wayside forever, Dr. Constance LeBlanc, Dal Med's associate dean of Continuing Professional Development, expects remote approaches to CPD will become the "new normal" in the COVID-19 and post-COVID-19 world.

when faced with the urgent need to provide frontline health care staff with safe and rapid training on the new protocols for working with potentially infected patients, Dr. LeBlanc and her medical education colleagues did not hesitate to break with tradition. They could not invite physicians and other health care providers to come to Halifax for in-person training, so they found a way to take the training out to them.

It started with a remote simulation debriefer "train the trainer" initiative, developed and run by Dr. Stephen Miller, assistant dean of the Skilled Clinician Program (in undergraduate medical education) and Interprofessional Education.

"Based on discussions at the provincial level, we knew we needed to prep our emergency, critical care, anesthesia and ICU interprofessional teams as quickly as possible, all across Nova Scotia, to prepare them for the COVID-19 wave," Dr. Miller recalls. "Leaders were recruited from all four zones to take part in remote

simulation training sessions that equipped them with the knowledge and skills they needed to take the lead on COVID-19 training at their particular clinical sites."

An online platform allowed realtime interaction as clinical teachers in Halifax demonstrated correct COVID-19 intubation procedures, for example, and then watched their colleagues at other sites practice the techniques.

"A lot of the learning is physical and requires a lot of demonstration and practice," notes Dr. LeBlanc. "One of the things that worked really well with this new approach is that the interprofessional teams in the zones got to practice the new techniques in their own clinical environments, rather than a simulation lab in Halifax, so we were able to help them recognize weaknesses and troubleshoot on the spot, before they were confronted with the fallout of that weakness in a real situation."

Dal Med's CPD office developed written materials and video trainings to support the simulation training, including

videos on how to safely don and doff the elaborate PPE required to care for patients known or suspected to have COVID-19, how to offload patients from an ambulance into an emergency department without contaminating the area, and how to oxygenate and intubate patients safely. Videos detailing protocols for primary care offices, specialty clinics, office emergencies, and so on, are in the works.

Physicians and other professionals taking part in the COVID-19 training will receive high-level CPD credits. "We applied for high-level credits, as the direct application for this training reflects higher order learning," notes Dr. LeBlanc, adding, "We have been successful in certifying programs for credit far more quickly than usual for our COVID-19 programming."

Each hour of training is worth three credits, awarded after participants have applied the learning in a clinical setting and submitted a report.

With a second potential COVID-19 wave on the horizon, preparedness training is ongoing, with remote simulation training sessions being booked well into the summer now.

"The crisis has made us do things that are outside our usual comfort zone,"
Dr. LeBlanc says. "But now we are seeing the benefits of the train-the-trainer and remote training model, and there's nothing to stop us from taking similar approaches

to other areas of training."

Dr. LeBlanc expects physicians will be eager to embrace a more flexible style of CPD they can complete when it's convenient, without leaving their own cities and towns.

"We want our docs to have more life in their lives," she says. "With remote and online CPD, they can have a weekend off instead of a weekend away at a conference, and far less expense. The training won't be free but cutting travel expenses out of the equation is a great advantage for many doctors."

"Once the COVID-19 threat is over, we will certainly return to face-to-face learning, but we will be much smarter about it," Dr. LeBlanc says. "Learning that *can* be completed online, we will deliver that way, in order to make the best, most efficient use of our face-to-face time."



Human Body Donation Program SUPPORTS AIRWAY TRAINING

WHEN DAL MED SHUT down all inperson learning in the middle of March, the Human Body Donation Program was also suspended, a rare event in its roughly 150-year history. It would not be long, however, before the program would be restarted to meet a new and urgent need: training in safe airway management and intubation procedures for frontline health care staff.

"How to intubate rapidly and safely—for the patient and staff—became an immediate and pressing concern," says Dr. George Kovacs, a professor in the departments of Emergency Medicine and Medical Neuroscience who is a national

leader in airway management training.

Suddenly, routine procedures for oxygenation and intubation were fraught with danger, as these bring clinicians close to the patient's face, increasing the risk of being contaminated by aerosolized viral particles generated during the procedure.

As one of Dal Med's emergency medicine leads on airway management training, Dr. Kovacs worked with other airway educators to provide simulation training for frontline staff to practice the skills required to safely perform airway procedures on patients with known or suspected COVID-19. It became clear that Dalhousie Medical School's Clinical

Cadaver Program had the potential to support the rapid implementation of the new provincial airway management recommendations for COVID-19.

"Teams needed to test techniques for maximizing oxygen delivery that were safe for both the patient and provider, using both new and existing equipment,"

Dr. Kovacs says. "And physicians needed to practice using new video laryngoscope equipment recommended in the guidelines and acquired to safely intubate COVID-19 patients."

As medical director of Dalhousie's Clinical Cadaver Program, Dr. Kovacs says "there is no higher-fidelity model than one that uses the human body." So, he reached out to Rob Sandeski, who oversees the medical school's Human Body Donation Program.

"Cadavers for clinical training are different from cadavers used for traditional anatomy studies," explains Sandeski.
"We use different embalming processes that preserve the pliability of the tissues for training in clinical procedures, whereas the tissues become quite hardened in traditional processes."

With appropriate approvals, the Human Body Donation Program began accepting donations again—with strict criteria and screening processes to ensure none of the donors had been infected with the coronavirus—and teams began working with the cadavers.

Within days, practice-changing training was underway. Nova Scotia's EHS LifeFlight critical care transport team members were granted access to the reopened Clinical Cadaver Program to practice their intubation skills. Meanwhile, physicians in Halifax were able to use clinical cadavers to refine their skills in the Nova Scotia Health Authority's "Sim Bay" simulation centre in the emergency department at the QEII Health Sciences Centre.

It was challenging to adopt new protocols in the absence of high-quality evidence, but in this circumstance, it was



■ Dr. George Kovacs

necessary to not only run with the bestavailable evidence but also be able to listen and learn from the experiences of others.

"I was on the phone with colleagues in New York on a regular basis," Dr. Kovacs says. "We were learning from their successes and failures, all of which influenced our local recommendations, training and simulation."

Dr. Kovacs and his colleagues had the unique opportunity to perform procedural research "on the fly." Because they had access to clinical cadavers, they could open the chest and observe the lungs while testing various oxygenation techniques that needed to be modified to use safely on COVID-19 patients.

From hypothesis to peer-reviewed publication, practice-changing research can take years. In these times, Dr. Kovacs remarks, "guidelines were being generated"

and practice changed in a matter of weeks. We ramped this up FAST. It was amazing. The silos went down and people adopted a can-do collaborative attitude; we worked every waking hour."

Even though it was fast, it was not simple or easy. "I cannot stress enough how complex this was to roll out," says Dr. Kovacs, giving credit to provincial airway education leads (Dr. Nick Sowers, Dr. Lori Beatty, Dr. Sam Campbell and Dr. Adam Harris) and others from the Department of Emergency Medicine, the Emergency Program of Care (Dr. David Petrie), and colleagues in Critical Care (Dr. Tobias Witter) and Anesthesiology (Dr. Adam Law) for their hard work developing guidelines and providing resources to support emergency departments in hospitals across the province.



Thankfully, Nova Scotia hospitals were not inundated with a high volume of COVID-19 patients in the first wave of infections. Whatever happens in subsequent waves, staff are now prepared.

"We have adjusted to the new protocols, the new equipment, the new 'normal,"

Dr. Kovacs notes. "It's not so cumbersome or difficult anymore."

Even so, teams will continue to be diligent in practicing their new skills, and the clinical cadaver program will continue to be a crucial element in ensuring their proficiency.

Due to COVID-19 restrictions on gatherings, there was no in-person

memorial service this spring to honour the people who donated their bodies to medical education at Dalhousie. Instead, Mr. Sandeski coordinated a video service for all of the families to attend.

"This is a difficult year for us all,"
Mr. Sandeski says. "Typically, as many as 600 people attend our annual memorial service in honour of the people who donated their bodies to our learning programs. We did our best to honour the donors and their families for their outstanding commitment to advancing health care."



THANK YOU

to the Canadian Medical Association Foundation for supporting medical learners across Canada as we adapt to the changes and pressures of COVID-19.

CMAF has committed to granting \$5 million to learners at 17 Canadian medical schools, to alleviate financial hardships experienced by medical students and residents throughout the pandemic.

We are grateful.



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Confronting COVID-19:

DALHOUSIE RESEARCHERS HELP GALVANIZE SCIENTIFIC RESPONSE TO THE PANDEMIC

As the world watched in disbelief and horror at the rapid spread of a new and sometimes-deadly coronavirus, researchers in Dalhousie University's Faculty of Medicine took swift action to meet the threat.

DAL INFECTIOUS DISEASES,

vaccinology and immunology researchers began pursuing vaccine, antiviral, point-of-care testing and immune-boosting strategies as quickly as they could, in collaboration with their colleagues in the hastily formed Canadian COVID-19 Research Network. The good news is, they were not working from scratch.

"We've been working with emerging infectious pathogens for years, including the H7N9 influenza and SARS viruses," says Dr. David Kelvin (PhD), a professor and Canada Research Chair in Dal Med's Department of Microbiology & Immunology. "So we're working with a lot of well-developed tools and strategies. This allows us to quickly pivot and turn our attention to a new pathogen."

Point-of-care triage assistance

Dr. Kelvin is one of three Dalhousie principal investigators who received Canadian Institutes of Health Research rapid-response funding for COVID-19 research, announced in early March. His immediate goal was to identify biomarkers and develop a point-of-care device that staff in emergency departments can use to quickly predict if people presenting with the disease will have a mild or severe case. This will allow them to immediately direct patients to the appropriate care.

This effort is being conducted through the Canadian COVID-19 Research Network, which includes researchers from China, Vietnam, Spain, Italy, Morocco, Sudan, Egypt, Ethiopia, Côte D'Ivoire, Mozambique, and the U.S., as well as Canada.

In addition to \$1 million from CIHR for the project, Research Nova Scotia awarded Dr. Kelvin and his team

\$600,000. Dalhousie Medical Research Foundation, meanwhile, contributed \$250,000 and put out a call to donors and the public to give if they wish to or can. (to give, visit www.dmrf.ca)

Vaccine strategies in the chute at Dal

Dalhousie researchers are working on a number of vaccine strategies against COVID-19. Dr. Kelvin is collaborating with Dr. Chris Richardson (PhD), also a professor and Canada Research Chair in the Department of Microbiology & Immunology, on a vaccine that takes advantage of the spike proteins that stick out from the surface of the coronavirus. These bind with ACE-2 (angiotensin converting enzyme-2) receptors on the





surface of epithelial cells in the lungs, kidneys, heart, blood vessels, liver and other body parts and systems.

Thanks to his work with other viruses that have spike proteins, Dr. Richardson has the equipment and know-how to purify large amounts of the novel coronavirus spike protein in his lab. He's inserting these proteins into the same crippled measles virus used in the measles vaccine, as a means of delivering the coronavirus spike proteins. Separated from the virus body, the spike proteins cannot cause disease, but they do stimulate the immune system to mount a robust antibody response.

"It's a very safe vaccine strategy, making use of an attenuated measles virus as a vector for transplanted spike protein, rather than the regular novel coronavirus," Dr. Richardson explains. "One of our next steps is to test the vaccine in an animal model."

At the same time, Dal's Killam Chair in Virology Research, Dr. Roy Duncan, is working with nucleic acids from the virus, replicating the DNA to produce proteins that may be an effective agent for provoking a powerful immune response. Antivirals are also in the works, under the leadership of Dr. Craig McCormick, a professor in the Department of Microbiology & Immunology.

Animal model in the works

An effective animal model is essential for testing new antivirals and vaccines. It just so happens that a Dalhousie researcher is working on an animal model of the disease, at VIDO-InterVac (Vaccine and Infectious Disease Organization-International Vaccine Centre) at the University of Saskatchewan in Saskatoon. Dr. Alyson Kelvin, an assistant professor in Dal's Department of Pediatrics, with an adjunct appointment in Microbiology & Immunology, is working with ferrets in the centre's high-level pathogen containment facility, to see if the animals could be an effective model for COVID-19 vaccine studies and therapeutic investigations, as well as immunology studies.

The impact of public policy

Massive impacts are being felt across society and the global economy in the wake of ongoing shutdowns. Dr. Scott Halperin, a professor in the departments of Microbiology & Immunology and Pediatrics at Dalhousie, is heading a CIHR-funded study of public policy and its social implications in the context of COVID-19. He and colleagues in Bangladesh and China are exploring how individuals and communities understand and react to the disease and how public health policy affects them.

"Understanding how policy can be more effective will have implications not just for this outbreak but for future ones," Dr. Halperin says. "We learned a lot from the SARS outbreak and those learnings are already being used by policymakers in this one. The importance is making sure policymakers have those learnings so mistakes are not repeated and the public health response is better with every outbreak."

Shedding light on a brand new disease

So far in the spread of COVID-19, of those who become ill, roughly 20 per cent experience a severe case. Most of these people are over the age of 60, or have pre-existing illnesses and/or compromised immune systems. But, there is bound to be more to the picture.

"This is one of the key things we want to find out," remarks Dr. David Kelvin. "Why do some people develop severe illness, while others do not? There is a lot to uncover as we learn about this new virus."

Because this coronavirus is new to humans, the only people with specific antibodies to it are those who've been exposed to the virus. Until there is a vaccine that works, effective public health measures are the primary line of defence. Antivirals and non-specific immune-

boosting agents offer considerable promise, however, and a number of Dalhousie immunologists and infectious diseases researchers are working on these, with colleagues at Dal, across Canada and around the world.

"We're part of an enormous global scientific effort going on right now," says Dr. Kelvin. "It's one of those situations where you have to draw on the expertise of many people, and you need their expertise *now*. The amazing thing is, we have a collection of brilliant people here at Dal and many other universities around the world who are willing to help."

New Nova Scotia COVID-19 Health Research Coalition

FUNDS 40 PROJECTS AT RECORD SPEED

In an unprecedented scientific review sprint, researchers across faculties at Dalhousie University gathered, distributed, reviewed and ranked more than 260 applications for COVID-19 research funding in less than a week.

AND FOR MANY THIS was all while homeschooling their kids and doing their day jobs from home.

"To a person, everyone stood up to get this done," says Dr. Jim Fawcett, a professor in the departments of Pharmacology and Surgery who quarterbacked the scientific review process in close collaboration with Dr. Jordan Warford, senior director of research at the Nova Scotia Health Authority. "There was a huge collegial spirit across the board."

As a result of this can-do collegiality, 40 research projects received a total of

\$1.5 million from the new Nova Scotia COVID-19 Health Research Coalition to address COVID-19 from multiple angles. These range from fundamental inquiries into its transmission, replication and effects on the human immune system, to the development and testing of diagnostic tests, risk-assessment tools, vaccines, antivirals, and novel protective equipment. In addition, several studies examine how health services can be better and more safely delivered in the future—in particular, to vulnerable populations such as the elderly and the Mi'kmaq and African Nova Scotian communities.

As chair of Dalhousie Medical Research Foundation's Scientific Review Committee, Dr. Fawcett took on the challenge of overseeing the accelerated review process at the request of DMRF's CEO, Ms. Joanne Bath.

DMRF has been on the forefront of advancing COVID-19 research at Dalhousie since the earliest days of the pandemic—for example, shifting gears to launch a spring Molly Appeal in support of COVID-19 vaccine studies.

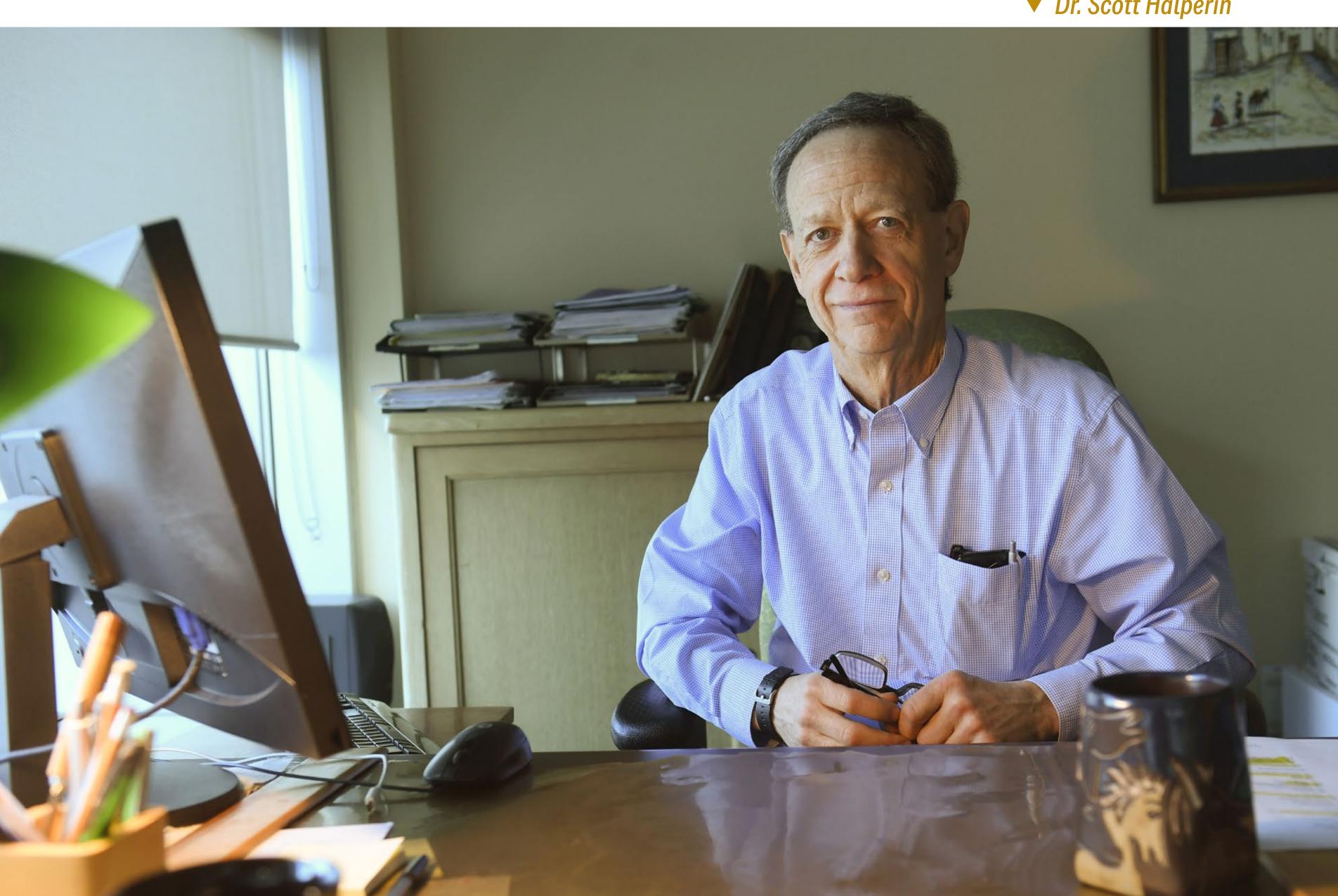
The idea to do something much bigger emerged as leaders from the foundation,

the medical school and NSHA began talking about how the Maritime research community could play a more influential role in creating solutions to the COVID-19 problem.

"We started talking to our colleagues at the Nova Scotia Health Authority and other organizations and, very quickly, it created a waterfall effect," notes Ms. Bath. "People were getting back to us in hours, not days, to commit to a collaborative effort."

Research Nova Scotia, the IWK Health Centre, Dalhousie's Research and Innovation Office and the QEII, IWK and

Dr. Scott Halperin



NOVA SCOTIA COVID-19 RESEARCH COALITION FUNDED PROJECTS, SPRING 2020:

IN THE CLINICAL SCIENCES, RESEARCHERS ARE USING THE FUNDS TO:

understand how COVID-19 disrupts the immune system

learn if brain abnormalities in COVID-19 patients are associated with the need for ventilation

see if a "made-in-the-Maritimes" integrated gown, hood and face shield can be donned and doffed faster/more safely than standard PPE

investigate the role of frailty in progression and outcomes

IN THE DISCOVERY SCIENCES, RESEARCHERS HAVE BEEN FUNDED TO:

investigate antiviral strategies

develop and test a device for repositioning critically ill anesthetized patients

explore various vaccine candidates

develop a sustainable fabric for use in local production of PPE

create and evaluate a higher-sensitivity test

learn what microbes are linked to disease severity and explore a microbiome-based risk-assessment tool

determine how temperature affects virus propagation and cells' response to infection

understand virus shedding and infectability cycles

generate and purify large amounts of SARS Cov-2 spike proteins for use in tests and vaccines

develop a device to contain aerosolized virus during intubation

determine if ultraviolet light can disinfect N95 masks for reuse

IN HEALTH SYSTEMS IMPROVEMENT, RESEARCHERS HAVE BEEN FUNDED TO:

develop and test analytical tools for assessing threat, reducing risk

address health law and policy gaps revealed by COVID-19

analyze EMR data from primary care to see how service delivery can be improved

determine what changes allow safe reopening of primary dental care

examine the IWK's pandemic planning to improve safety and quality for future outbreaks

refine and launch a virtual platform for guiding patientcentred COVID-19 care in the community

use artificial intelligence to guide deployment of tests and vaccines

investigate how the pandemic has affected patients with cardiovascular and neurovascular disease

understand the experience of COVID-diagnosed Mi'kmaq community members

improve the system for providing specialist consultations to primary care providers in long-term care

IN THE SOCIAL SCIENCES, RESEARCHERS HAVE BEEN FUNDED TO:

assess the impact of COVID-19 on dementia care in the community

develop a culturally specific response to reduce the impact of COVID-19 on African Nova Scotians

explore how weather, air quality and social mobility influence virus transmission

support mental health/prevent burnout among frontline health care workers responding to COVID-19

learn how to respond better to gender-based violence in African Nova Scotian communities

identify factors that increase risk of severe COVID-19 and assess long-term fallout of COVID-19 and mitigation strategies on older adults

examine interpersonal relationships as a source of risk and resilience during the pandemic

assess the impact of social distancing on mental health during and after the crisis

assess the impact of COVID-19 on neonatal care and investigate virtual care options

explore the impact of the COVID-19 state of emergency on infant feeding in Nova Scotia

identify what determines African Nova Scotians' trust of pandemic strategy and response

Dartmouth General Hospital foundations, all came forward to become founding members of the Nova Scotia COVID-19
Health Research Coalition. Together with DMRF, Dal Med and NSHA, their collective financial contributions reached \$1.5 million.

"Not only did we want to support our researchers to get started with their COVID-19 projects now, we wanted to set them up with local grants that would serve as matching funds for upcoming Canadian Institutes of Health Research competitions," says Ms. Bath. "This will position them to do very well on the national stage as this new and urgent research area develops."

The response from the research community took the coalition—and especially Dr. Fawcett—by surprise.

"I was expecting from 50 to 70 submissions, but then I got a call from Jordan Warford at NSHA Research Services, who was overseeing the gathering of submissions," Dr. Fawcett recalls. "He said, 'Are you sitting down? Because it looks like we'll have close to 300

applications.' I thought 'oh oh!,' took a deep breath, and then spent the next day and night finding more reviewers."

Dean of Medicine, Dr. David Anderson, and Dalhousie's VP of Research, Dr. Alice Aiken, stepped in to help find reviewers for the gargantuan task of reviewing applications that involved expertise found not just in the faculties of Medicine and Health, but also in Law, Arts, Architecture, and Science.

"The quality of the applications was impressive," says Dr. Fawcett, noting that the reviewers used CIHR ranking criteria and most of the applications would have been fundable according to these criteria. As it was, the reviewers had to narrow the field down to 40 projects.

For more information about these 40 funded projects: https://dmrf.ca/
coronavirus/covid-19-funding-recipients/

Dal Med researchers lead Canada's first

GOVID-19 VAGGINE CLINICAL TRIALS

Dalhousie's long-term investment in building its vaccine research and pandemic response capabilities, through the Canadian Center for Vaccinology (CCfV), is paying off in the fight against COVID-19.

"WE ARE DOING PHASE I and phase II clinical trials to assess the safety and tolerability of the vaccine, and then the immune response to the vaccine, first in younger adults and then older adults," says principal investigator Dr. Scott Halperin, a professor in the departments of Pediatrics and Microbiology & Immunology and director of the CCfV. "We want to make sure the vaccine is safe first in younger individuals before we go into people who may be at higher risk."

Dr. Halperin and his team are recruiting about 100 healthy volunteers between the ages of 18 and 55 for the safety/tolerability

trials, which are being conducted under close supervision at the CCfV. Phase II will involve about 500 individuals between the ages of 18 and 85, at several additional clinical trial centres of the Canadian Immunization Research Network (CIRN) across Canada. If all goes well with the first two phases, phase III could launch in the early fall, just in time for an expected second wave of COVID-19 infections.

As Dr. Halperin explains, in phase III participants receive either a vaccine or a placebo and wait to see who gets infected over the normal course of exposure to the virus.

These trials are a prime example of national and international collaboration at work. The vaccine formula is based on the HEK293 adenovirus cell line developed by the National Research Council of Canada and licensed to Chinese pharmaceutical company, CanSino, which has already used it to develop a vaccine against Ebola. The company has now taken the adenovirus and modified it to carry the SARS CoV-2 spike protein, to safely stimulate immunity to COVID-19. Canada's involvement in the cell line, the clinical trials, and an agreement to manufacture vaccine in Canada for Canadian needs, will ensure an adequate domestic supply of the vaccine.

This vaccine candidate is one of several being advanced by researchers at Dalhousie. Other candidates in the works include an effort by Dr. Chris Richardson and Dr. David Kelvin to use the same attenuated measles virus that's used in the measles vaccine as a vector to deliver the coronavirus spike protein.

To learn more: https://www.dal.ca/
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THIRD WAVE EMERGED IN February and March of 1919 that killed another 10 persons per thousand. The total estimated death toll of the Spanish Flu ranges from 50 to 100 million people, on a planet of fewer than 2 billion souls.

Such a scenario playing out with SARS CoV-2 is beyond terrifying and, thankfully, not likely in today's world. Still, the spectre of some sort of a second wave is a very real concern. So, what can we learn from history?

Stay the course, recommends Dr. Allan Marble, Dalhousie professor emeritus of biomedical engineering and chair of the Medical History Society of Nova Scotia.

Dr. Marble has shared his findings about how Nova Scotia, like much of Canada, avoided the heaviest brunt of the Spanish Flu in his article, "Halifax was Plunged into Doom: The Impact of the Spanish Influenza Pandemic on Nova Scotia," published in the *Royal Nova Scotia Historical Society Journal* in 2019. He spoke to *VoxMeDAL* about it in April 2020.

"The Nova Scotia public health leaders made quick decisions very early on, before there were any infections in the province," Dr. Marble says. "They sent three doctors down to Boston, where the pandemic was raging, to see what they could learn."

The savagery of the 1918 H1N1 virus—which was striking young, healthy

people down in a matter of hours—made quite an impression on the envoys. They hastened back to Halifax with an urgent message: get everyone to isolate themselves with their families. The leaders of the time did not argue or criticize, prevaricate or politicize. They simply and swiftly ordered all the public buildings in the province closed.

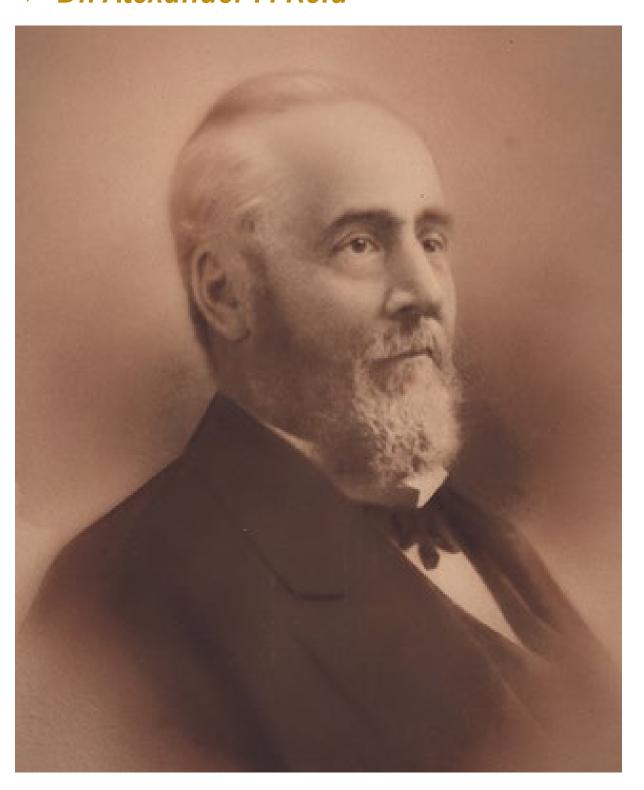
Nova Scotia's public health officer, Dr. William Hattie, took to writing articles for the 38 newspapers then in circulation across the province, to explain what was happening and how people could protect themselves. One of his recommendations: wear a mask. And people did.

The leaders did not argue or criticize, prevaricate or politicize. They simply and swiftly ordered all the public buildings in the province closed.

"One of the interesting differences between then and now is that, back then, it was an entirely medical, public health response. It was not a political response," Dr. Marble notes.

"Government officials largely ignored the situation and, here in Nova Scotia at least, the public health officials handled it

▼ Dr. Alexander P. Reid



▼ *Dr. William H. Hattie*



and the people followed their advice."

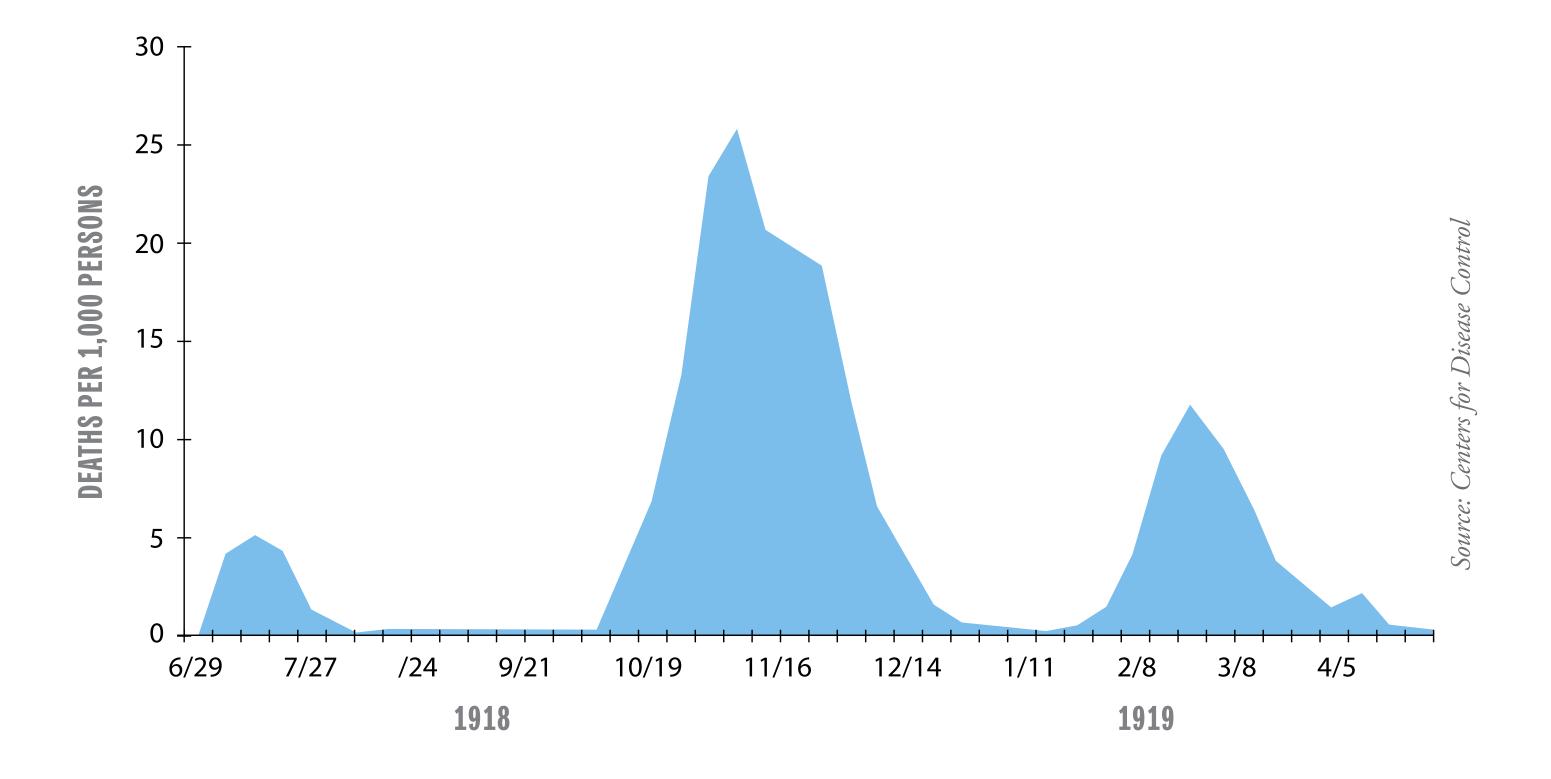
There was already a well-established public health office in Nova Scotia, set up in the wake of the devastating diphtheria epidemic of 1890-91 and led by Dalhousie University's first dean of medicine, Dr. Alexander P. Reid. Dr. Hattie followed Dr. Reid into this office, taking charge of the medical response to the Halifax Explosion in 1917. It was perhaps the respect he earned in this gargantuan undertaking that inspired Nova Scotians to heed advice the following year.

Among the only dissenters to the shutdown of public life were certain members of the clergy, who held outdoor services in defiance of bans on public gatherings. Of course, the fact that most Nova Scotians were living in small villages

and rural areas, in a resource economy involving a lot of outdoor work, meant social distancing was built into the social and economic structures of the time.

By the end of the Spanish Flu—a much more virulent version of H1N1 than we saw in 2009—Nova Scotia's death rate was the second-lowest in Canada, at 3.18 deaths per thousand, next to Prince Edward Island at .97 deaths per thousand. Ontario and New Brunswick were next lowest, at 3.56 and 3.84, respectively, according to the Canadian Bureau of Statistics. Western provinces bore the brunt for Canada. Nationwide, more than 37,000 lives were lost.

The Spanish Flu brought home to Canadians the need for stronger, more organized public health capacities. Eastern



Canada fared well due to its decisive early action to shut down public buildings and isolate people with the virus, while Western Canada was hit hard, in large part due to its inability to control crowds. All across the country, however, personal and household hygiene were poor, and there was no national coordinating body to promote health and respond to crises. In June 1919, the bill to form a federal department of health received royal assent. As Dr. Marble indicates in his paper, "The main item on the agenda was to plan how to disseminate information about the outbreak of diseases in the future and to counteract any false theories or ideas about such diseases."

One hundred years later and this is more relevant than ever.

By the end of 1919, the H1N1 strain that had been so deadly had mutated and lost much of its virulence, subsiding until it made relatively weak reappearances in the 1940s and again in 2009.

The novel coronavirus may not be mutable enough to lose its virulence and, with asymptomatic spreaders, the chances it will just vanish like its precursor, SARS, are slim. It remains to be seen what kind of second or third wave may hit—or if COVID-19 will become another endemic virus with deadly potential year over year. Clear, evidence-based information, social cohesion, principled leadership and trust among government officials, health professionals and the public are essential no matter what scenario unfolds.

Alumni Profile

AGILE INNOVATOR MEETS EMERGING NEEDS

BY MELANIE STARR



Dr. Stephen Bartol pivots from Al for cannabis prescribing to COVID-19 diagnostic test.

DAL MED ALUMNUS Dr. Stephen Bartol (MD'83) is passionate about creating new technologies for meeting emergent health care needs. The long-time spine surgeon-turned-inventor has pioneered a device to enable minimally invasive spine surgery, launched an artificial intelligence project to guide physicians in the safe prescribing of cannabis, and most recently developed a rapid antibody test for SARS CoV-2.

After training at Dalhousie and practicing in Windsor, Ontario, Dr. Bartol moved to Michigan, where he led surgery programs and founded the Michigan Spine Surgery Improvement Collaborative and a skills-development program for health-innovation entrepreneurs. Along the way, he earned an MBA and started a company, Sentio, to commercialize a device that allowed him to use minimally invasive techniques—rather than openspine surgery—to release and repair spinal nerves.

"The device is a 'smart sensor' that can be quickly and easily applied to the skin—not unlike a high-tech Band-Aid—to pick up signals from nerves in the path of surgical instruments," Dr. Bartol explains. "The device then alerts the surgeon to reposition the instruments to avoid hitting a nerve."

The Sentio smart sensor became so popular for its effectiveness and ease of use that, in 2017, global surgery-device giant, DePuy Senthes, and its parent corporation, Johnson & Johnson, bought Sentio out.

"Before the Sentio smart sensor, I was able to perform only three to five per cent of spine surgeries using minimally invasive techniques. With the sensor, I was able to raise this to 75 to 80 per cent," notes Dr. Bartol, adding that overall rates of minimally invasive spine surgeries in the U.S. rose from nearly none to 20 per cent thanks to the device. "For patients, this is the difference between day surgery and a major operation."

After selling Sentio, Dr. Barto turned his attention to an emerging challenge for physicians—how to advise patients on the medicinal use of cannabis.

"I noticed my patients who reported using cannabis for post-operative pain had very mixed results. It was perplexing," recalls Dr. Bartol. "It's a very confusing space for physicians. Patients are asking for guidance and most doctors have no idea how to prescribe."

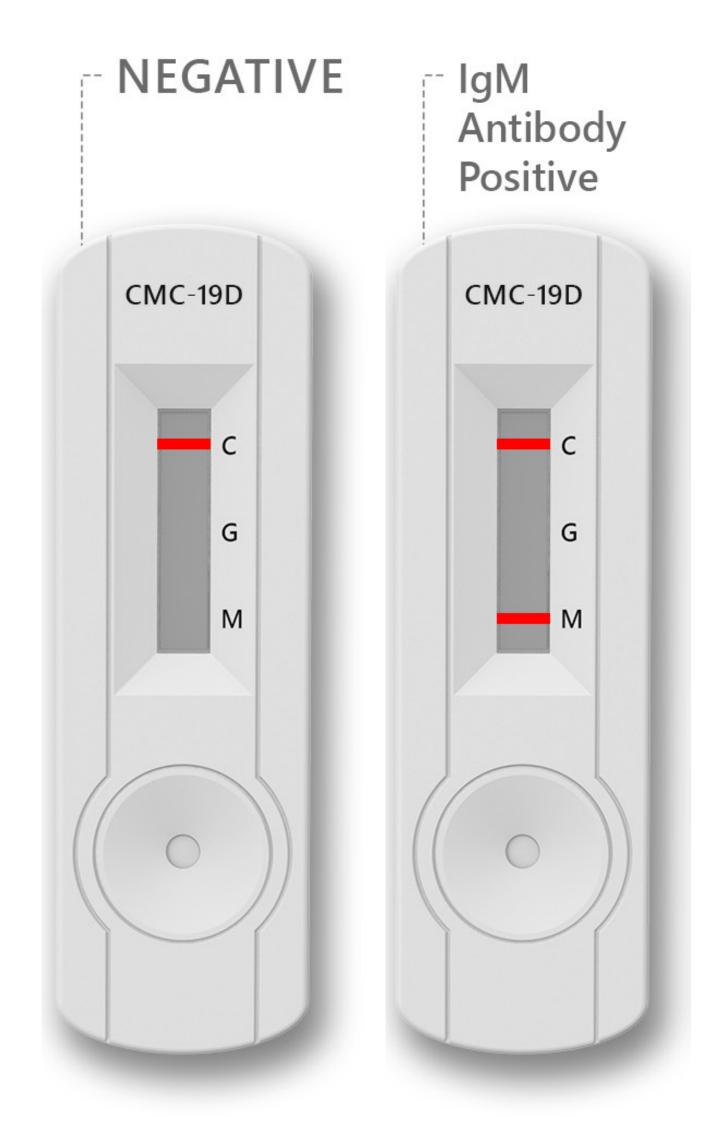
His solution? Develop an artificial intelligence platform to sift through more than 600,000 peer-reviewed publications for the most robust data, and then take it to physicians with an interactive portal they can use to look up information (about strains, dose, delivery and so on), and ask specific questions of the fast-growing body of literature. Because the portal is built on artificial intelligence and machine-learning algorithms, the more people use it, the "smarter" it will get, providing physicians with push-button access to the answers they need, when they need them.

But just as this project was picking up steam, so was a new coronavirus out of China, prompting Dr. Bartol to put the brakes on the cannabis project and shift his attention to SARS CoV-2. Through his company, Audacia Bioscience, Dr. Bartol has led the development of the *CMC-19D SARS-CoV-2 (COVID-19) Rapid Antibody Test.*

"Already, the test has been fully developed, validated and tested in about 1,500 patients in Detroit, Michigan," Dr. Bartol says. "It is now ready for market and we have completed our first production run. We hope to have FDA clearance in the next few weeks, with Health Canada to follow."

Meanwhile, Dr. Bartol and members of his team are participating in a number of research projects--one is studying COVID-19 infections in frontline workers in the U.S., another is a large U.S. trial of potential preventive medications for COVID-19.

Clearly, for Dr. Bartol, there is no waiting around for other people and companies to come up with solutions—he is constantly in tune and just ahead of the leading edge.



Clearing a path to medical school

With the high cost of medical education today, Dr. Stephen Bartol is concerned young people from less-than-wealthy backgrounds may be deterred from pursuing careers in medicine. "The cost and the debt load that comes with it is a huge barrier that keeps many people with the aptitude and passion out of medical school," he says. "I want to do what I can to remove that barrier." He and his wife, Judy, have established the Dr. Stephen and Judy Bartol Bursary Fund, to provide financial support to aspiring physicians in need.

For more information about supporting Dalhousie medical students, please contact Nadine Woon, Development Officer, Faculty of Medicine at Nadine.woon@dal.ca or 902-719-9775.



BY MELANIE STARR AND JEFF SUTHERLAND

▲ Jeff Sutherland and his son, Zach

Dr. Jeff Sutherland shares his journey from physician to disabled person

Dr. Jeff Sutherland (MD'91) had it all: a thriving family practice, a loving marriage and three healthy sons. It began to erode in 2007, when he was diagnosed with ALS. He wrote his memoir, *Still Life*, using software he manipulates with his eyes, having lost the ability to move any other part of his body. In it, he shares not only the frustration and pain of the losses brought on by his illness, but the even more painful loss of his son. Through it all, he retains his deep humanity and sets forth a prescription for the good life, even in the face of staggering loss.

Why did you feel it was important to take the time and make the effort to tell your story in a book?

I wrote *Still Life* first as a way to grieve. As a severely disabled person, I have few ways to express myself. Writing about my profound losses enabled me to process the loss of my son, Zach, and his partner, as well as my ALS. Initially it was just for my family, but as I read our story, I felt it could help others.

What do you hope other physicians will take away from reading your book?

I hope other physicians will see it is a great privilege to be a physician and care for others. It is also important to recognize that when they see patients, they are only seeing the tip of the iceberg regarding the complexity of their patients' lives. I hope that sharing the thoughts and feelings associated with living with a

terminal illness, and the profound grief of losing a loved one, will prompt them to pause and look at their patients with more compassion. Finally, I hope they remember the personhood of people living with severely disabling illnesses.

In what ways has looking at life from a spiritual perspective helped you cope with your disease and the loss of your son and his partner?

Looking at life from a spiritual perspective has given me hope that even though my physical life has been full of adversity, purpose is still unfolding within it. It has helped me recognize that I am more than my body and part of a greater connection to all life. Through my belief in an afterlife, I know that the separation between me and my departed loved ones is temporary.

Why do you think spirituality is so largely devoid from medical practice and education?

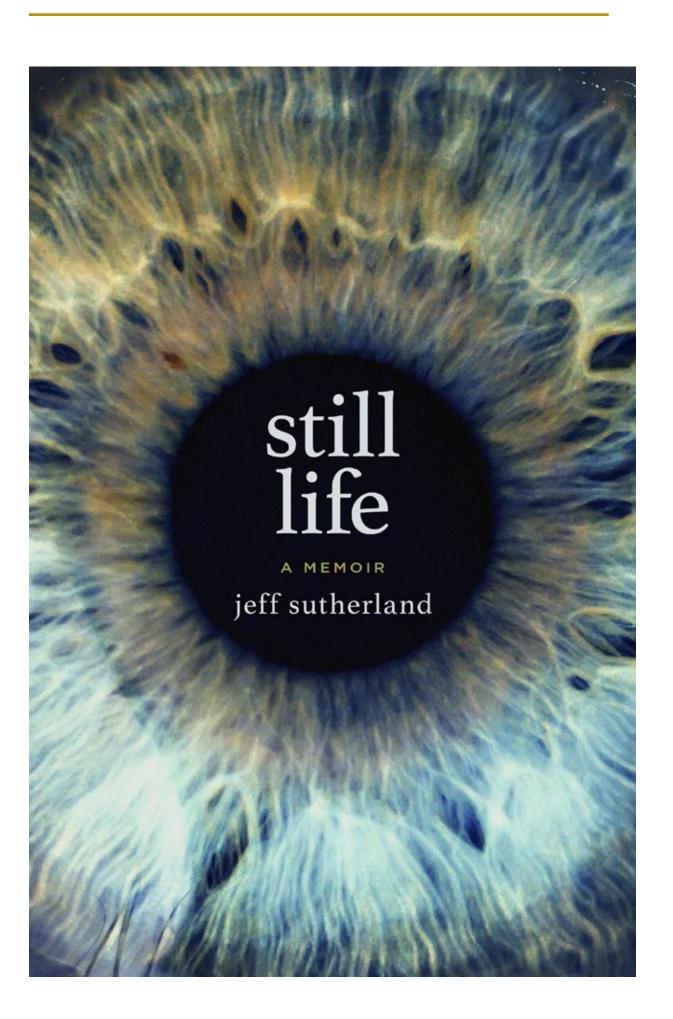
Medical education and practice primarily focus on evidence-based practices. This is necessary to create scientifically sound physicians. Spiritual beliefs are not, nor will they ever be, scientifically proven, so they are discounted or ignored.

How would patients—and medical professionals—benefit by incorporating the soul into the processes and paradigms of medical care?

If patients were able to incorporate the soul into their medical problems, I think they would invite a sense of peace into their lives, despite their adversity. If more physicians incorporated the soul into medical practice they would be able to give their patients more tools to help them face adversity, such as mindfulness practices. I think it would also lessen physicians' mental health issues because they would recognize that a lot of things in life are beyond anyone's control. I know that when I practiced medicine, it was very difficult to see patients suffer or die. I questioned if had I missed something or could have done better. Physicians, like

everyone, have a negative bias.

We forget the good we have done and dwell on where we judge ourselves to be lacking. Recognizing the soul is manifesting its free will in medical adversity will help physicians with their often-misplaced guilt over bad outcomes.



Still Life can be

purchased through Indigo

and Amazon

Grieving alumni family

PITCHES IN TO HELP FIGHT COVID-19

The Sober Island
Brewing Company's
logo typically features
a clipper ship in full
sail, in keeping with
its hometown of
Sheet Harbour's
seafaring history.

BUT THE COTTAGE BREWERY,

owned by Rebecca Atkinson and run with help from her family, has switched out the ship for a new Nova Scotia icon—a cozy home by the sea, under a starlit sky, printed on t-shirts for sale as a fundraiser.

"We were desperate to help the COVID-19 response, but as a small company and without the required equipment, we couldn't set out to

manufacture personal protective equipment or hand sanitizer," Rebecca says. "Promoting social distancing by means of these t-shirts, and donating our proceeds to the Dalhousie Medical Research Foundation for COVID-19 research, seemed like a way we could help."

The Atkinson family has deep connections to Dalhousie University. Rebecca's father, Dr. Bradley Atkinson, is an alumnus (Bsc 1981, BA 1983), who's been practicing family, emergency and geriatric medicine for 26 years in Sheet Harbour, where his wife, Meryl, owns and operates the Henley House Pub & Restaurant. Going a generation back, Brad's father, Dr. Theodore Atkinson, was a graduate of Dalhousie Medical School (MD'62). He went on to become a faculty member in Dal's Department of Family Medicine and earn many prestigious awards for his professional and community service.

The family's connection to Dalhousie Medical Research Foundation (DMRF), however, took a sombre tone in March of this year. David Atkinson, Brad and "It's a way to say thank you to all the wonderful medical personnel who helped us so much when David was sick."

—DR. BRAD ATKINSON

Meryl's son and Rebecca's brother, became ill following his return from a trip to Mexico. His health declined rapidly and he was hospitalized. Sadly, he did not recover, passing away at the age of 26. Doctors are still uncertain as to exactly what caused David's death. He tested negative for COVID-19, but no other cause has been identified.

In the wake of the tragic loss, the Atkinson family (including David's other sisters, Rachel and Sara), decided to designate in memoriam donations to DMRF. Later, as they reflected on how they might save other families from the grief of losing a loved one, the family agreed that the idea of making and selling "Stay at Home Nova Scotia" t-shirts—with proceeds going to DMRF for COVID-19 research—was a good one.

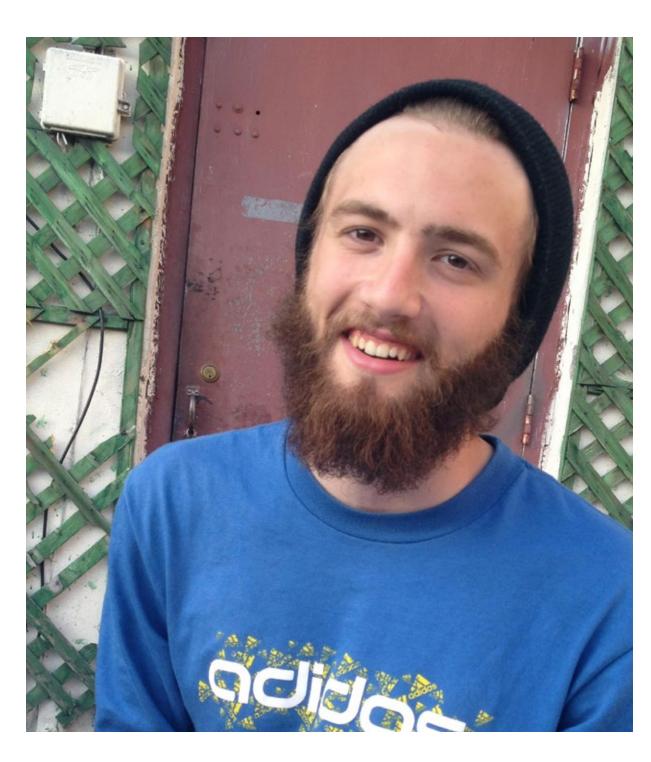
"It's a way to say thank you to all the wonderful medical personnel who helped us so much when David was sick," says Brad. "Even though he did not survive, he did receive top-notch care from dedicated professionals and we are grateful."

Sales of the Sober Island "Stay at Home" t-shirts raised more than \$6,500 for COVID-19 research at Dal. Dalhousie researchers are among those scientists leading the international effort to stop COVID-19's deadly toll. The Atkinsons feel David would be pleased to see his family helping. "He was a very sensitive

and caring young man," says Meryl.

"When he was just 19, he raised funds
and awareness for cancer research by
walking from Sheet Harbour to southern
Ontario. He also arranged a monthly
donation to Doctors Without Borders.
He was the friend you could talk to,
day or night, about anything. As he was
such a compassionate person, we truly
believe he would want us to help as much
as possible."

A small number of "stay home" t-shirts are still available for order, with proceeds to DMRF. The shirts are \$30 including tax and shipping in Nova Scotia; they are \$40 all-inclusive if ordered for shipping outside the province. Contact rebecca@soberbrewing.ca



David Atkinson passed away in March 2020 after a trip to Mexico



DALHOUSIE DONORS MAKE ALL THE DIFFERENCE

With today's medical students facing upwards of \$150,000 in debt upon completion of their medical education, the Dalhousie Medical Student Bursary has been created to help relieve some of the financial burden. With your gift to Dalhousie's Medical School, your support will have an immediate and lasting impact on the school's future physicians.

To make your donation today, please visit giving.dal.ca/medicine





Steady as she goes:

DR. BRENDAN CARR TAKES NSHA HELM JUST DAYS AHEAD OF COVID-19 STORM



ONE WEEK BEFORE DALHOUSIE

University suspended in-person classes, Nova Scotia Health Authority's new CEO, Dr. Brendan Carr (MD'89), had his eye trained calmly on the gathering storm.

"We have the benefit of a well-exercised pandemic plan that was developed first for SARS and then refined further through our experience with H1N1," he said at the time. "We are adjusting that plan as we learn more about COVID-19. There is a

highly coordinated effort underway to prepare."

Just 12 weeks later, Nova Scotia reported its first day with no new COVID-19 cases, but the health care system in the province may never be the same.

From Dr. Carr's perspective as one of the system's most senior leaders, this could be a good thing.

As Dr. Carr noted to CBC News in early May, shifts to virtual medicine and the use of the 811 phone line as a means of triaging and scheduling patients to appropriate services are helpful steps in the effort to provide timely, quality care, particularly as the health care system begins to tackle the backlog of postponed non-urgent cases—while keeping a sharp eye on the horizon and the very real possibility of a second pandemic wave.

"We've seen from the rapid, cohesive response to COVID-19 that we are capable of coming together, breaking

down barriers and letting go of old ways to create workable solutions in the face of enormous challenges," he says. "We've shown ourselves what's possible... now we need to build on this."

Physicians have a vital role to play as leaders in the midst of the ongoing pandemic response as well as in the creation of a more responsive and efficient health care system in general.

"By nature, doctors want to be advancing, improving, doing their best to provide the best possible care to patients," says Dr. Carr, who has decades of experience as an emergency physician. "This can be at the level of their own practice, but also at the level of the system as a whole."

The establishment of interprofessional collaborative primary care practices, the expansion of nurse practitioner roles, virtual visits, online patient portals, and the introduction of group approaches to care, are but some of the praiseworthy system changes Nova Scotia has made.

Dr. Carr—who served as VP of medicine for the former Capital District Health Authority before stints as CEO of Vancouver Island Health Authority and the William Osler Health System in Ontario—got his first taste of leadership as a naval reserve officer during his university years. Before entering medicine, he earned an MBA, and found the tools he'd learned

in business school to be very helpful as he got more involved in committee work early in his medical career.

"There are lots of opportunities for physicians to get involved in leadership roles," he notes, remarking that, "It uses a different part of the brain to work on the system level, and requires continuous improvement, continuous learning."

On top of medical knowledge, physician leaders stand themselves in good stead by learning such skills as how to facilitate teamwork, plan and manage budgets, allocate human resources, and adapt leadership style in the face of complexity and chaos. For Dr. Carr, mentors within the university, health care system and professional communities have been pivotal resources for him, as has the Canadian Society for Physician Leaders.

"It has really been a long-time passion for me, to be part of making the system better," Dr. Carr says. He has already shown himself to be a calm and levelheaded leader in the midst of a health care hurricane that landed early in his watch. Along with other leaders, he is looking ahead to the future and putting the plans, teams and resources in place for Nova Scotia's health system to stay on course with needed reforms while weathering another potential storm.



BY JASON BREMNER

"Is this everybody, or is this just me?"

THESE ARE THE TYPES of questions that Dr. OmiSoore Dryden, the James R. Johnston Chair in Black Canadian Studies, is helping Black students tackle with her monthly Chair Chats.

Originally intended only for medical students, Chair Chats now provide a forum for Black students in the health professions and graduate studies to openly discuss topics that come up in their classes, connect with their peers, and hear from those who have shared similar experiences.

"There are nuances to navigating a university as a Black student," says
Dr. Dryden. "They could be experiencing unconscious or implicit biases but may not have the language to articulate it."

Building a sense of community

Since arriving at Dalhousie, Dr. Dryden has felt a responsibility to offer mentorship to Black students, evidenced by her involvement in the Promoting Leadership in health for African Nova Scotians (PLANS) program, and the Sophia B. Jones Mentorship Program.

Sitting in her office located in the Department of Community Health & Epidemiology, Dr. Dryden sounds at home while discussing the need to build a sense of community.

"A lot of our students are involved in community work," she says. "I want them to think about how we understand our responsibility to the communities we live in and how we can be advocates to create more opportunities and greater access."

With students attending across multiple faculties, the conversations are free-flowing, which allows students to make connections that would have otherwise

been unlikely in the somewhat isolating world of academics.

"It's inspiring to hear everything people have gone through to get where they are now," says first-year medical student, Adrianna Broussard. "It's comforting to know there are people to chat with who have accomplished so much."

As busy as students are, the Chair Chats give them the opportunity to relax in a safe space and share their experiences as Black students.

Dr. Dryden's first year was meant to be an environmental scan to determine areas of importance and help guide the Faculty of Medicine's equity, diversity and inclusion commitments. While this is taking place, she is already providing meaningful leadership and guidance to students.

Now more than ever

Chair Chats are continuing over the summer of 2020, as the importance of having programming and supports for Black students has become more apparent following the violent death of Mr. George Floyd, an African American man who died in an encounter with police in Minnesota this spring. The resulting

protests and rallies have highlighted the long history of injustice endured by Black people and the systemic anti-Black racism which has caused health inequities that are disproportionately harming Black communities.

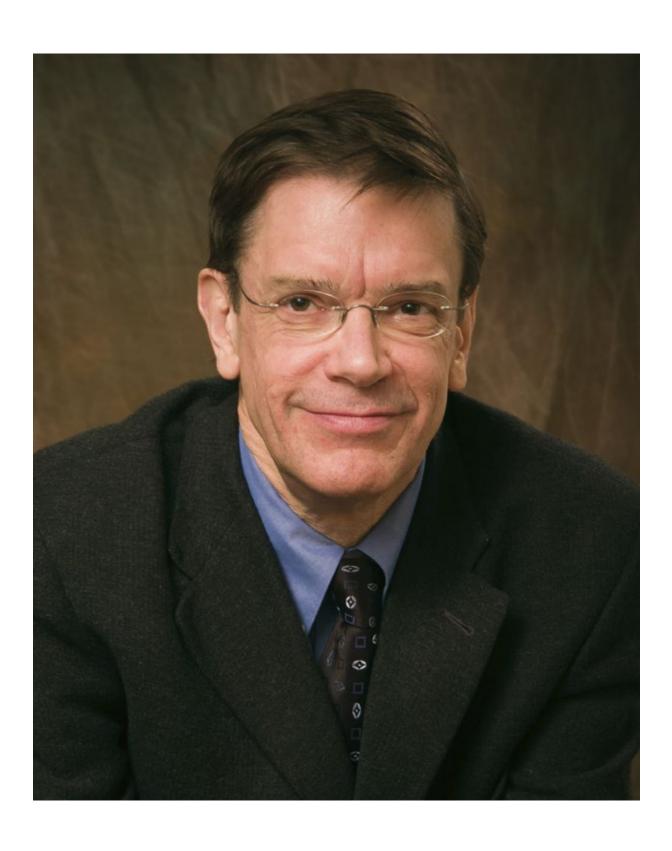
"One of the reasons that anti-Black racism persists in Canada is because of the faulty belief that Canada is a haven of racial tolerance," says Dr. Dryden. "There is more of a commitment to that belief than there is in actually confronting the gross inequalities that Black communities continue to face. As professors and scholars, it is incumbent upon us to understand these complicated and interconnected realities of anti-Black racism."



Dr. Rod McInnes sets the stage for

CANADIAN RESEARCH SUCCESS

BY JASON BREMNER



DR. ROD MCINNES' (MD'70) time as interim president of the Canadian Institutes for Health Research (CIHR) was brief. Yet his contributions to the national research landscape during his 15-month tenure cannot be understated.

In 2017, he was tapped by the Minister of Health to restore confidence in Canada's largest health research fund-granting body—CIHR—during a period of widespread tumult.

With the eyes of the country on him, Dr. McInnes successfully secured a significant funding increase from the federal government toward health research. Moreover, he restored face-to-face peer review (considered the gold standard) for funding competitions, to replace the much-maligned virtual peer-review system.

"For the research community across the country, it was a time of great distress," recalls Dr. McInnes.

In recognition of these and other efforts, in 2019 Dr. McInnes received the Research Canada Leadership in Advocacy Award, which recognizes outstanding champions of health research and health innovation, and the Paul Armstrong Lecture Award from the Canadian Academy of Health Sciences for leadership in advancing health sciences. These awards join his growing list of recognitions, as he was previously named a fellow of the Royal Society of Canada and the Canadian Academy of Health Sciences and was appointed to the Order of Ontario in 2008 and the Order of Canada in 2009.

When the director of the Lady
Davis Institute and professor of
genetics and biochemistry at McGill
University discusses his many career
accomplishments, he is quick to point out
the successes of others. This is perhaps why
he has gone on to become one of Canada's
greatest champions of health research and
an advocate for change.

Hailing from Halifax, N.S.,
Dr. McInnes was never interested in
joining his family's prominent law firm in
the city. Instead, he was drawn to science
and medicine—eventually completing
his BSc at Dalhousie. After a fortunate
undergraduate lecture on the topic of
genetics, Dr. McInnes' career path in
medicine was set and he was accepted to
Dalhousie Medical School.

"I loved my time at Dal Medical School," says Dr. McInnes "My classmates were amazing people, and included Tom Marrie, Dan Reid, Bill Stanish, and Ron Stewart, among many others. All exceptional individuals. I could go on forever."

Although his career trajectory was set in motion, he recognizes that he would not be where he is today without the guidance and mentorship of several outstanding people along the way, including the former head of the Department of Pediatrics at Dalhousie, Dr. Richard Goldbloom.

Throughout his career Dr. McInnes has

had the opportunity to learn from great leaders—ultimately becoming one himself.

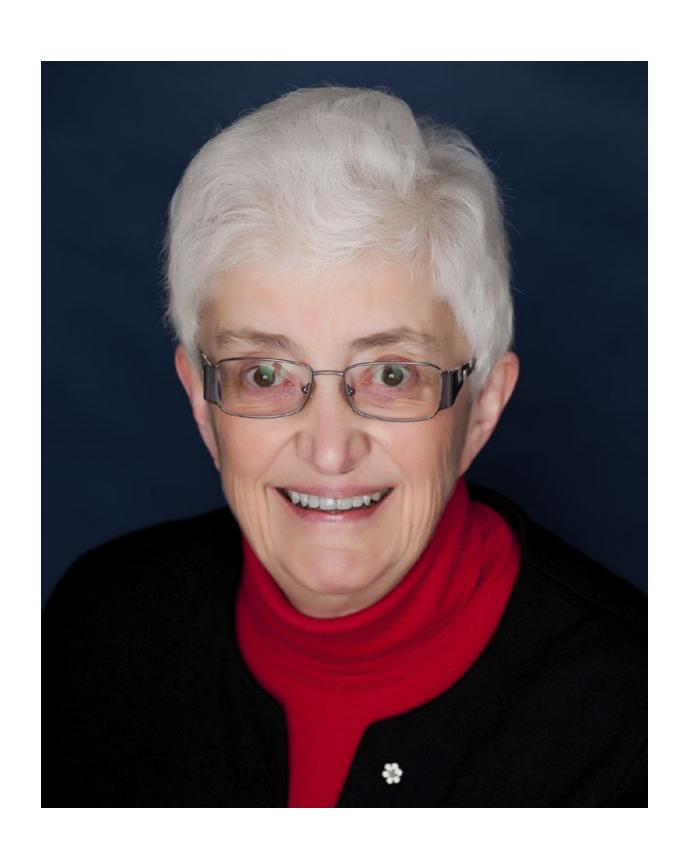
With the health research landscape stabilized and well-positioned for the future, Dr. McInnes stepped down from his current role as director of the Lady Davis Institute at the end of June 2020, to slowly transition into what he calls "a calmer existence."

Although he will still maintain a modest lab and staff to work on research topics that interest him, he points to wise words from Dr. Goldbloom as to why now is the right time to wind his career down. "He used to joke, 'Always leave them wanting more."

When his career does come to an end, he will have left Canadian research with more than enough.

Dr. Jean Gray inducted into

CANADIAN MEDICAL HALL OF FAME



DR. JEAN GRAY, professor emeritus of Medical Education, Medicine and Pharmacology at Dalhousie University, has been named a 2020 inductee into the Canadian Medical Hall of Fame.

The Canadian Medical Hall of Fame celebrates Canadians whose work has advanced health, nationally and globally, and who has fostered future generations of health professionals through local

and national youth education programs, scholarships and awards.

Dr. Gray is being recognized for outstanding leadership throughout her career—for example, in advancing the status of women in medicine, and improving the safety of medications and prescribing practices in Canada.

In the early 1990s, Dr. Gray began working with the Canadian Pharmacists Association to develop *Therapeutic Choices*, a comprehensive handbook for primary care physicians designed to support evidence-based therapeutic decisionmaking. She was editor-in-chief of five editions.

"The book really was a turning point for me because the Health Council of Canada recommended that every practitioner in the country have a copy," says Dr. Gray. "It had very positive reviews in the Canadian and even the American literature. It was clearly a book that met a need at the right time."

She calls her role in creating this invaluable guide her proudest career achievement. Her proudest achievement in life was becoming a mother. The experience spurred her to become an outspoken advocate for women in medicine and the medical sciences.

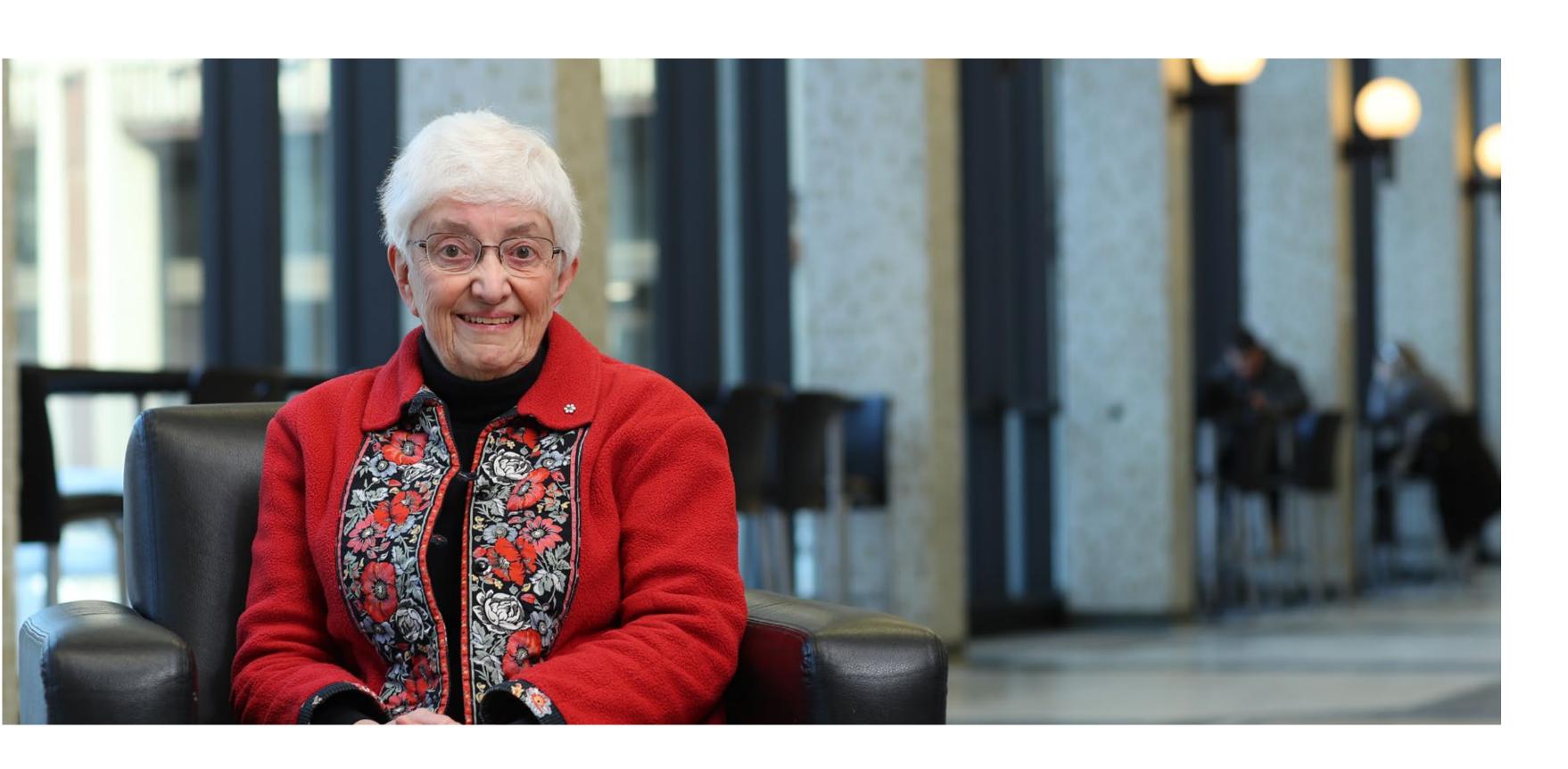
"Both of my children very obligingly arrived on a Friday night and I went back to work on Tuesday morning," she remembers. "I was on call the night my first child was born. When I finally went over to the maternity hospital they kept having to say, 'Wake up and push!' And I kept saying, 'I was up all night—leave me alone!"

Soon after, Dr. Gray began lobbying for some form of maternity leave for the growing number of women entering medicine. She started by ensuring that her female colleagues were each given two months of leave—a vast improvement at the time—and continued to help turn the tide toward policies that eased the way for women in medicine.

Most recently, Dr. Gray has taken the step of establishing a scholarship for medical students at Dalhousie, in a planned gift through her estate.

"I was blessed; Dalhousie always supported and encouraged me, in both medicine and pharmacology," she says. "Now I want to invest in the next generation of Dalhousie doctors and help them accomplish what I was able to do."

Visit the virtual Canadian Medical Hall of Fame at www.cdnmedhall.org



UPCOMING EVENTS

MD'85 was planning their reunion for this year, but are rescheduling to 2021. Here is a message from class president Dr. Renée Lutwick: Dear Class of '85, these are indeed strange times! So, as you know we have cancelled our 35th reunion and we will now have a 36th reunion instead. Date: September 10-12, 2021 Location: Digby Pines, N.S. Digby Pines has graciously agreed to keep the rates the same. If you are not receiving my emails and would like to be on the contact list, you can email me at relutwick@me.com.

MD'70 will be postponing 50th anniversary celebrations to 2021. For more information please contact Dr. Dan Reid, danreid2@eastlink.ca.

The Dalhousie Medical Alumni Award Luncheon will be held virtually this November. The luncheon will honour the winners of the four DMAA Alumni Awards as well as two newly introduced DMAA Resident Leadership Awards. More details will be announced closer to the event.

DAL MED 152 GALA CANCELLED

Due to COVID-19, unfortunately, we have had to cancel the DalMed152 Gala Weekend. The DMAA Alumni Awards and Resident Leadership Awards will be presented in a virtual ceremony this fall, with details to be announced soon.

We'll miss celebrating with all of you in person this year and hope that we'll be able to see you in 2021 for the DalMed153 Gala Weekend.



GLASS NOTES

1960s

Dr. MengHee Tan (MD'69) edited "Diabetes Mellitus-Impact on Bone, Dental and Musculoskeletal Health," published in August 2020 by Elsevier Inc. as the inaugural volume of its *Bone, Joints and Hormones* series.

1970s

Dr. Tom Laughlin (MD'78) was the 2019 winner of the Dalhousie Medical Alumni Association's Family Physician of the Year Award.

The MD Class of 1978
has won the \$100k, \$200k and \$300k cups for raising \$300,000 as a class to support medical students and residents in financial need. They are the first MD class at Dalhousie to achieve the \$300k cup.

1980s

Dr. Kevin Orrell (MD'81)
has been appointed as deputy
minister of the Nova Scotia
Department of Health and
Wellness.

Dr. Ann Collins (MD'85) was the 2019 winner of the Dalhousie Medical Alumni Association's Honourary President Award.

Dr. Sultan Darvesh (MD'88), the Dalhousie Medical Research Foundation's Irene MacDonald Sobey Chair in Curative Approaches to Alzheimer's Disease, was inducted into the 2019 Science Hall of Fame at the 2019 Discovery Awards for Science and Technology. **Dr. Brendan Carr (MD'89)** is the new president and CEO of the Nova Scotia Health Authority.

the Nova Scotia Health Authorit His five-year contract began on December 16, 2019.

1990s

Dr. Sean Grondin (MD'90) was the 2019 winner of the Dalhousie Medical Alumni Association's Alumnus of the Year Award.

Dr. Gaynor Watson-Creed (MD'99) was named as one of Canada's Most Powerful Women: Top 100 for 2019.

2010s

Dr. Tim Holland (MD'11) was the 2019 winner of the Dalhousie Medical Alumni Association's Young Alumnus of the Year Award.

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 and provide us with the information.



Dr. Gordon Jasey (MD'56) passed away July 12, 2019

Dr. Glasier (Icy) Somerville (MD'60) passed away July 28, 2019

Dr. John Stuart Soeldner (MD'59) passed away October 16, 2019

Dr. Jim Smith (MD'64) passed away January 18, 2020

Dr. David Fraser (MD'58) passed away February 15, 2020

Dr. Rollie Langille (MD'63) passed away March 27, 2020

