

CFMS FEMC



Canadian Federation of Medical Students



Fédération des étudiants et des étudiantes en médecine du Canada

ANNUAL REVIEW 2021

“‘Hope’ is the
thing with
feathers”

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Our Mission

THE CANADIAN FEDERATION OF MEDICAL STUDENTS IS THE NATIONAL voice of Canadian medical students. We **connect, support** and **represent** our membership as they learn to serve patients and society.

Our Vision

Tomorrow's physicians leading for health today.

THE CANADIAN FEDERATION OF MEDICAL STUDENTS (CFMS) WAS FOUNDED in 1977 in response to the recognized need for a national unifying body for medical students. Our membership has since grown to more than 8,000 students at 14 medical student societies across Canada. In addition, the CFMS welcomes individual members from non-member Canadian medical schools in Québec. At the CFMS, it is our mission to connect, support and represent our membership. As future physicians, we also advocate for the best health for all members of society.

The CFMS **connects** Canadian medical students and we seek to engage with our student members. Our cornerstone is www.cfms.org -- the online home of CFMS, available in both English and French. We also publish this *CFMS Annual Review*, a yearly magazine highlighting CFMS and medical student activities. Beyond connecting members to CFMS, we connect Canadian medical students with each other through bi-annual meetings, numerous committees, programs, and events. These student-to-student connections facilitate the sharing of local best practices across schools and create a sense of camaraderie among medical students.

The CFMS **supports** medical students through a wide variety of services and programs. We know our members value savings as they undertake costly medical training, and our discounts program includes disability insurance, laser eye surgery, hotels, medical apps for smartphones, and more. We also host online databases with reviews on Medical Electives and Residency Interviews. Our Student Initiative Grants support and enhance local initiatives undertaken by Canadian medical students. Our Global Health international exchanges provide opportunities for members to experience medical learning in diverse global environments. Finally, in recent years, we have taken a renewed focus in supporting the wellness of our members via wellness resources, a wellness member survey, and advocacy efforts.

The CFMS **represents** our membership at multiple forums. We provide the Canadian medical student perspective to our sister medical organizations, government, and other partners that are helping to shape the future of medical education, medical practice and health care. Within Canada, we are proud of our work in medical education on projects such as the *Future of Medical Education in Canada*, The Royal College's *CanMEDS 2015*, and the *AFMC Student Portal*. Our advocacy work includes a national Lobby Day in Ottawa where we discuss health policy topics with parliamentarians in an effort to bring about positive change, both for Canadian medical students and the patients we serve. Internationally, our Global Health Program represents the Canadian medical student voice abroad.

Our CFMS Global Health Program (GHP) is vital within the CFMS. Focused on promoting health equity at home and abroad, the GHP represents Canadian medical students at the International Federation of Medical Students' Associations (IFMSA) and at the Pan-American Medical Students' Association (PAMSA). Our Global Health Program also connects medical students to health equity initiatives across Canada. The CFMS Global Health Program works toward globally-minded education and coordinates national projects related to global health.

The activities of the CFMS are diverse, relevant, and member-driven. We invite you to learn more about how the CFMS aims to serve its members through its vision of tomorrow's physicians leading for health today. ■



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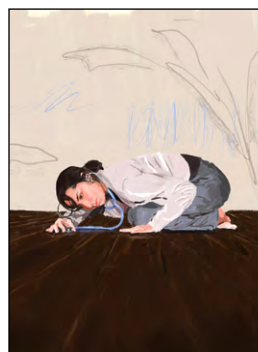
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Cover art

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Materials/Medium
Digital painting

Artist
Lauren Gorfinkel
University of British Columbia,
Class of 2024



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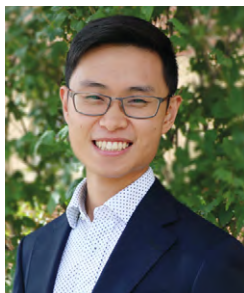
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Letter from the president



Henry Li
CFMS President
2020-2021

Dear friends and colleagues,

I am excited to introduce you to the *CFMS Annual Review*. I am so grateful to be able to serve as CFMS President. This year, more than ever, we have seen the incredible passion, dedication, and creativity of medical students across the country. At a time when our world is changing faster than ever before, medical students have stepped up and earned the trust of the community at large. I am confident that the population of Canada will be well-served by this next generation of physicians.

This publication highlights the incredible work of medical students across the country – the future of the medical profession. Every year, we take this opportunity to highlight innovation and excellence amongst medical students in Canada, as well as to provide an update on our organizational successes.

As I reflect on this past year and the many successes of medical students across Canada, I am reminded of the humble beginnings of the organization and how we've grown over the last four decades. I am also reminded of the incredible dedication of our General Manager, Rosemary Conliffe, who is celebrating her 20th year with the organization. She is truly the pillar and driving force of the organization, and we owe our successes to her leadership, kindness, and creativity. She has fostered an entire generation of physician leaders that have gone on to shape the Canadian healthcare system and embody the values of the organization.

Over the years, the CFMS has seen its membership and influence expand and drive its ability to create change for its members. This accomplishment is epitomized in the strategic leadership that the CFMS took during the COVID-19 pandemic to shape medical education. From advocating for MCCQE1 remote proctoring, driving the R1 match timelines, and leading innovation in the program promotion and virtual interview process, the CFMS has been a pillar of equitable change in the face of the unknown. We expediently brought together the voices of medical student leadership across all our member schools and effectively channeled this to create change on numerous occasions.

Amidst all of this work, the CFMS also launched its inaugural National Annual Survey, receiving responses from over 25% of our membership to support our quality improvement and advocacy efforts. We developed robust recommendations on equity, diversity, and inclusivity both for the organization as a whole and for the faculties of medicine. Furthermore, the CFMS has continued to be a leader in physician and learner wellness with the development of a wellness curriculum framework and recommendations to support health-promoting learning environments.

I would like to thank the CFMS Board, volunteers, authors, and contributors for this publication. In particular, I would like to thank Clara Osei-Yeboah for her leadership as the *Annual Review* Editor. This publication would not be possible without her commitment and strategic vision.

Although we have faced many challenges throughout this past year, I am proud of the incredible work that the CFMS and medical students across Canada have accomplished. We have all adapted to the hurdles that have come our way, and this has showcased the leadership and potential of our generation. Although the pandemic has proved difficult for many, it has also provided a space to reflect and re-envision how we work and live.

I hope you find this year's edition of the *Annual Review* thought-provoking, reflective, and inspiring, as we showcase the hard-earned successes of our organization and medical students across the country. As we look towards the future, there are many unknowns as to how the world will adapt to our new normal. What is certain though is that the CFMS will continue to be "Tomorrow's Physicians Leading for Health Today."

Sincerely,

Henry Li

CFMS President 2020-2021

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Letter from the editor



Clara Osei-Yeboah
Annual Review Editor
 University of Toronto,
 Class of 2023

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Dear friends and colleagues,

We invite you to explore this year's *Annual Review*, aptly named “‘Hope’ is the thing with feathers,” to reflect on, celebrate, and engage with the innovations and experiences of medical students this past year. The COVID-19 pandemic has been a challenging and frightening period of time for us all. This last year has tested our capacity for mobilisation in the face of adversity and, under duress, has compelled our creativity, inventiveness and resourcefulness. In what Dr. Howard Njoo so eloquently refers to as “caremongering,” Canadians have demonstrated a selflessness and unparalleled commitment to each other. We are fatigued – emotionally and physically exhausted – and at times, surfeited with the morbidity and mortality of COVID-19. But we're also witnessing great successes and triumphs.

This year's edition of the *Annual Review* alludes to Emily Dickinson's 1861 poem, “Hope is the thing with feathers.” She likens “hope” to a bird, whose singing she hears ubiquitously. I often find refuge in this poem, because it provides some respite from the unremitting conditions of death and suffering in which we presently seem inundated. But the poet reminds us that because hope “perches in the soul,” it is ineluctable. We see hope in the many initiatives that medical students have committed to in efforts to address, among other concerns, environmental change and sustainability. We see hope in the disruption to in-person clinical training, which has propelled the evolution of virtual care and telemedicine. We see hope in the examinations of personal and professional identity, which endorse changes in meaning of the most mundane and simple things. We see hope in the accounts and experiences of clerks, whose profound reflections only foretell the sensitivity and insight with which they will engage with future patients. Sometimes, it may seem that we are suffering in silos, but in this edition, you may indeed resonate with some of the feelings and experiences of your colleagues and other medical learners.

This year, we received a record number of submissions; needless to say, we were extremely impressed and humbled. There is additional content in the digital version of this year's *Annual Review*, including, for the first time, a musical composition! In this edition, we also celebrate the accomplishments and achievements of medical students and trainees. We discuss the challenges of mental health on physicians, the prospect of virtual care, the paucity of resources in Northern communities and the meaning of communication. It is our honour to remember and pay tribute to Mohammad Asadi-Lari, CFMS Global Health Liaison, for his tireless work in promoting global health equity, entrepreneurship, and innovation. Lastly, we'd like to extend our sincerest gratitude to all the medical trainees and learners who've contributed to this issue to chronicle their experiences and most intimate moments of self-discovery, personal reflection, dedication and perseverance amidst change and instability. I am also extremely grateful for the contributions of our general manager, Rosemary Conliffe, whom I worked alongside to bring this vision to fruition.

This edition of the *Annual Review* also features an interview with Deputy Chief Public Health Officer of Canada, Dr. Howard Njoo. Our conversation examines the inequities that the pandemic has amplified, while addressing the value of human connection and community. Dr. Njoo reflects on the lessons of the ongoing pandemic and the culture shift our society may sustain in the post-pandemic era.

This edition also challenges us to look towards what healing and recovery will mean for us in the post-pandemic era. How is the pandemic conditioning humanity? And in what ways have we evolved to better meet the demands and needs of our compatriots and fellow global citizens? How do we address the trauma that we've witnessed and experienced this past year? Healing is a long road, but with the advent of vaccines, it is hopefully within reach. What I've learned during my term as *Annual Review* Editor is that if we take a moment, we will find that hope does indeed “[perch] in our souls.” And that resilience and victory are inherent conditions of our humanity. When we revisit this chapter in history, we will proclaim with certitude that we were resilient, and thus, we triumphed.

Sincerely,

Clara Osei-Yeboah
CFMS Annual Review Editor
 University of Toronto, Class of 2023

Addressing social inequities virtually: lessons from student advocacy during the pandemic

Takhliq Amir

CFMS National Officer of Health Policy

McMaster University, Class of 2022

Roya Akbary

McMaster University, Class of 2022

IN A YEAR DURING WHICH many struggled with stay-at-home orders due to social distancing measures, countless others had no home in which to self-isolate. In Canada – and globally – the issues of homelessness and housing instability remain as pervasive today as they have been for the last few decades. The COVID-19 pandemic has

only served to shed light on the truth that adequate housing is a fundamental human right not being met for many. Shelters and governments have been challenged with the task of providing housing for those in need, while adhering to public health guidelines. The difficulty lies in striking a balance between social distancing needs and

providing space for those who need to isolate and be tested for COVID-19. During this time, inequities within our society have been amplified.

As medical students, many of us pursued this field due to an interest in advocacy. The recent global events have only made more poignant the effects of social factors – housing, employment,



We would like to acknowledge and thank our amazing team members and delegates from the Michael G. DeGroot School of Medicine Waterloo Regional Campus for their leadership and contributions to our inaugural Waterloo Municipal Day of Action.

and access to basic necessities – on the health of individuals and communities. In October 2020, alongside a team of first- and second-year medical students, we hosted the inaugural Municipal Day of Action at McMaster’s Michael G. DeGroot School of Medicine Waterloo Regional Campus. It was a week of meetings with 13 city and regional councillors, including 4 city mayors, to discuss homelessness and housing instability, which are important to community health. We hoped that this experience would improve the future care of patients experiencing economic, social and political inequities. After consulting leaders at our school and in the community, homelessness and housing instability were identified as the topic of our advocacy. These issues affect a significant population in the Region of Waterloo and directly impact health outcomes. Our goal was to identify existing gaps in local policies and practices around the topic and develop recommendations that we would then advocate for in our conversations with municipal governments.

For many of our team members, this first foray into political advocacy was compounded by the uncertainties of a virtual world. Meetings and consultations that would have normally been conducted by visiting local organizations, shaking hands, and building connections now had to be done online through Zoom calls with limited non-verbal cues. Amidst the challenges of limited in-person social interactions, however, the irony of easier communication also emerged – email and video conferencing facilitated easier communication with both community members and city and regional councillors in the Region of Waterloo.

Early on, we recognized the importance of connecting with those affected by this issue directly and building our

recommendations from the ground up. In May, we began our background research and consulted grassroots community organizations and leaders who tackle homelessness and housing instability daily. Through these conversations, we learned about gaps in the current housing system and listened to the community’s perspectives on the changes needed in current practices. We also met with frontline healthcare workers who had witnessed the effects of homelessness and housing instability firsthand, especially since the first wave of the COVID-19 pandemic.

From these discussions, emerged the idea that homelessness and lack of housing can be both a cause and consequence of human illness and suffering. We, therefore, need to identify individual needs in order to support people in the best way possible. There isn’t a one-size-fits-all problem or solution to homelessness. Our final recommendations tried to reflect this, focusing on some of the more immediate problems we saw, such as winter shelter capacity and barriers to accessibility of shelters within the context of the second wave of the pandemic. We also advocated for more innovative housing options aimed at greater sustainability in the long run. In our meetings, most councillors were receptive. We are glad to learn that many of the changes we suggested are already in the process of being implemented.

The often impersonal nature of conducting this initiative online was a challenge, but what emerged was a lesson in human connection and persistence. We were cognizant of our privilege in these positions as we researched and met online from the warmth and safety of our homes. We became blatantly aware of not only what many in our community did not have, but also their strength and

“Above all, the greatest lesson learned was in humility – to be aware of the privilege to be in these positions and to ensure we do the work necessary to improve the overall well-being of our neighbours and communities.”

resilience in coming up with creative solutions to the problems they faced. Our team members worked tirelessly to ensure that the end product of our work was as true a reflection of the lived experiences of our community members as possible. All the while, we questioned and critically analyzed the processes of political advocacy and policymaking and recognized the work being done every day in our communities. Above all, the greatest lesson learned was in humility – to be aware of the privilege to be in these positions and to ensure we do the work necessary to improve the overall well-being of our neighbours and communities. ■

HEART - A year in review

George Kitching

2019-2020 Co-Chair CFMS HEART,
Western University, Class of 2021

Celia Walker

2020-2021 Co-Chair CFMS HEART,
University of Calgary, Class of 2022

Owen Dan Luo

2020-2021 Co-Chair CFMS HEART,
McGill University, Class of 2023

Julia Robson

2020-2021 Member of CFMS HEART,
Queen's University, Class of 2022

Sasha Létourneau

2019-2020 Co-Chair CFMS HEART,
Queen's University, Class of 2021

Meghan Kerr

2019-2020 Member of CFMS HEART,
University of Toronto, Class of 2021

LAST YEAR, MEMBERS OF THE 2018–2019 CFMS Health and Environment Adaptive Response Taskforce (HEART) wrote a similar retrospective article in the *Annual Review* with a focus on the wildfires that ravaged Australia in January 2020. One year has passed, but it feels like a century. At the time of writing this article, January 2021, countries around the world continue to grapple with the COVID-19 pandemic – the result of a zoonotic virus. The COVID-19 pandemic serves as a sobering reminder of the incredible harm that can come from the deteriorating relationship between human populations and the natural environment. However, the incredible steps that many societies have taken to safeguard human lives in this pandemic represent the level of ambitious change that Canada must

achieve to meet our 2030 international climate commitments.

Since its creation in 2016, HEART has made the intersection between climate change and health our priority, expanding our impact and reach each year. Despite the global pandemic, 2020 was no different – if anything, it galvanized our advocacy efforts. In recognition of the advocacy work that HEART has engaged in since initiation, HEART was awarded the 2021 Association of Faculties of Medicine of Canada (AFMC) Charles Boelen International Social Accountability Award. We hope to share a few of the projects that we've engaged in over the past year.

We started the year with the launch of our National Report on Planetary Health Education, a nationwide survey on the current status of climate change and Planetary Health integration into medical curricula at all 17 Canadian medical schools. This report garnered national and international attention in publications in *The Lancet Planetary Health* and *Global News* as well as thousands of social media impressions. Furthermore, within only a month of the report's publication, local medical student champions in the HEART Network organized meetings with Deans and UME educators at seven medical schools (and many more have shown progress since). This report was also the first of several similar national and international assessments that were published this year, including the International Federation of Medical Students' Associations (IFMSA) global assessment.

For our efforts in climate health education advocacy, HEART has been acknowledged by the IFMSA as an international leader in this field. At the United Nations Framework Convention on Climate Change Conference of Parties (UNFCCC COP25), the IFMSA presented HEART's climate health curriculum evaluation at a panel event alongside representatives of the World Health Organization (WHO), the United Nations, and *The Lancet Planetary Health*. HEART was also provided an opportunity to present our work to an international audience at the Global Climate and Health Summit organized by the WHO and Global Climate and Health Alliance (GCHA).

HEART spent 2020 building on the medical student engagement we had seen through Fridays for Future and Doctors for Future campaigns in 2019. During our 2020 Earth Week Campaign, we challenged medical students nationwide to write messages to our political leaders calling for action on the health emergency of climate change. This social media campaign was our most successful to date, accruing 33,000 impressions and even retweets and replies from leaders including NDP MP for Hamilton Centre, Matthew Green, and Liberal MP for Toronto-St. Paul's, Carolyn Bennett.

HEART's virtual engagement throughout the pandemic included another successful annual Earth Day Photo contest focusing on the health benefits of nature. At the brink of the initial lockdown in March 2020, HEART

“For our efforts in climate health education advocacy, HEART has been acknowledged by the IFMSA as an international leader in this field.”

“A highlight of this conference was our “Greenathon,” a hackathon-style event where students created and proposed sustainable healthcare initiatives that would be feasible at their home institutions.”

encouraged medical students to get outside safely. We recognize, however, that more work needs to be done to highlight and rectify inequities in access to nature, and we must be mindful of who has access to these spaces and why.

HEART expanded its virtual reach to engage an international community of medical students, partnering with the IFMSA and HEART’s Australian counterpart, Code Green, in organizing a webinar to share our best practices with similar groups around the globe. Further, HEART organized Canada’s first medical student Planetary Health Action Conference in September 2020, providing a national platform for students to share information and ideas about initiatives. A highlight of this conference was our “Greenathon,” a hackathon-style event where students created and proposed sustainable healthcare initiatives that would be feasible at their home institutions. This event inspired the creation of seven new Greening Healthcare Initiatives, part of

HEART’s *Project Green Healthcare/Projet Vert la Santé*, which is reported in greater detail elsewhere in the *Annual Review*. To support these projects, HEART received a \$12,000 CFMS Student Initiative Grant and published the first-of-its-kind Greening Healthcare Toolkit.

The new HEART team, selected in November 2020, will lead a planetary health curriculum re-evaluation to assess to what extent schools have implemented the recommendations outlined in HEART’s initial report. We hope that 2021 will be a turning point in our collective understanding of the fierce urgency of action on climate change to safeguard our health. ■



Bluewater Health, Sarnia & Petrolia, Ontario

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Project Green Healthcare/Projet Vert la Santé: empowering medical students to lead green change in the Canadian healthcare system

Owen Dan Luo
 CFMS Health and Environment Adaptive Response Taskforce
 McGill University, Class of 2023

Jacob Carson
 CFMS Health and Environment Adaptive Response Taskforce
 Queen's University, PGY1 Pediatrics

CLIMATE CHANGE IS THE largest global health threat of the 21st century, and tackling it could be our greatest health opportunity.¹ The healthcare sector is a significant contributor to climate change and Canadian healthcare is no exception, having been identified as the third highest emitter per capita worldwide.² Between 2009 and 2015, our healthcare system accounted for 4.6% of Canada's

national total emissions – or 33 million CO₂ equivalents – which has been linked to 23,000 disability-adjusted life years lost among Canadians each year.³ Clearly, there is tremendous opportunity to reduce the environmental impact of Canadian healthcare delivery.

Over the past year, we've designed and launched *Project Green Healthcare/Projet Vert la Santé* (PGH), the first-of-its kind national community of practice

empowering Canadian medical students to lead green change within our healthcare systems. With a generous Canadian Federation of Medical Students (CFMS) Strategic Innovation Fund operating grant, student teams are equipped with up to \$2,000 of financial support and partnered with mentors from the Canadian Association of Physicians for the Environment (CAPE) and the Canadian Coalition for Green Health

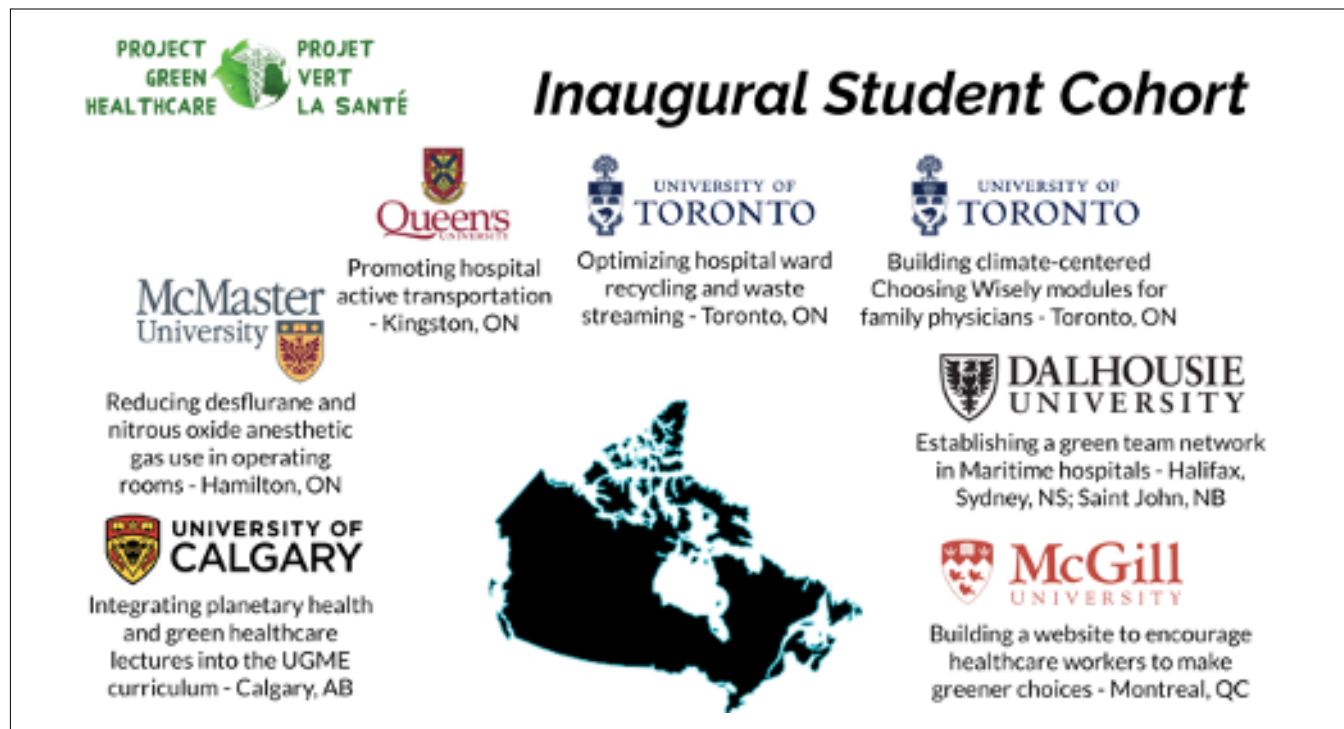


Figure 1. Project Green Healthcare 2020-2021 Inaugural Cohort

Care (CCGHC). Teams conduct needs assessment and quality improvement projects to improve the ecological sustainability of their local healthcare institutions. In order to empower our medical student teams with the best evidence in environmental sustainability and healthcare quality improvement literature, we published what is to date the only “Primer on Greening Healthcare for Healthcare Students,” and have made it available in both English and French.⁴ This document outlines a series of evidence-based quality improvement projects that Canadian healthcare student teams would be well-positioned to design and execute. There are seven primary domains:

1. Advocating for green hospital policies and practices
2. Implementing circular economies
3. Reducing energy consumption
4. Optimizing waste management
5. Reducing food and water footprints
6. Ameliorating transportation-associated emissions
7. Choosing greener healthcare practices

We also designed a 5-step model for students to mobilize effectively for sustainable healthcare, which starts with “motivating yourself,” “setting up your team environment” and “identifying your allies” in order to “perform a needs assessment” and “employ a quality improvement approach” that elicits the maximal green change at the target healthcare institution.⁴ The PGH program aims to empower medical student-driven local innovation to permit timely wins in green healthcare delivery, and to inform the rapid scale-up of effective local quality improvement project designs on a national scale.

Our inaugural PGH cohort is composed of 7 teams of 34 medical students distributed over 6 Canadian medical schools – Dalhousie University, University of Toronto, McGill University, Queen’s University, McMaster University and the University of Calgary – in 5 Canadian provinces. Our teams are leading innovative green quality improvement projects that aim to:

1. Reduce the ecological footprint of anaesthetic gas use in operating rooms
2. Improve waste streaming and recycling on the wards
3. Launch a green team network across the Maritimes
4. Promote active transportation
5. Improve climate change-related medical education
6. Design a website to encourage healthcare providers to reduce their personal environmental footprints
7. Build sustainability-oriented *Choosing Wisely* educational modules for general practitioners

The PGH national community of practice permits the iterative exchange of ideas on greening healthcare best practices, which are informed by the experiences of medical student leaders in climate action across Canada. This practice of collaborative healthcare system advocacy spanning the local and national spheres will equip medical students with the skills to become career-long advocates and contribute to a more ecologically-sustainable and climate-resilient Canadian healthcare system.

Please see Figure 1 for the complete PGH team and project roster. ■

“The healthcare sector is a significant contributor to climate change and Canadian healthcare is no exception [...]”

References:

1. Costello, A., Abbas, M., Allen, A., Ball, S., Bell, S., Bellamy, R., ... & Lee, M. (2009). Managing the health effects of climate change: lancet and University College London Institute for Global Health Commission. *The Lancet*, 373(9676), 1693-1733.
2. Watts, N., Amann, M., Arnell, N., Ayeb-Karlsson, S., Belesova, K., Boykoff, M., ... & Chambers, J. (2019). The 2019 report of The Lancet Countdown on health and climate change: ensuring that the health of a child born today is not defined by a changing climate. *The Lancet*, 394(10211), 1836-1878.
3. Eckelman, M. J., Sherman, J. D., & MacNeill, A. J. (2018). Life cycle environmental emissions and health damages from the Canadian healthcare system: an economic-environmental-epidemiological analysis. *PLoS Medicine*, 15(7), e1002623.
4. Luo, O.D., Carson, J. J. K., Létourneau, S. (2020). Primer on Greening Healthcare for Healthcare Students. Canadian Federation of Medical Students Health and Environment Adaptive Response Taskforce. Available at: https://www.cfms.org/files/HEART/CFMS%20HEART%E2%80%99s%20Primer%20on%20Greening%20Healthcare%20for%20Healthcare%20Students_FINAL.pdf.



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Medical school parenting reflections

Lucas King

CFMS Director of Student Affairs

University of Saskatchewan, Class of 2023

SINCE ENROLLING IN 2018, I have spoken with many incoming and current students about being a parent in medical school. When asked about my experience, I often emphasize that I am not the primary caregiver for my children – my wife proudly holds that title – and it is important to accept that you cannot do everything for everyone. While I am present for most of the important activities in my children’s lives and spend time with them regularly, I do not often take a leading role in caring for them (outside of buying them gifts, which is my specialty). Although difficult, it is essential to acknowledge

“I have found that, with children, quality time is always more important than quantity. It will be challenging, but your children will understand if you do your best at being present when you can be.”

that we need help to succeed in medical school while raising our children. I am privileged to have an amazing wife who cares for our children and manages our family life, which allows me to succeed in my studies and give back to the community.

My wife and I had our first son eight years ago when we were barely one year out of high school. Our second was born in April 2020 amidst the COVID-19 pandemic and my second year of medical school. Needless to say, both experiences have challenged us to grow in unique and invaluable ways. Our eldest son’s birth is what drove me to go back to school, since I originally had no intention of going to university. Without the motivation to ensure a stable and secure life for him, I may have never ended up in medicine. Our second son’s birth gave me a greater appreciation for what it is like to be the recipient of health care services, particularly in a hospital during a pandemic. I have also found that my experiences as a parent have helped me create deeper connections with patients and better understand their concerns. Like many challenges we face in our lives, I see being a parent as an advantage in medicine because it will help me provide better care for my patients in the future.

In contrast, one of the most challenging things about parenting while in medical school is constantly feeling that I could be studying or volunteering more, while, at the same time, feeling that I should do more for my family. Every conference or meeting I attend and every extracurricular activity I participate in takes away from time I could be spending with them. I have not figured out the secret to finding the right “balance,”

which varies widely between families, but I find it helpful to remember I am not here just for myself. While I am the one who will ultimately become a physician, I am not on this journey alone, and the sacrifices we make as a family now will pay off in the long run for us and those we impact along the way. For anyone with classmates or colleagues who are parents, I encourage you to find family-friendly ways to interact with them, such as dinner outings that the kids can attend. Finding childcare or justifying spending even more time away from family can be difficult, but a night out with the family can be fun for everyone.

Being a parent in medical school can be difficult, especially if you need to homeschool your children during a pandemic. However, I genuinely believe that I would not be where I am today without my family and their unwavering support. To anyone who is currently a parent or expecting in the future, it is essential to acknowledge that you will miss milestones, activities, and school events, but that does not make you a bad parent. I have found that, with children, quality time is always more important than quantity. It will be challenging, but your children will understand if you do your best at being present when you can be. Just as in medicine, we cannot be all things to all people. We must recognize our limitations and look to others for support to succeed. ■

Nationwide blood donor recruitment during the COVID-19 pandemic

Marissa Absi

CFMS National Blood Drive Chair
University of Ottawa, Class of 2023

THIS PAST YEAR HAS BEEN A learning experience in many ways as we embraced uncertainty, learned to be resilient, listened to the needs of our community, and adapted to new changes in day-to-day life. In light of the new year ahead of us, it is worth highlighting the efforts of medical students and donors who have supported blood donations throughout the COVID-19 pandemic. It was an overwhelming experience to witness our medical students nationwide come together, rolling up their sleeves to ensure patients' needs were met – especially during these ever-changing times.

Every year, the Canadian Federation of Medical Students (CFMS) National Blood Drive Chair and Canadian Blood Services (CBS) partner to facilitate the Phlebotomy Bowl, an annual competition between medical schools across Canada to track which school has the highest numbers of blood donations per capita and first-time blood donors within the year. To join the competition and support one's school, students, teachers, staff and members of the community must register under their school's respective Partners for Life (PFL) number. Once registered, all past and future donations automatically count towards the school's annual goal in the Phlebotomy Bowl.

Since 2015, this initiative has recruited over 1,000 blood donors every year – and the CFMS continues to be one of CBS's leading partners. Each year, the program is maintained by 35 Senior and Junior Blood Representatives – dedicated medical students from each participating medical school who work closely with the CFMS National Blood Drive Chair and CBS Regional Managers. Together, we facilitate group donations at local clinics and organize events to advocate for the importance of blood and stem cell donation across Canada. Other areas of focus include raising awareness about the eligibility criteria for blood donors, and providing education to improve methods



Graham Landells, UBC Kelowna Blood Team (2020)

“Despite the challenges that our blood representatives have faced, we surpassed our recruitment goal of 1,250 blood donations for 2019 - 2020!”

of participation and recruitment to the stem cell registry. In addition, we strongly encourage students who are ineligible to donate blood, either temporarily or

permanently, to find a donor from the non-medical student population to give blood on their behalf in what is known as a “donation by proxy.”

While nationwide blood donations tend to decrease over long weekends and holidays, the need for lifesaving blood transfusions does not take a break. From victims of car accidents to children fighting cancer, there is a continuous need for these transfusions. Our effort to organize group donations aims to successfully fill blood donation appointment slots and meet the constant need for blood and stem cell donors. As the pandemic progresses, a number of new protocols have been put in place to ensure the health and safety of donors and staff. In compliance with public health recommendations, group donations were not held, and donors were encouraged to donate independently or with a member of the same household. To adapt to these new circumstances, we rallied together to introduce a virtual donor recruitment program. We began to educate our donors about

the safety protocols in place in adherence to public health regulations, to protect them and clinic staff. We chose locations that best suited our communities and also relocated many mobile clinics given the current circumstances. Since we are no longer attending in-person classes, we have transitioned to virtual advertisement campaigns of our blood drives. Despite the challenges that our blood representatives have faced, we surpassed our recruitment goal of 1,250 blood donations for 2019–2020! To track your medical school’s progress, please visit <https://cfms-blood.ca>.

As future doctors, we’ve learned to appreciate how critical it is that blood products are available to our patients at any given time. Blood donor recruitment is an ongoing learning opportunity that undoubtedly continues to shape us into becoming more instinctive, empathetic and better physicians in the future. Together, we are Canada’s Lifeline. ■

The CFMS's first SCORA X-Change

Tracy Pham

CFMS National Officer of Reproductive and Sexual Health
University of Alberta, Class of 2021

IT WAS AN IDEA YEARS IN THE making: a CFMS SCORA X-Change. SCORA X-Change is a unilateral exchange program organized by the International Federation of Medical Students' Associations (IFMSA) Standing Committee on Sexual and Reproductive Health and Rights including HIV & AIDS (SCORA). Our work is centered around five key concepts:

- 1) sexuality and gender identity
- 2) maternal health and access to safe abortion
- 3) comprehensive sex education
- 4) HIV/AIDS and other STIs
- 5) gender-based violence

For years, Canadian medical students have travelled abroad to participate in an IFMSA SCORA X-Change, learning about their host country's perspectives on sexual and reproductive health in "X-Change" for their experiences with the healthcare system here in Canada. It was the sincerest wish of the CFMS's Global Health Program's Reproductive and Sexual Health (RSH) portfolio to have international medical students experience Canada for themselves.

"Medical students from across the globe had an opportunity to learn about the situation in Canada and compare it to their home countries."

2020 would be the year: the year the CFMS would hold its first ever SCORA X-Change. A nine-member organizing committee of Local Officers of Reproductive and Sexual Health (LORSHs) and previous Canadian SCORA X-Change attendees was created to turn this idea into a reality. The first ever CFMS SCORA X-Change would be a collaboration between three Canadian medical schools: University of Toronto, Western University and McMaster University. The exchange aimed to educate participants on the barriers to accessing reproductive and sexual health services among marginalized groups in Canada (including individuals from Indigenous, immigrant and/or low socio-economic status communities) and to improve participants' understanding of transgender healthcare and challenges to access in Canada. The planning committee submitted the proposal to IFMSA SCORA on January 31st, 2020. In February, it was announced that the CFMS had been accepted to host its first ever SCORA X-Change!

And then 2020 happened. As applications poured in, the COVID-19 global pandemic swiftly grounded all plans. The CFMS issued a statement discontinuing international exchanges. But the organizing committee was not discouraged; in fact, they decided that the first ever CFMS SCORA X-Change would also be the first *virtual* CFMS SCORA X-Change. Transitioning to a virtual format removed some of the previous limitations of distance and economic factors, meaning that the opportunity to participate was open to more international medical students than ever before. In total, there were over 250 international applicants to the exchange, nearly triple the number that applied to other SCORA X-Changes available at the time.

On July 22nd, 2020, 25 international medical students across the globe – from India to Brazil to Malaysia – witnessed, from the comfort of their own computer screens, what Canada had to offer in terms of reproductive and sexual health rights. Participants were treated with two talks on topics near and dear to the Canadian experience: the first, on transgender health, was delivered by Dr. Lacombe-Duncan and Yasmin Persad and the second, on Indigenous reproductive health, was delivered by Dr. Lisa Richardson. Participants were then placed into breakout rooms where they discussed what they had learned and compared their home countries' experiences in these areas. One participant reflected that "the area of Brazil where [they] live[d] ha[d] the highest proportion of Indigenous peoples, yet [they were] not taught about [Indigenous reproductive health] in school. [They were now] going to start learning more about these communities."

The first ever CFMS SCORA X-Change was a resounding success. Medical students from across the globe had an opportunity to learn about the situation in Canada and compare it to their home countries. But the CFMS has learned a thing or two from the experience as well. With the knowledge it acquired from hosting a virtual exchange, the CFMS RSH portfolio will be imparting that wisdom to other IFMSA national member organizations (NMOs) interested in doing the same. While the inaugural CFMS SCORA X-Change was virtual, it was also innovative, insightful and most importantly, uniquely Canadian.

For anyone keen on learning more or getting involved with a CFMS SCORA X-Change, contact norsh@cfms.org. ■

Remembering Mohammad

Krish Bilimoria

University of Toronto, Class of 2022

Calandra Li

University of Toronto, Class of 2023

Ushma Purohit

University of Toronto, Class of 2022

Reza Fakhraei

University of Toronto, Class of 2022

ON JANUARY 8, 2020, Mohammad Asadi-Lari, a second-year MD/PhD student at the University of Toronto (U of T), was killed when Ukraine International Airlines Flight 752 crashed outside Tehran, Iran. Over a year after his passing, we, his colleagues, are grateful that the CMA has posthumously honoured Mohammad with an award for his leadership and his tireless work to make the world a better place.

Mohammad went to great lengths to push forward initiatives across various areas of personal interest. He was one of the founders of the Canadian Association for Physician Innovators and Entrepreneurs (CAPIE), managed the STEM Fellowship initiative, and was involved in numerous youth-focused groups both prior to and during his time at U of T. We commonly joked that Mohammad had already achieved more than most of us would in our lifetimes.

Of particular note, Mohammad served as the Vice President of Global Health with U of T's Medical Society, where he advocated for international health, aid and equity. In this role, he was interested in completing a review of the state of global health curricula in MD programs across Canada. A group of students at U of T is continuing this work and expects to publish the review in the summer of 2021. Furthermore, he worked alongside U of T's MD Program to help develop and implement a Global Health Certificate program, which is currently in its first year and has enrolled about twenty Year 1 and 2 medical students.

Mohammad's contributions as a CFMS Global Health Liaison were unparalleled. He sought to build awareness around the practice of voluntourism at CFMS Global Health roundtables and was often critical of it, wanting to increase transparency on how admission committees viewed the practice. At the

Global Health Roundtables, Mohammad often initiated insightful discussion and offered innovative solutions. Although it was not part of his role, Mohammad supported the CFMS National Officer of Partnerships in identifying global health organizations that the CFMS could form meaningful partnerships with. There is little doubt that Mohammad was a very valuable member of the CFMS Global Health team.

As colleagues and friends of Mohammad, we are grateful that the CMA has awarded him for his contributions as a leader, innovator and advocate, and believe that he had much more to share with all of us. It is with great sadness that we cannot celebrate this award with Mohammad's presence, but as his colleagues, we are honoured to have been able to speak on our memories of Mohammad. We hope to keep his legacy alive and recognize just a small part of the larger vision he had for a better world.



PPE Portraits Canada – Sharing the smile behind your PPE

Rayoun Ramendra
University of Toronto, Class of 2024

Caroline Gregory
University of Toronto, Class of 2022

Anupa Jyoti Prashad
St. Michael's Hospital, Unity Health Toronto

Daamoon Ghahari
University of Toronto, Class of 2024

Kenneth Williams
University of Toronto, Class of 2023

James Sanayei
University of Toronto, Class of 2023

Lauriane Forest
University of Montreal, MSc Candidate

Fadi Touma
Concordia University, MSc Candidate

Adrian Goin
McGill University, BEng Candidate

Cynthia Ventrella
McGill University, MSc Candidate

Diana Di Iorio
McGill University, MSc Candidate

Jammy Zou
McGill University, BSc Candidate

Hui (Harriet) Yan
University of Ottawa, Class of 2024

Jason Tran
University of Ottawa, Class of 2023

Nuri Song
McMaster University, BHSc Candidate

Erin Artna
McMaster University, BHSc Candidate

Hannah Kim
McMaster University, BHSc Candidate

Alex Pozdnyakov
McMaster University, Class of 2021

Kayla Zhang
McMaster University, BHSc Candidate

Jessica Wang
University of British Columbia, Class of 2023

Megan Chan
University of British Columbia, Class of 2023

Sara Choi
University of British Columbia, Class of 2023

Simrin Dhillon
University of British Columbia, Class of 2024

James Taylor
University of British Columbia, Class of 2023

Emily Yang
University of British Columbia, Class of 2023

Adamo Anthony Donovan
McGill University, PhD Candidate

SOCIAL ISOLATION CAN BE an extremely distressing experience, especially for those seeking medical care. The Personal Protective Equipment (PPE) Portrait Project was created by Mary Beth Heffernan in response to the 2014-16 Ebola pandemic.¹ She noticed that the use of PPE created an alienating environment for patients already terrified by the high mortality rate of Ebola virus disease (EVD). In response, the PPE Portrait Project was created as a hybrid

art and medical intervention designed to improve patient care and team dynamics through warm and smiling headshots fixed to the outside of a healthcare worker's PPE.²

While PPE increases a healthcare professional's perceived competence, it reduces their perceived warmth for their patients. This consideration is crucial since a patient's perception of their healthcare provider's warmth and competence can affect their outcome.³ As such,

a PPE Portrait is a simple and cost-effective method to increase perceived warmth when healthcare professionals don PPE.

With the spread of SARS-CoV-2, there was widespread use of PPE in hospitals, rehab centres, and long-term care homes across the country. A group of students running an Intensive Care Unit volunteer program at four McGill University-affiliated hospitals reached out to Mary Beth Heffernan to bring this project to Montreal, QC.⁴ Due to the successes this initiative had in Montreal, it expanded to become a national project run by Canadian medical, graduate, and undergraduate students. Thus far, over 1,500 healthcare workers have received free PPE Portraits in Montreal, Ottawa, Toronto, Mississauga, Hamilton, Kelowna, Prince George, Vancouver, and Victoria (www.ppeportraits.ca).

Canadian healthcare professionals who wish to humanize their PPE with a portrait can request one via our 5-minute online sign-up: www.icubp.org/ppesCanada. Our team of volunteers across the country will then resize the smiling headshot, send the portraits for printing, and deliver the PPE Portrait to the healthcare worker's affiliated hospital. The portraits have been validated by Infection Prevention and Control (IPAC) Canada to be acceptable for daily disinfection with traditional hospital cleaning agents.



Anh Thy Le Quang, Kinesiologist & MSc candidate, Montreal General Hospital, QC

Overall, the portraits have been well received:

“I am very grateful for and happy with the portrait, especially as a psychiatrist working with anxious children who are uncomfortable with masks during the pandemic. I received many positive comments.”

- Dr. Helen Spenser, Psychiatrist, Ottawa, ON

“We need to wear face coverings to be socially responsible for some time to come, but we need not hide our humanity, and the PPE Portraits Project speaks to this crucial imperative.”

- Dr. David Hornstein, ICU Physician, Montreal, QC

“Since the beginning of the pandemic, so much has changed, and our patients no longer see our faces under the mask and goggles. When our Child Life specialist told us about this project, I was so excited! The kids not only see what I look like, but also that I am smiling under all of this. [It] gives a more human touch that was lacking since the pandemic started. I have gotten nothing but positive feedback from parents to colleagues!”

- Soo-Lin Ng, Pediatric Nurse, Montreal, QC

A recent study surveying 111 healthcare providers using PPE Portraits at the University of Massachusetts found that 89% thought it was a great idea, 79% found that it improved morale, and 72% found that it improved perception of team connection within the healthcare team.⁵ Outside of Canada, the PPE Portrait Project is active at several major healthcare centres including: Stanford University Medical Center (CA, USA), LAC+USC Medical Center (CA, USA), Massachusetts General Hospital (MA, USA), Boston Children’s Hospital (MA, USA), Tucson Medical Center (AZ, USA), and ELWA Hospital (Liberia).²



Toronto Team - Daamoon Ghahari (MD '24), James Sanayei (MD '23), Caroline Gregory (MD '22), Rayoun Ramendra (MD '24) (Left to Right)

Moving forward, widespread vaccination will hopefully limit the spread of SARS-CoV-2 and lead to the eventual reduction of PPE use in public settings. However, in healthcare, the use of PPE will persist especially when caring for patients with infectious diseases, immunocompromised individuals (in oncology and palliative care, for example), those undergoing surgery, and older adults. Thus, PPE Portraits will have a permanent role in the healthcare setting and should be incorporated as standard practice in medical education and PPE training for all healthcare professionals.

To learn more about this initiative, please visit www.ppeportraits.ca and/or contact us at info@ppeportraits.ca. ■

References

1. Brown-Johnson C, Vilendrer S, Heffernan MB, Winter S, Khong T, Reddy J et al. PPE Portraits - a Way to Humanize Personal Protective Equipment. *Journal of General Internal Medicine* 2020 May 14;35(7):2240-2242
2. www.ppeportraits.org
3. Howe LC, Goyer JB, Chrome AJ. Harnessing the Placebo Effect: Exploring the Influence of Physician Characteristics on Placebo Response. *Healthy Psychology* 2017 Nov 3;36(11):1074-1082
4. www.icubridgeprogram.org/
5. Reidy J, Brown-Johnson C, McCool N, Steadman S, Heffernan MB, Nagpal V. Provider Perceptions of a Humanizing Intervention for Healthcare Workers A Survey Study of PPE Portraits. *Journal of Pain and Symptom Management* 2020 Nov 5;60(5):7-10



Dr. James Brown, Anesthesiologist, BC Women’s Hospital, BC

Addressing racial inequities in the care of hematological patients: Swab The World McGill

Owen Dan Luo
McGill University, Class of 2023

Chloe Gordon
McGill University, Class of 2022

Emily Sarid
McGill University, Class of 2023

Mrityunjaya Arjun Alapakkam Govindarajan
McGill University, Class of 2023

Alice (Shiyang) Shen
McGill University, Class of 2023

Feriel Rahmani
McGill University, Class of 2022

Thalia Nguyen
McGill University, Class of 2024

Jennifer Merariu
McGill University, Class of 2024

Lilly Groszman
McGill University, Class of 2025

Elana Fogel
McGill University (Dentistry), Class of 2023

Tatiana Tuccinardi
McGill University (Dentistry), Class of 2023

Sophie Zhu
McGill University (Dentistry), Class of 2025

JUST ONE WEEK BEFORE Swab The World (STW) McGill's launching event, COVID-19 hit North America. This necessitated that the newly founded STW McGill club get creative. We turned on a dime to organize a virtual stem cell donor recruitment campaign integrated with features of our knowledge translation efforts, which would not have been possible prior to the pandemic.

As we all know, long-standing inequities have been brought into the lime-light this past year, from the murders of Ahmaud Arbery, Breonna Taylor and George Floyd to the deaths of Joyce Echaquan, and most recently Dr. Susan

“Hearing the story of a fellow student truly put into perspective the impact every single one of us can have by swabbing and thereby registering to become a stem cell donor.”

Moore. These tragedies and the movements they've galvanized, have exposed the gravity and prevalence of racism and racial disparities in our communities, and made us realize that our health systems are no exception.

Recognizing that racial inequities also exist in the care of patients with hematological diseases, a team of medical and dental students at McGill University decided to take action, founding the McGill chapter of STW. For many patients with blood cancers or blood-based diseases, stem cell transplantation represents hope and often, a second chance at life. However, the world's stem cell donor registry is 70% white, while 88% of the world is not. In Canada, only 15.2% of the registry is Asian, 1.4% is Black and 1% is First Nations.¹ This discrepancy makes it incredibly difficult for Black, Indigenous and People of Colour (BIPOC) to find suitable stem cell donors, since the precise genetic compatibility required between donor and recipient is most likely found between two people with the same ethnic and/or racial background. For patients in need of stem cell transplantation, finding a compatible donor in a timely fashion can be a matter of life or death.

Swab The World is a movement that originated from the experiences of its founder, Mai Duong, a Vietnamese patient battling leukemia in 2014. She was in search of a compatible stem cell donor amongst a registry severely lacking in Vietnamese representation. What started as a tragic story flourished into a

life-saving project. Mai and Christiane, the founders of STW, are using their advertising backgrounds to fuel change and build campaigns to find life-saving donors for patients in need of stem cell transplants.

Throughout the pandemic, STW McGill has successfully organized 7 virtual “Swab Talks,” reaching over 200 young adults. These evidence-based presentations raised awareness about the critical shortage of ethnically-diverse stem cell donors, and encouraged those who were interested to register as stem cell donors by ordering swab kits online. In addition to highlighting the importance of stem cell donation, the presentations walked through the donor experience from registration to donation in order to provide attendees with insight into what can be expected. The virtual mode of delivery broke down geographical limitations and enabled past stem cell donors and recipients alike from across Canada to join our talks and share their stories – demystifying misconceptions about the stem cell donation process and stimulating thought-provoking conversations with our attendees.

In October 2020, we partnered with the University of British Columbia (UBC) Blood for Life team to deliver a cross-provincial stem cell donor recruitment event. This “Swab Talk” featured Jessica Wang, a UBC medical student and stem cell donor. She shared a touching testimonial of her experience donating stem cells to her father, who had been diagnosed with leukemia. Hearing the

story of a fellow student truly put into perspective the impact every single one of us can have by swabbing and thereby registering to become a stem cell donor.

We also leaned into the power of social media and launched a TikTok presence to reach more young adults. We made our debut on September 19 for World Marrow Donor Day by creating our very own “Swab Dance” to celebrate and encourage people to register online with their respective stem cell donor registry.²

Now, more than ever, we must come together as Canadians to confront the

systemic inequities deeply rooted in our healthcare system. To begin the process of mitigating racial inequities among patients in need of stem cell transplants, all you need is a big heart and 10 minutes to register to become a stem cell donor. As stated on the STW Foundation website, “The world is a colourful place, we want to keep it that way.”

Anyone interested in becoming a stem cell donor or learning more about the process of registering, matching and donating, is encouraged to reach out to us at swabtheworldmcgill@gmail.com, or sign up for their stem cell registry at

<https://swabtheworld.com/en/become-a-donor>. Once registered online, check your mailbox for your swabbing kit, then simply swab your cheek and return the sample for free. ■

References

1. Swab The World. (2019). About us. Available from: <https://swabtheworld.com/en/>
2. @swabtheworld. (2020, Sep 19). “September 19th is @worldmarrowdonorday! Join the global stem cell registry and save lives!”, Tik Tok. Available from. <https://www.tiktok.com/@swabtheworld/video/6874268741228662017?fbclid=IwAR3Nw8lr-qgWk4z-ejRBy4UVUAvciU4mLrvxpUQMhCPIt9mBLqO-BIUHqfQI>.

Ride to Connect: a cycling fundraiser, awareness, and advocacy initiative

Mitchell Crozier
University of Ottawa, Class of 2022

Nathan Chiarlitti
University of Ottawa, Class of 2022

Francesco Fazzari
University of Ottawa, Class of 2022

Adriano Petrangelo
University of Ottawa, Class of 2022

Raphael Lessard
University of Ottawa, Class of 2022

Amy Yu
University of Ottawa, Class of 2022

Karine Riad
University of Ottawa, Class of 2022

Simon Pupulin
University of Ottawa, Class of 2022

Sonia Dancey
University of Ottawa, Class of 2023

Joelle Soriano
University of Ottawa, Class of 2022

Brendan Cotter
University of Ottawa, Class of 2022

IN LATE MAY, THE CANADIAN MILITARY WAS called to investigate living conditions in long-term care facilities. What the military described was appalling – cockroaches and insects in living centres, poor hygiene and support, and malnourished, forgotten residents calling out for help, unanswered. While these horror stories were drastic accounts of negligence and human disregard, COVID-19 has illuminated the chronic neglect of Canadian seniors. With expanding social restrictions and social distancing measures, social isolation is affecting our aging population now more than ever.

Technology has proven to be an effective tool to mitigate social isolation and loneliness by enhancing connectivity. We live in a digital era, where technology access and technological literacy are often taken for granted. Yet, a digital divide exists. Many seniors lack the access and/or skills to use technology, which consequently creates a barrier to opportunities for virtual connectivity and exacerbates feelings of isolation.

At the beginning of the COVID-19 pandemic, as necessary social distancing and quarantine measures were implemented, 11 medical students at the University of Ottawa recognized the vulnerability of Canadian seniors. We realized that it would be challenging for Canadians to connect with senior family members as restrictions were put in place. It was apparent that the pre-existing social isolation and loneliness faced by seniors would be exacerbated during this unprecedented time. The importance of supporting the social and emotional needs of seniors was underscored. We were motivated to take action to address this problem. Thus, we founded Ride to Connect (RTC) and held our first-ever campaign during the summer of 2020.

RTC is a cycling fundraiser, awareness, and advocacy initiative. The mission of RTC is to help combat social isolation and loneliness in Canadian seniors by providing technological access and training through united advocacy efforts. We have pursued our mission through collaboration with Connected Canadians and HelpAge Canada’s Seniors Can Connect! Program, two

established non-profit organizations promoting digital literacy amongst seniors by providing free technology access, training, and support. Additionally, we created an online platform to unite our community through cycling since we wanted this issue to be understood nationwide.

In our first-ever campaign, we eclipsed our original fundraising goal of \$15,000 by raising over \$53,000 for the Seniors Can Connect! Program. We raised funds from private donations, sales of our custom-designed cycling apparel and sponsorships from local businesses and corporations in Toronto, Ottawa, and Montreal. We organized fun cycling challenges, such as sponsored cycling rides, which helped promote community engagement and inspired hundreds of cyclists to ride for our cause. One hundred percent of all proceeds were donated to the Seniors Can Connect! Program to provide teaching and iPad access to seniors in long-term care homes or in isolated living situations in Toronto, Ottawa, and Montreal. The financial support had an immediate impact on helping the program empower seniors with technology access and training.

In an effort to raise awareness about our cause, we engaged our community through social media channels and our verified RTC Community Cycling Club, which was hosted virtually on the Strava fitness platform to maintain social distancing. Our social media channels collectively gained thousands of followers that were passionate about our cause. We were also fortunate to raise awareness via televised and radio news coverage through multiple media outlets, and through a national press release.

Over the course of our campaign, our RTC Community Cycling Club expanded to over 400 cyclists of all skill levels, from amateur riders to Canadian Olympians. We established a fun and inclusive cycling community that was inspired to cycle for our cause. While our initial goal was to collectively cycle 100,000 km from June 1st to August 31st, we more than doubled that goal by riding over 210,000 km during our campaign! We are thrilled that we have been able to foster community cohesion and inspire individuals to be physically active during the COVID-19 pandemic. The passion and enthusiasm from our RTC community has been incredible.

Following last summer's campaign, we are already planning our 2nd Annual RTC campaign, which will launch on June 1, 2021. To expand our reach and increase community engagement, we have recruited new RTC team members from medical schools across Canada. Our goals are to have RTC representatives at each medical school in Canada in order to increase community engagement and sponsorship, and to raise awareness about senior social isolation and loneliness nationwide.

The COVID-19 pandemic has cast a spotlight on the painful reality of social isolation and loneliness amongst Canadian seniors and this issue will not simply go away with reduced restrictions and reopening once officials deem it safe to do so. RTC will continue to advocate for Canadian seniors, the silent minority, and empower this population with technology access and literacy. It's time we closed the digital divide. ■



The PPE crisis in Northern Ontario from the perspective of student responders

Sarah Mavin

Northern Ontario School of Medicine, Class of 2021

Lily Racine-Bouchard

BSc, BPhEd, Laurentian University

Alannah MacLean

Northern Ontario School of Medicine, Class of 2022

THE NORTHERN ONTARIO PPE for HCP is an organization that NOSM students developed in March 2020 to help meet the PPE needs in Northern Ontario. Sarah Mavin and Alannah MacLean are cofounders of the initiative and Lily Racine-Bouchard is Director of Communications. They completed a series of interviews with various stakeholders and will later publish a documentary that highlights the unique strengths and challenges in addressing the PPE crisis. The questions that follow are collected from past media interviews and preview the types of questions and answers the documentary will address:

Q: How did you first learn about the PPE crisis in Northern Ontario?

Sarah: I can't recall exactly how I came to realize it was an issue at first, but my husband is an RN and was working in the ICU and so I was appreciative of the importance of having access to PPE. Shortly after Alannah and I started the campaign in late March, we were invited to be members of the North Regional Critical Supplies Table (Ontario Health) and were collaborating with the Northern representatives of the OMA regularly. Finding out that we were the only pan-Northern operation able to distribute donated PPE without any red tape was

enlightening to say the least. Realizing that we, a group of volunteers with no experience but good intentions, were collaborating with the government to address the crisis made it clear that everyone was in this together.

Q: How did you respond to the PPE crisis?

Alannah: Sarah and I met because the Ontario Medical Students Association (OMSA) put out a challenge to medical schools to collect PPE for their local hospitals. As NOSM students, Sarah is based out of the campus in Sudbury and I attend the Thunder Bay campus – 1,000 km away from each other. If we were going to address a shortage in PPE, we wanted to serve healthcare facilities across the entire region of Northern Ontario because we knew our rural hospitals and remote nursing stations were likely to suffer the most. We recruited 150 volunteers in a matter of weeks to cold call potential donors and to connect them to healthcare facilities in need of PPE. We fundraised to cover expenses related to shipping PPE and recruited 3D printers and volunteer sewers across the region to produce hand-made PPE. By plane, train, and automobile, we distributed donations of 33,000 disposable gloves, 13,000 N95s, 25,000 disposable masks, 4,200 cloth masks, 1,800 ear savers and 1,400 face shields to 155 healthcare facilities across Northern Ontario.



Q: What were the benefits of being a student- and volunteer-run organization? Weren't the government and private sector supplying PPE?

Sarah: Plainly, we didn't have any rules, policies, or red tape. We were as transparent as we could possibly be to both donors and recipients, and we made sure that our redistribution plan was grounded in ethical allocation of scarce resources. After that, we were able to collect and ship PPE across all of Northern Ontario quickly. As the leads, we made sure to always make ourselves available to all volunteers, donors, recipients, partners, and others, 24/7.

Q: Have you had any backlash on your media platforms from pockets of people who are second-guessing the validity and reality of the pandemic?

Lily: With Twitter, Facebook and Instagram, our amazing Communications team is busy! There have been a fair bit of negative posts, comments, and shares related to PPE usage and vaccinations. Realistically, there is a lack of accurate and trusted information on the internet, and it can certainly be overwhelming when trying to understand this pandemic and the virus. And let's be honest, virology



isn't a simple topic! The only thing we can do on our end is post educational content in the hopes of creating more awareness. We strive to be a resource hub for related topics by providing peer-reviewed information that is valid and reliable.

we have received. Thank you to everyone who follows us!

Q: Is the campaign still ongoing?

Alannah: Our campaign continues to be active for PPE donations in Northern Ontario based on need, but we are not operating on the same level of intensity that we were during the initial PPE shortages. We are currently working on a film project highlighting the perspective of healthcare facilities during the PPE crisis. ■

Q: Did you gain good traction through your social media platforms?

Lily: Social media has allowed us to reach so many people that have been important in the success of PPE for HCP – from volunteers reaching out to offer their support to good Samaritans with sewing machines who want to help out as they can! We have been contacted by donors down South looking to support their Northern neighbors, and other media activists that have helped with our exposure. We have been pleasantly surprised and overwhelmed by the support



The Stem Cell Club – supporting virtual stem cell donor recruitment during the COVID-19 pandemic

Michael Shao
University of British Columbia (Vancouver Fraser Medical Program), Class of 2020

Xiu Qing (Jenny) Wang
University of British Columbia (Vancouver Fraser Medical Program), Class of 2021

Valeriya Zaborska
University of British Columbia (Vancouver Fraser Medical Program), Class of 2021

Grace Zheng
University of British Columbia (Vancouver Fraser Medical Program), Class of 2022

Hayley Wroot
University of British Columbia (Vancouver Fraser Medical Program), Class of 2024

Alli Jussila
University of British Columbia (Island Medical Program), Class of 2022

Alyssa Zucchet
University of British Columbia (Southern Medical Program), Class of 2020

Maryam Yaqoob
University of Calgary, Class of 2020

Kristin Milloy
University of Calgary, Class of 2020

Amit Manocha
University of Calgary, Class of 2021

Helen Cai
University of Calgary, Class of 2021

Erin Degelman
University of Calgary, Class of 2022

Dylan Coupal
University of Saskatchewan (Regina Campus), Class of 2021

Kasey Berscheid
University of Saskatchewan (Saskatoon Campus), Class of 2022

Alexander Sharp
University of Manitoba, Class of 2021

Youstina Soliman
University of Manitoba, Class of 2022

Lisa Kim
University of Manitoba, Class of 2023

Mirna Ragheb
University of Manitoba, Class of 2023

Navjit Singh
University of Manitoba, Class of 2023

Kenneth Williams
University of Toronto (Toronto Campus), Class of 2023

Rupal Hatkar
University of Toronto (Toronto Campus), Class of 2023

Setti Belhouari
University of Toronto (Toronto Campus), Class of 2023

Shamini Vijaya Kumar
University of Toronto (Mississauga Campus), Class of 2023

Anna Lee
University of Toronto (Mississauga Campus), Class of 2024

Sally Lin
McMaster University (Hamilton Campus), Class of 2020

Ali Eshaghpour
McMaster University (Hamilton Campus), Class of 2021

Alexander Anagnostopoulos
McMaster University (Hamilton Campus), Class of 2021

Shannon Gui
McMaster University (Hamilton Campus), Class of 2021

Danielle Harris
McMaster University (Hamilton Campus), Class of 2022

Larissa Maini
McMaster University (Hamilton Campus), Class of 2022

Jared Cohen
McMaster University (Waterloo Campus), Class of 2020

Kyle Evans
McMaster University (Waterloo Campus), Class of 2020

Ethan Weiss
McMaster University (Waterloo Campus), Class of 2022

Kianna Chauvin
Western University (London Campus), Class of 2021

Neha Sharma
Western University (London Campus), Class of 2021

Lorenzo Saad
Western University (London Campus), Class of 2022

Donald Bastin
Western University (London Campus), Class of 2022

Matthew Fruhstuck
Western University (London Campus), Class of 2022

Kaveh Farrokhi
Western University (London Campus), Class of 2023

Victoria Sanderson
Western University (London Campus), Class of 2024

Raman-Deep Sambhi
Western University (Windsor Campus), Class of 2021

Michael Cameron
Western University (Windsor Campus), Class of 2021

Charlie Choi
Western University (Windsor Campus), Class of 2021

Fuad Chowdhury
Western University (Windsor Campus), Class of 2022

Cristina Andronic
University of Ottawa, Class of 2021

Esther Lee
University of Ottawa, Class of 2021

Gabrielle Haidar
University of Ottawa, Class of 2021

Rana Kandel
University of Ottawa, Class of 2021

Adrian Bailey
University of Ottawa, Class of 2022

Jade Choo-Foo
University of Ottawa, Class of 2022

Rachel Howlett
University of Ottawa, Class of 2022

Marina Atalla
University of Ottawa, Class of 2022

Aaron Rosenfeld
University of Ottawa, Class of 2023

Marissa Absi
University of Ottawa, Class of 2023

Lidia Avvakoumova
University of Ottawa, Class of 2023

Rahul Mor
University of Ottawa, Class of 2023

Gabriele Jagelaviciute
Queen's University, Class of 2024

Adriyan Hrycyshyn
Queen's University, Class of 2024

Romy Segall
Dalhousie University, Class of 2023

Warren Fingrut
Founder and Director, Stem Cell Club; Adult Bone Marrow Transplantation Fellow, Memorial Sloan Kettering Cancer Center, NY, USA

THE STEM CELL CLUB IS A student-run non-profit organization that works to recruit Canadians as stem cell/bone marrow donors.¹ We have been accredited through Canadian Blood Services, our community partner, to run our own stem cell donor recruitment drives. These are either in-person,² where we guide potential donors to provide informed consent and a tissue sample (cheek swab), or virtual, where we guide potential donors to sign up online, following which a swab kit is mailed to them. Transplant physicians search Canada's stem cell registry to find suitably matched donors for patients

who need a stem cell transplantation but do not have a fully matched related donor. Since 2011, Stem Cell Club has recruited over 20,000 potential stem cell donors (representing 4.5% of all donors in Canada's current donor database). Our recruitment strategy focuses on the most needed donors according to the literature: males and individuals from a diversity of ethnic backgrounds.^{3,4}

We have reported on our initiative in the past six issues of the *Annual Review*. In 2015, we outlined our initiative's launch at the University of British Columbia's medical school and subsequent expansion to all of its

distributed sites.⁵ In 2016, we reported our expansion to five medical campuses across Ontario.⁶ In 2017, we reported on the launch of chapters at two additional Ontario campuses, as well as at the University of Saskatchewan and the University of Manitoba.⁷ In 2018, we reported achieving a recruitment milestone of over 10,000 donors.⁸ In 2019, we reported on our expansion to the University of Calgary, as well as the development of a whiteboard video^{9,10} to support the education and recruitment of potential stem cell donors (available here: <https://youtu.be/V4fVBtxnWfM>).¹¹ In 2020, we reported launching a new

chapter at Dalhousie University, coordinating a major national campaign with coverage in major media outlets across Canada.^{12,13} We also launched “Why We Swab,” a library of stories in stem cell donation (facebook.com/WhyWeSwab/; instagram.com/whyweswab/; twitter.com/WhyWeSwab)¹⁴ from stem cell donors and recipients, patients searching for a match, and families and caregivers. This library was developed with support from CFMS Community Initiative Grant Funding, and now features over 90 posts from over 35 storytellers, with new stories published every week.

In this review, we report three main updates. First, Stem Cell Club ran a second major national campaign in February 2020, again securing coverage in major media outlets across Canada including *Toronto Sun*, *London Free Press*, *Victoria News*, *Waterloo Chronicle*, and *Sudbury Star*.¹⁵⁻¹⁹ Second, following the onset of the COVID-19 pandemic, Stem Cell Club chapters across Canada transitioned to supporting virtual stem cell donor recruitment. As part of this transition, teams began developing TikToks and other short multimedia to support recruitment efforts (examples include <https://bit.ly/2JxC9s0> and <https://bit.ly/3oOTYTr>). Third, Stem Cell Club has been working with Pride organizations across Canada to engage gay or bisexual men, as well as men who have sex with men (MSM), to register as stem cell donors through the development of this set of educational videos on stem cell donation (youtube.com/playlist?list=PL9prDkqE0rTCNjEdDzGLqvLprF5n5sQw) and through participation in Virtual Prides (calgarypride.ca/event/engaging-queer-men-to-become-stem-cell-donors/). MSM are eligible to donate stem cells if they are ages 17-35, in good general health, and willing to help anyone in need; however, many do not know of this eligibility due to the long history of barriers which have impacted their ability to donate blood. With support from the CFMS, Stem Cell Club has developed teaching materials on blood and stem cell donation for MSM in Canada, and has been leading workshops

for medical students across Canada to learn about this issue and how they can advocate for change to support a more equitable blood system.

Overall, our initiative provides medical students with experiential learning opportunities, honing their development across different CanMEDS roles. We empower students to become leaders in Canadian healthcare and health advocates for patients in need of stem cell transplants. We consolidate student communication skills to recruit registrants without compromising informed consent, and to sensitively and professionally redirect ineligible donors to help in other ways. Through targeted recruitment of the most needed donors, we guide students to be stewards of limited healthcare resources. We develop students’ quality control skill sets by instructing them to use our checklists and to maintain good documentation practices. At our drives, students act as scholars, teaching other students about stem cell science and the principles of stem cell donation. Medical students at each chapter of our club collaborate with each other and with students from other disciplines at their university to recruit donors. By tracking outcomes at every drive we run, we emphasize continuous quality improvement.

We invite medical students across Canada to partner with us at schools with existing chapters, and to establish new Stem Cell Club chapters where applicable (including at UAlberta, NOSM, and Memorial). We offer our support, guidance, and mentorship to any individuals or groups of students interested in starting their own stem cell clubs. We will connect you directly with Canadian Blood Services and work to accredit your group to run stem cell drives independently (either virtually or in-person when these drives resume). We can, together, dramatically increase the number of individuals we recruit to become stem cell donors, and save the lives of patients who cannot find a match. Interested students can email Dr. Warren Fingrut at wfingrut@alumni.ubc.ca to discuss next steps. ■

References:

1. Fingrut W, Parmar S, Cuperfain A, et al. The Stem Cell Club: a model for unrelated stem cell donor recruitment. *Transfusion*. 2017;57(12). doi:10.1111/trf.14327
2. Fingrut W, Messner H, Allan D. Targeted recruitment of optimal donors for unrelated hematopoietic cell transplantation: The Stem Cell Club process. *Hematol Oncol Stem Cell Ther*. 2020;In Press.
3. Fingrut W, Rikhraj K, Allan D. Targeted recruitment of male donors for allogeneic haematopoietic cell transplantation: A review of the evidence. *Vox Sang*. 2018;113(4). doi:10.1111/vox.12632
4. Fingrut W. The Need for Ethnically Diverse Stem Cell Donors. *UBCMJ*. 2015;7(1):44-47.
5. Fingrut W & Wang X. The UBC Stem Cell Club: strengthening Canada’s stem cell donor database. *CFMS Annual Review* 2015:23.
6. Cuperfain A, Tigert A, Welsh C, et al. The Stem Cell Club: Expansion to Medical Schools across Ontario. *CFMS Annual Review* 2016:20.
7. Parmar S, Rikhraj K, Hartsook S, et al. The Stem Cell Club – Spearheading Stem Cell Donor Recruitment at Medical Schools Across Canada. *CFMS Annual Review* 2017:39.
8. Wang X, Shao M, Parmar S, Rikhraj K, Zucchet A, Stuart M. The Stem Cell Club – Over 10,000 Stem Cell Donors Recruited at Campuses across Canada. *CFMS Annual Review* 2018:32.
9. Li EW, Lee A, Vaseghi-shanjani M, et al. Development and Evaluation of a Whiteboard Video to Support the Education and Recruitment of Unrelated Donors for Hematopoietic Stem Cell Transplantation. *Biol Blood Marrow Transplant*. 2020. doi:10.1016/j.bbmt.2019.12.690
10. Li EW, Lee A, Vaseghi-Shanjani M, et al. Multimedia resources to support the recruitment of committed hematopoietic stem cell donors: Perspectives of the most-needed donors. *Transfusion*. 2020;(August):1-12. doi:10.1111/trf.16186
11. Shao M, Zaborska V, Wang X, et al. The Stem Cell Club – Working together across Canada to support stem cell donor recruitment. *CFMS Annual Review* 2019:33-34.
12. Sismondo C. Stem cell donors wanted. Get Swabbed campaign coming to university campuses. *The Toronto Star*. November 2019.
13. Rivers H. Western University stem cell donor drive especially seeks ethnic groups. *The London Free Press*. November 2019.
14. Jagelaviciute G, Kum E, Williams K, et al. Why We Swab: Development and Evaluation of a Library of Stories in Stem Cell Donation to Support the Recruitment of Committed Unrelated Donors for Hematopoietic Stem Cell Transplantation. *American Society of Transplantation and Cell Therapy Meeting*. 2021.
15. Connor K. Working to build Canada’s network of stem cell donors. *Toronto Sun*. February 2020.
16. Snobelen J. “I can’t thank people enough”: Waterloo students swab up in search of stem cell donor for sick Windsor girl. *The Waterloo Chronicle*. February 2020.
17. Mehta S. Stem cell drive at UVic aims to find life-saving donors for patients in need. *Victoria News*. February 2020.
18. Bieman J. Toddler’s case proves patients must harness social media in quest for stem cell donors: Advocates. *The London Free Press*. February 2020.
19. Lappa J. Stem cell drive at Laurentian University. *The Sudbury Star*. March 2020.

2019-2020 CFMS Student Initiative Grants

EACH YEAR, THE CFMS ACCEPTS APPLICATIONS for CFMS Student Initiative Grants (SIGs). This program was established in 2007 in response to the increasing number of medical student-run initiatives and the need for official and financial support from our national student organization.

Many successful projects have benefitted from direct CFMS funding including charitable, educational, and social events organized by medical students. Please visit our website for more information: <https://www.cfms.org/what-we-do/finances/student-initiative-grants>

Projects granted funds in the SIG 2019–2020 application cycle

During the 2019–2020 SIG application cycle, CFMS received a total of 62 applications from 14 of our 15 member schools. After 2 rounds of marking, 12 student initiatives were selected. From coast to coast, here are some of those initiatives:

Coast Clinic

University of British Columbia Faculty of Medicine

We are preparing to launch a student-run clinic (SRC) in the Coast Mental Health Resource Centre, a facility that provides low-cost meals and social programs for vulnerable populations in downtown Vancouver. The SRC will integrate the existing social services with new healthcare services by providing basic health services in a supervised setting. This initiative will help fill gaps in the accessibility of healthcare as well as increase trust between marginalized individuals and the healthcare system. Participating in the clinic will also provide students with the opportunity to develop their advocacy and clinical skills while strengthening relationships with vulnerable patients.

Email: coastsrc@gmail.com

Facebook: www.facebook.com/Student-Community-Health-Initiative-100886185330334

MD Admissions Initiative for Diversity and Equity

University of Alberta Faculty of Medicine & Dentistry

MD AIDE is a student-led initiative at the University of Alberta Faculty of Medicine & Dentistry aimed at addressing the barriers to medical school admission. Given the need for greater social accountability and diversification within medicine, they collaborate with the faculty and community partners to support students applying to medical school who face financial barriers as well as those from Indigenous and other under-represented minority backgrounds. A dynamic initiative, MD AIDE is always collaborating and evolving to better advocate

for equitable, diverse, and inclusive medical education.

Email: mdaide@ualberta.ca

Facebook: <https://www.facebook.com/MDAIDE.ualberta>

Twitter: [@mdaide_ualberta](https://twitter.com/mdaide_ualberta)



Reach Accès Zhibbi Interprofessional Education Opening Session

Northern Ontario School of Medicine

RAZ Interprofessional Health Promotion is an organization that bridges the gap between health and social care students and persons living in vulnerable circumstances. The goal is to enhance the understanding of priority populations for the people who will become future providers in our health/social care system. Students from diverse disciplines (e.g. nursing, social work, medicine, radiation therapy, and health promotion) learn about interprofessional education competencies to engage in collaborative community-centred care through the development of health promotion workshops.

MP-MD Apprenticeship

McMaster University Medical School

Given the impact of policy on health – especially in this time of COVID-19 – it is ever more crucial for the medical community to have an insider voice in politics. Enter the MP-MD Apprenticeship. We aim to help medical students learn the behind-the-scenes of policymaking through apprenticeships and policy collaborations with their local political representatives.

Email: MPMDapprenticeship@gmail.com

Facebook: [@MPMD.Apprenticeship](https://www.facebook.com/MPMD.Apprenticeship)

Twitter: [@MPMD_Apprentice](https://twitter.com/MPMD_Apprentice)

Website: <https://mpmdapprenticeship.ca>



DDxed, a tool to shape the differential diagnosis for medical students

McGill University Faculty of Medicine

Building a comprehensive differential diagnosis is challenging, especially for unfamiliar cases in a world where every patient is different. DDxed is a tool that aims to help generate a full differential diagnosis. It aims to aid the clinician in thinking outside the box. It aims to help students learn clinical

thinking skills and also aims to help answer the question: what do I do next so that the patient can have a good outcome? At the heart of things, DDxed makes the complexities of medicine easier to understand when lives are at stake.
 Website: <https://ddxed.com>, email: info@ddxed.com



3D Printing Clinical Creative Space Dalhousie Medicine

The 3D Printing Clinical Creative Space is an initiative started at Dalhousie Medical School to provide an opportunity for medical students, residents, and physicians to engage with 3D printing and additive manufacturing tools to facilitate clinical innovation. Whether creating medical models for educational purposes or prototyping medical devices, the Clinical

Creative Space is dedicated to helping provide access and support for medical students and professionals to develop their solutions.

Website: clinicalcreative.com
 (currently under construction)



Her Health: A Women's Health Program for Refugee and Immigrant Women of St John's, NL Memorial University of Newfoundland Faculty of Medicine

Her Health is a student-run women's health initiative at Memorial University of Newfoundland's Faculty of Medicine, which aims to improve access to health information among immigrant and refugee women living in St. John's and surrounding areas. To achieve this goal, our program offers a series of in-person group information sessions focused on a variety of women's health-related topics to newcomer women in our community. ■

CFMS COVID-19 Community Care Initiative Grants

AFTER BUDGET CHANGES due to COVID, CFMS was able to reallocate some funds. Up to \$10,000 was made available for CFMS member Med Socs to apply to in order to support community care initiatives to support Canadians during the COVID-19 pandemic response.

The following information comes from reports sent to CFMS by some of these initiatives.

Contact Tracing Alberta

Medical students from UofA were able to increase the contact tracing workforce in Alberta ten-fold and their work helped flatten the curve in the province. Contact tracing included a number of learning opportunities for students to better understand Communicable Disease Control in Public Health and the Pandemic Response.

UBC Medical Student Response Team

The UBC COVID-19 Medical Student Response Team (MSRT) initiated 5 projects:

Bag Half-Full

Students provide grocery delivery service for older adults, immunocompromised individuals, and those self-isolating due to COVID-19.

Homemade PPE Initiative

Students create and deliver cloth masks to those who have socio-economic barriers to social distancing.

Physician Support

Students drive or transit to provide physician and nursing support. Support activities included child care, pet care, meal drop-offs, errands, and prescription pick-ups.

PPE Recovery

Students involved collect PPE from community sources and transport them

to healthcare shipping and receiving sites.

Prescription Delivery for Vulnerable Seniors

Students travel to deliver prescriptions to vulnerable seniors at four sites in BC.

Whohascoronavirus.com site for tracking

McGill University

The site was one of the earliest trackers developed and the only one with a clinical lens. It can be modified to track the five most deadly diseases in a clean and simple fashion. The website was visited thousands of times. Numerous donations to support the project were received.

Keeping Six Street Outreach

McMaster University

Keeping Six initiated a street outreach program. This involved a set of volunteers and peer workers travelling around Hamilton core in small groups of two to

three to deliver food, harm reduction supplies, and camping gear to folks in need. Due to the transition of medical education to an online platform, many medical students signed up to support K6 in this effort.

KHealth

Queen's University

KHealth is Kingston's first inter-professional student group where students work together to improve the health and well-being of the local community. They launched the Student-run Community Support Program (SCSP), which involves partnering a student from the Faculty of Health Sciences with an elderly person and/or a member of a vulnerable population and assisting them during the COVID-19 pandemic.

Other initiatives supported by the CFMS COVID-19 Community Care Initiative Grant:

- Creation and distribution of hand sanitizer for non-AHS essential services (UofA/UofC)
- Donnez La Protection (McGill)
- Feed Ontario Fundraiser Organizers (UofO)
- London-Middlesex PPE Initiative (UWO)
- McMaster PPE (McMaster)
- MLHU (Middlesex-London Health Unit) COVID-19 Contact Tracing (UWO)
- NeverAlone Chat Line/Website (McGill)
- Ottawa Medical Students for Healthcare Providers (UofO)
- PPE for Health Care Professionals Northern Ontario (NOSM)

- Student - Senior Isolation Prevention Partnership, Ottawa Chapter (UofO)
- Students for Emergency Childcare (UWO)
- University of Toronto Medical Society Community Initiatives: *COVID-19 Central, Training Masks, Toronto Sews, Stitch4Corona, Coronavirus Education for Kids, 3D PPE GTHA* (UofT)
- Virtual Teddy Bear Clinics (McMaster) ■



Staying connected and staying safe: how the enTECH Computer Club breaks down barriers to using tech

Raza Haider
BSc Candidate

Venus Ho
BA Candidate

Trung Tram
BA, BSc

Colin Whaley
McMaster University, Class of 2023

USING TECHNOLOGY CAN BE intimidating for some folks. The fear of breaking or damaging a device can be a real impediment for one to get comfortable using a cell phone or tablet, for example. Some older adults may avoid using technology altogether, even though they are tools that may be useful to them. For these individuals, having someone guide them step-by-step can be helpful in reducing their anxiety and discomfort around technology use. In 2015, during their undergraduate studies at the University of Waterloo, Dr. Peter Hoang and Colin Whaley founded the enTECH Computer Club. The objective was to harness the potential of university students to help older adults feel more comfortable using technology.

enTECH is a student-run club where volunteers provide one-on-one help sessions to older adults to support them in reaching their technology goals. Before the pandemic, enTECH volunteers would visit a long-term care home in the Waterloo Region to assist the residents with their technology concerns. However, COVID-19 has drastically changed the club's operations. Dynamic weekly programming came to a complete standstill during lockdown. As the demand for technical support increased with more and more activities becoming virtual, we launched a new program called "enTECH@home" to remotely support community members with technology issues. Our pivot to enTECH@home allows community members of all

ages, wherever they are located, to get free tutorials, tech advice and a listening ear to help them reach their technology goals. We aim to get the individual to a comfort level where they are able to connect with their friends and family, access resources online and overall, adapt to our even-more-virtual world using devices they already own. The service is free of charge and there are no costs associated with running the club, since the program is completely run by volunteers using free services like Google Drive to manage emails and an intake form, Fongo to make free phone calls, and HubSpot to manage client information.

We're humbled that a number of clients have allowed us to share their stories. At first, Sandra was very hesitant to use technology. All of her friends were texting and doing things on their phones and computers, while she had no idea what any of it meant. She was nervous to use her phone because she thought a steep learning curve was involved. However, after working weekly with a volunteer, she feels more confident in trying new things and asking more questions to clarify her understanding. Sandra's transformation was night and day. She can now text and email, and even uses her phone to Google things she doesn't know!

Marie is another amazing success story. She was having difficulty creating a photobook because the program she had previously used had been discontinued. She thus had to use a new program, but wasn't able to get help from her usual resource due to

COVID restrictions. Once COVID-19 precautions were implemented, she lost all hope in creating a photobook. Marie was ecstatic when we were able to help her start the photobook and guide her through the new program's features. After working with enTECH@home for a month (so far), she is well on her way to finishing her photobook!

enTECH believes that young people have a responsibility to promote tech literacy among older adults. Improving tech literacy among the older population can be as simple as teaching your grandparents how to email or showing them how they can send a text message. If in a position to do so, we encourage young people to reach out to the older people in their lives to see if they need help adjusting to our new and highly digital world (in a socially distanced way, of course!) We also hope that communities can start implementing more initiatives like enTECH in order to improve tech literacy in older adults. We understand that the process of starting an initiative like enTECH can be confusing, so we have created a guide to allow other organizations to replicate our services elsewhere. These documents are available for free on our website (www.entech.club). Lastly, if you or anyone you know might benefit from a little tech support, feel free to direct them to our website or have them call us at 226-336-9684. ■

Protecting our frontline workers: COVID-19 PPE for HCPs

Isabel Shamsudeen
University of Ottawa, Class of 2021

Mehr Jain
University of Ottawa, Class of 2021

Kelsie Ou
University of Ottawa, Class of 2021

ON MARCH 11TH, 2020, THE World Health Organization (WHO) declared the COVID-19 outbreak a global pandemic.¹ One of the first issues identified was a personal protective equipment (PPE) shortage.² Due to the increasing volume of potential and confirmed cases of COVID-19, frontline healthcare professionals (HCPs) require more PPE (i.e. face masks, gowns, gloves, and N95 respirators) than they did prior to this pandemic, in order to protect themselves against COVID-19 and prevent its spread. WHO first highlighted this shortage in early February 2020² and subsequently released recommendations for the judicious use of PPE.³ WHO modelling from March 2020 projected that 89 million masks, 76 million examination gloves and 1 million goggles would be needed worldwide each month for the COVID-19 response – numbers that far exceeded global stocks at the time.¹ In Ottawa, as demand for PPE outstripped supply, many HCPs struggled to access PPE. HCPs at the Queensway Carleton Hospital made online pleas for PPE⁴ while masks were rationed at The Ottawa Hospital.⁵ We, a group of medical students at the University of Ottawa, were determined to help our colleagues on the frontlines, so we started a fundraising initiative called “COVID-19: PPE for HCPs.” Our aim was to raise money to purchase PPE for frontline HCPs in Ottawa from certified, international, non-governmental PPE suppliers. This endeavour came with a unique set of challenges, including establishing a route to raise the money, and finding and purchasing certified PPE during the widespread shortage while ensuring that we were not diverting supplies away from existing government approaches. It was also important that we distribute the acquired PPE to HCPs in an equitable manner.

On March 23rd, 2020, we launched a GoFundMe page to raise money and a Facebook page to promote our cause. We organized a group of over 35 student volunteers to promote the fundraiser by advertising to friends, family, and the medical community through multiple social media platforms such as Facebook, Instagram and Twitter. We also recruited local politicians and social media influencers to spread awareness about the initiative. We were able to secure CDC-certified PPE from a reputable manufacturer by collaborating with Dr. Chris Griffiths, a general surgery resident at McMaster University who was running his own fundraiser for PPE. He had connections with this manufacturer through his sister’s clothing company. Through this joint project, we accessed a PPE manufacturer that hospitals were not able to directly order from, since the manufacturer was not taking on new clients. Thus, we were able to secure a separate source of PPE for HCPs in Ottawa and surrounding communities without impacting the flow of government-directed supplies. We pooled the money we fundraised with that of Dr. Griffiths’s parent fundraiser and together, we made a bulk order of PPE from the manufacturer. A portion of the bulk order went towards the Ottawa “PPE for HCPs” fundraiser, proportional to the amount that we contributed. Throughout this project, we collaborated with the University of Ottawa Faculty of Medicine and The Ottawa Hospital to ensure all purchased supplies met industry standards and were distributed equitably within the community.

Thanks to our fantastic leadership team, dedicated volunteers, and the support and guidance of the University of Ottawa Faculty of Medicine, The Ottawa Hospital, and Dr. Chris Griffiths, over \$15,000 was raised towards the Ottawa “PPE for HCPs”

fundraiser in just two weeks. We also developed an instructional resource that was shared with other medical schools across Ontario to assist them with their own PPE fundraisers. University of Toronto medical students, for example, utilized this resource to kickstart their own fundraising endeavour, which ultimately raised over \$10,000 towards PPE for HCPs in Toronto.

Carrying out this fundraising initiative from beginning to end came with several challenges which, at times, seemed insurmountable for a small group of medical students. However, through collaboration, communication, and perseverance, we were able to overcome these obstacles to aid healthcare professionals in accessing much-needed PPE to protect themselves and ultimately limit the spread of COVID-19.

Although the fundraiser is now closed, you may visit our GoFundMe page for additional information: gf.me/u/xsggwh.

References:

1. WHO Director-General’s opening remarks at the media briefing on COVID-19 - 11 March 2020. The World Health Organization [Internet]. 2020 Mar 11 [cited 2020 Dec 27]; General-Director Speeches [about 3 screens]. Available from: <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19--11-march-2020>
2. WHO Director-General’s opening remarks at the media briefing on 2019 novel coronavirus - 7 February 2020. The World Health Organization [Internet]. 2020 Feb 7 [cited 2020 Dec 27]; General-Director Speeches [about 2 screens]. Available from: <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-2019-novel-coronavirus--7-february-2020>
3. World Health Organization. Rational use of personal protective equipment for coronavirus disease (COVID-19): interim guidance, 27 February 2020. World Health Organization; 2020.
4. Queensway Carleton Hospital staff make online plea for protective gear. City News [Internet]. 2020 Mar 26 [cited 2020 Dec 27]; Local News [about 2 screens]. Available from: <https://ottawa.citynews.ca/local-news/queensway-carleton-hospital-staff-make-online-plea-for-protective-gear-2201065>
5. Masks being rationed at The Ottawa Hospital. Ottawa Citizen [Internet]. 2020 Mar 26 [cited 2020 Dec 27]; Local News [about 2 screens]. Available from: <https://ottawacitizen.com/news/local-news/masks-and-other-protective-equipment-being-rationed-at-the-ottawa-hospital>

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Lessons learned from working in harm reduction during a pandemic

Rebecca Seliga
University of Ottawa, Class of 2022

OTTAWA INNER CITY HEALTH (OICH) is an organization that provides integrated health care and housing services to people who are chronically homeless. This past summer, during the COVID-19 pandemic, OICH hired several medical and nursing students to help the staff and personal support workers at its shelters and supportive housing units. I was fortunate enough to be one of these students. I spent most of my time working in a unit that combined the Managed Alcohol and Aging at Home Programs. The Managed Alcohol Program (MAP) aims to stabilize participants with alcohol use disorder by providing prescribed, measured “pours” of alcohol every hour for 15 hours a day. Here, I share some of the many lessons that I learned during my brief three months working in the MAP. This list is by no means exhaustive:

1. Check your privilege. People say this one so often that it has almost become a cliché, but I mean it quite literally. Once, I was helping someone on COVID isolation change after vomiting. This was the first time that I had ever been completely responsible for someone’s care. Nobody else was going into his room during this shift, and I realized that if I didn’t change this man, nobody else would. I asked him if he kept his clean shirts in the dresser beside the bed and he said no. I asked where he kept them then. He shrugged and told me that he didn’t have any other shirts at all. I felt pretty awful after that. Another time, a resident was telling me about how he wanted to go back to school. I replied that that was awesome and asked what it was that he wanted to study. He looked at me curiously and said, “No, high school.”

2. How to play crib. Crib is essentially a card game involving quick mental math and strategy to win points based on how you combine the cards in your hand. It’s really popular with the residents, and one late night, when there wasn’t much work left to do, I was invited to play. I quickly realized that it’s a lot harder than it looks, and still, I haven’t figured out how to win!

3. Cultural safety and the ability to express one’s culture really do influence a person’s health. This one I sort of already knew, since we’ve talked about it before in the occasional CBL (case-based learning) or SIM (society, the individual, and medicine) session. However, it’s definitely very different to re-learn it out of the classroom. One afternoon, I was working when a visiting family member walked up to my counter and dropped a bag of raw whale down on it. He asked me to give it to his uncle and promptly left. It turns out that the Inuit residents at this location would regularly sit together and share different cultural foods. In addition to sharing food, residents would also talk, argue, and joke with each other in Inuktitut. I later spoke to some residents about how they weren’t able to speak their language during their time in residential schools and how important it was to be able to speak it now. This brings me to my third point...

4. How to say “Thank you,” “You’re welcome,” “Good night,” and “How are you” in Inuktitut. *Nakurmiik, Ilaali, Unukut, Qanuipit*, respectively, or how I spelled these out in a note on my phone: “na-ku-meh,” “ee-lali,” “unu-coot,” and “can-weh-peh.”

5. A paternalistic approach is not the approach I want to take. Some of my coworkers had a paternalistic way of

approaching their job and their interactions with clients. These coworkers were argumentative not only with residents, but also with me. There were many occasions where I was told that, if a resident didn’t take their meds, shower, or change immediately, I was not to help them or spend time with them later on. With time, I learned what it was that I valued in providing care and how to stick by these values. Because I value shared decision-making, I wanted to preserve the right of residents to make their own choices – i.e. *when* to shower, *when* to change, and whether or not they even wanted their trazodone that evening. Of course, there were also coworkers who exemplified these values. I’ll always remember how much fun I had working with them.

6. Harm reduction is important and improves quality of life. Yes, the people in this program were still drinking; however, with their prescribed regular doses, there were very few times that someone was actually intoxicated. By providing a safe and controlled environment in which residents could drink, they no longer had to worry about how to get their next drink or where it would come from. I was told that one individual went from having over 300 interactions with emergency services in a year to just 3 after joining the MAP. Furthermore, these individuals could now be regularly followed by a healthcare team. There is no doubt that everyone engaged in the program is now both physically and mentally healthier than they were before. Most importantly, this summer taught me that no matter what field I end up in, I will definitely incorporate harm reduction and healthcare for people experiencing homelessness into my practice. ■

40% test positivity rate

Sara Wang

University of Manitoba, Class of 2022

ON NOVEMBER 20TH, I CAME home to the news that the 10-day COVID-19 test positivity rate in Steinbach was a staggering 40%. Steinbach is a town of just over 15,000 people around 1 hour southeast of Winnipeg, and I was there for my family medicine rotation. The day before I arrived, a COVID-19 outbreak had been declared at the regional hospital. For the next month, I caught a glimpse of what life was like behind the 40%.

During my first ER shift, I was immersed in an atmosphere of stress and fear as staff started to feel the strain of the outbreak. All patients are screened as red, orange, or green, meaning “confirmed COVID,” “COVID suspect” and “no COVID symptoms,” respectively. Although this labeling system works in theory, delays in testing led to many orange patients later becoming red once their test result came back, usually five days later. By that time, multiple health-care workers would have already cared for that patient with inappropriate PPE. As a medical student, I was mostly asked to see green patients, so I had a relatively normal ER shift. But listening to the

“During my first ER shift, I was immersed in an atmosphere of stress and fear as staff started to feel the strain of the outbreak.”

conversations around me, it was clear that this was only the beginning.

By my second shift, this was all but confirmed. Two weeks after the outbreak was declared, the ER was essentially full of COVID red patients. I saw one orange patient whose test result had not come back yet. Around me, nurses were exhausted. Through cracks in the curtains, I saw patients struggling to breathe on 70L of oxygen. The anesthesiologist was on his way to do yet another intubation. Coughing was part of the constant background noise. I repeatedly refreshed the ER status board to see who was coming – every single one was COVID red.

That weekend, a Hugs Over Masks rally was held in Steinbach. Crowds of people gathered to listen to anti-mask rhetoric with no regard for public health precautions. Honking trucks and cars lined up and blocked traffic down the main road for hours. I spotted signs that read, “Masks are child abuse,” “Freedom is essential,” and “This is not North Korea.” All this occurred just two blocks down from a hospital buckling under the pressure of COVID-19. In clinic the following week, many patients were saddened by all the negative publicity the town had received – most of the people who had participated in the rally were not from Steinbach.

I spent a lot of time in clinic doing virtual visits due to COVID-19 restrictions. This is where I saw the reaches of the pandemic extending far beyond the hospital. Many patients were calling about the overwhelming stress of caring for their children, now at home because of school and daycare closures. Other patients who worked at schools and daycares were asking for work notes to protect their families at home. It wasn't until I took a step back that I realized giving out more and more work notes to school staff would make

it difficult for schools to stay open and would ultimately exacerbate the childcare problem. How then do you advocate for both patients – parents and school staff – when their needs contradict each other? A patient who worked at a personal care home with an outbreak asked for a work note due to their underlying health conditions. Again, how do you advocate for this patient while also advocating for a health-care system desperately in need of personal care home staff?

A young family came in one afternoon for a well-baby visit. After asking the standard questions, I asked how they were doing and found out that the couple was struggling financially. They were unstably employed even before the pandemic, making them ineligible for CERB. Now that the mom was prepared to work after giving birth, very few places were hiring. The social support services they had previously relied on had since been cancelled. Due to concern for their parents' health, the couple was reluctant to have them help with childcare. Their first child had been taken away by Child and Family Services a few years ago. How do you tell them the same won't happen again?

One afternoon, I was with a doctor who had been practicing for many years at Steinbach Family Medical. At the end of the day, we talked about how COVID-19 was impacting the community. I saw him hold back tears as he talked about how difficult the last week had been for him. Multiple patients of his had died of COVID-19 – patients he'd known for so long, he thought of them as friends.

Every day, we see the numbers. That day, it was 40%. But there's more to this pandemic than the numbers. There are people behind these numbers and people that the numbers could never capture. And it's important that we see them too. ■

From saving lives to transforming lives: promoting health and medicine through community

Krish Bilimoria
University of Toronto, Class of 2022

Jennifer Zheng
University of Toronto, Class of 2022

WAKE UP. GO TO THE bathroom. Brush teeth. Prepare for the clinic or hospital. This routine is standard among trainee health care providers joining the next generation of doctors, nurses, and allied health professionals. The science of medicine is rigorously taught to us as we progress through medical school and residency. At the hospital, echocardiograms, endoscopies, and electroconvulsive therapies are done regularly and quite well for that matter. These technologies, among others, support the medical foundations of health. However, they recognize patients as passive subjects of medical intervention, not as people with a vibrant life outside of their anatomy and physiology. We believe promoting and maintaining the health of one's whole person requires students like us to expand our experiences beyond hospital walls and into the communities where our patients live.

The most profound encounter with a patient's non-medical life inside a hospital is during discharge. Preparing patients to leave usually involves a laundry list of rehabilitation sessions, tests, and follow-up appointments. While many patients with robust family, peer, and community supports have no trouble managing discharge expectations, others find it challenging. These patients are typically seen back in the hospital after a few days, weeks, or months. We saw one patient, for example, who had been admitted to the hospital five times over the past six months. Each return to the hospital was due to exacerbations of heart failure after their medications seemingly failed to work. Interestingly, in hospital, under the

prescribed medication dose, their heart failure was well managed. So, was this a problem of a "non-compliant patient"? Perhaps. However, after a protracted medical and social history, we came to realize that this patient had struggled to remember which medications to take. They lived alone in their home and rarely spoke to anyone – not by choice, but due to a lack of community. This isolation made it quite obvious why this patient continued to return to hospital with exacerbations of the same disease.

One way in which the dearth of social support has been addressed is through "social prescribing." This program, coordinated by the Alliance for Healthier Communities and implemented across 11 community health centres across Ontario, promotes purposeful connections between a patient and a trusted physician. During our visit to Rexdale Community Health Centre, we saw firsthand the importance of a trusted patient-physician relationship and the power and opportunity that relationship has to improve health. One of the patients who came in needed to be seen by a cardiologist but he had a plethora of social limitations that prevented him from attending this appointment at the hospital. Rather than discharge the patient and hope that they would somehow attend their appointment, the physician arranged transportation for the patient to go to the hospital as well as back to his own home. By acting beyond the traditional role of a physician, she was able to advocate for the patient and ensure that he received the health care he needed. Although this particular encounter may appear as a triumph in patient advocacy, it also highlights the limited

capacity of medical professionals to address the non-medical needs of patients. Once a patient leaves the confines of a medical practice, there is often little that physicians can do to ensure patients have the support they need to adhere to discharge directives and attend future appointments.

Having seen the social prescribing model firsthand, we realize how primary care spaces can address the social determinants of health and connect patients with community resources for more holistic care. Some ways we might be able to do this include: 1) early exposure to community services, 2) physician-led observational learning on social prescribing, and 3) changing perspectives of the role of community in medical training. Firstly, early exposure to community services would provide opportunities for medical students to have longitudinal experiences with community health centres and agencies. Secondly, clinical placements in settings where the social context of a patient is taken into account will challenge trainees to think beyond the traditional role of what being a physician means. Lastly, a shift in perspective is required – we need to recognize that the limitations of our current medical training also translate to limitations in the role of medical professionals and can ultimately lead to burnout.

Transforming the social circumstances of patients, while difficult, must be done in order to meaningfully improve the health and lives of people. Being preoccupied with prolonging life makes it easy for us to forget that for patients, it is often quality of life, not quantity, that makes life worth living. ■

Language barrier, hearing impairment, or acute subdural hematoma? Barriers to communication in medicine during COVID-19

Cindy Na-Young Kang

University of Toronto, Class of 2022

“85-YEAR-OLD WOMAN WITH a head injury – two posterior head lacerations, fall witnessed by patient’s son” was the brief description I read on the patient’s triage note prior to seeing her in the Emergency Department (ED). It was my second day of my Emergency Medicine rotation and I hadn’t yet examined a patient with a head injury. So during the ten minutes I had before seeing the patient, I went over the key “fall” history questions in my head – the mechanism of injury, events preceding and following the fall, any loss of consciousness and for how long, associated symptoms such as confusion, incontinence, nausea, vomiting, or changes in vision. I felt confident and prepared to assess this patient.

To my surprise, when I entered the patient’s room, she was alone and did not speak a word of English. No problem, I thought. I’ve used translational services on my previous rotations, and I could use one now. As I made my way to find an interpretation device, the nurse stopped me to tell me the patient’s son, who spoke English fluently, had given the EMS some information prior to the patient’s arrival that might be helpful. Unfortunately, he was not allowed to accompany her due to COVID-19 visitor restrictions. Luckily, his phone number was on the chart.

I called her son and put him on speaker phone next to the patient. It was only at this time I realized that the patient was also incredibly hard of hearing – another obstacle I wasn’t expecting. Again, no problem, I thought – just put the phone next to her ear. Unfortunately,

even with the phone on maximum volume and numerous repetitions of my questions through the son’s translation, it seemed near impossible to get any answers to my questions. At this time, I had to determine: was it the language barrier? Her hearing loss? Or true confusion and altered mental status caused by the head injury? I would let my physical exam guide me at this point.

After establishing stable vitals, I proceeded with the neurological exam. I started by assessing the patient’s extraocular movements. With her son still on the phone, I asked him to ask the patient to follow my finger with her eyes. After five attempts, the patient was unable to do so. She made the slightest movement with her eyes on upward gaze but nothing else. This was when **panic mode** set in. Was she unable to understand the directions due to the language barrier? Or could she not hear her son on the phone? Or was there a brain bleed impacting her abilities to do so? And did I just waste all this time when she should be going to the CT stat? I immediately stopped the exam and retrieved my staff supervisor. After another quick neurological exam, the patient was sent to the CT. The results? No bleed. It was the language barrier.

Don’t get me wrong, I think language barriers have always complicated healthcare, but now these effects are exaggerated and are especially challenging during COVID-19. Today, hospitals understandably enforce strict restrictions on visitors. Unfortunately, this makes it even more difficult for those patients who typically require and depend on third parties for physical, emotional, and logistical support

in the healthcare system. And this experience really hit close to home – I grew up in a household where English was the second language. I remember attending countless doctor’s appointments with my mom who required interpretation services and advocating on her behalf. From interpreting symptoms and findings, explaining treatments, and guiding my mom from one appointment to the next, I can’t imagine how difficult it would have been for her to go through these experiences alone.

Then, I thought to myself – is there a solution? To my knowledge, we’ve introduced translational services, such as mobile devices and iPads through which we can immediately connect to an interpreter who speaks the language of interest. Another option is to do as I did – rely on family or friends who can speak on the patient’s behalf. In non-urgent settings, I think these are incredibly reliable and resourceful tools to overcome language barriers. But what about less affluent healthcare settings with limited access to these devices? What about in emergent situations? What about patients, like the one I met, who have multiple comorbidities that can further complicate this barrier? And most importantly, what about during COVID-19, an already isolating time that can make patients feel even more alone in the healthcare system?

This list of questions goes on and on. Although this may be our new norm for a while, there has to be a better way – I just haven’t figured out what that is yet. ■

[Details changed to respect patient confidentiality]

Untitled

Kendra Zhang

Queen's University, Class of 2024

MORE AND MORE THESE days, I find myself moving to the edge of my bed where I can get a fuller view of the sky through my window. Although the only other thing I can see are the tops of trees, I can't help but hold my gaze outside, especially when the sky begins to darken. My favourite moments are when it rains or snows, and every droplet becomes briefly illuminated as it whizzes underneath streetlights. They bring movement to an otherwise placid view.

It's difficult not to think about the places I could be or the things I could be doing: delving into the culture of a country abroad or simply seeing classmates in a lecture hall. Reminding myself of what I do have is of utmost importance, but the feeling of stagnancy that has come to permeate multiple facets of life can still linger. The sense that time is wasting away has undoubtedly become a common one. Yet, as I rise

each morning to the monotony of experiencing life within four walls, there has been something new.

Every time I sit before my window, my view is coloured with slightly different hues. The clouds sometimes form wispy entities that float gently along in a breeze, and at other times, seem a somber monolith ready to engulf the vast sky. The setting sun casts shadows upon different corners of my bedroom, creating a slowly moving ray of moted dustlight; I feel myself shifting with its angle. Songs associated with memories played on repeat seem to take on novel tones. With too little time having suddenly become too much time, I find myself newly captured by nuance – of surroundings, self, past experiences, and hoped-for change. Life is, and always was, vibrant.

As much as the past year has taunted us with what we weren't able to become, it has also shown us what already exists

at our core. We often spend much time in anticipation of the future and the meaning it will bring, or perhaps in longing for the possible paths we could've taken. Yet, the gestalt of a million little choices and intricacies is what has led to the particular place in which we find ourselves right now and all that we have. The pandemic has forced us to reevaluate the lives we lead and perhaps become more aware of who we already are. And when the simple is what now fills up our days – a room suffused in sunlight, the brisk air of routine walks, a ceiling extending over our heads – they themselves begin to engender a sensation approaching awe. The pandemic has been difficult. Through it all, we continue to adapt and grow. We have not ceased being people who innately strive; we refuse to stop. ■

The impact of the COVID-19 pandemic on the mental health of healthcare professionals

Adam Chubbs Payne

University of Ottawa, Class of 2022

THE NOVEL CORONAVIRUS disease (COVID-19) is a severe respiratory disease that was first reported in Wuhan, Hubei, China in December 2019. Since then, COVID-19 has rapidly spread across the globe, leading to the declaration of a global pandemic in March 2020. The COVID-19 pandemic continues to be associated with high rates of morbidity and mortality.¹ In January 2021, the World Health Organization reported 92,983,900 confirmed cases of COVID-19 globally, most of which (77%) were in the Americas and Europe, and 2,009,781 COVID-19-related deaths.¹ The COVID-19 pandemic has placed a tremendous burden on healthcare systems and healthcare workers worldwide. As such, frontline healthcare workers are at an increased risk of physical and mental health consequences associated with the challenges of caring for patients with COVID-19.^{2,3} It is essential to mitigate the negative mental health consequences of COVID-19 on healthcare workers, to provide them with

“[...] it is no surprise that the mental health of healthcare professionals continues to be negatively impacted.”

support and resources and thus improve the quality of healthcare provided during the pandemic.

Given the nature of healthcare-related careers in combination with heightened healthcare demands during this pandemic, it is no surprise that the mental health of healthcare professionals continues to be negatively impacted. A recent literature review of 30 research articles on the impact of COVID-19 on mental health in healthcare providers reported an increased prevalence of anxiety (30–70%) and depressive symptoms (20–40%) as well as insomnia, burnout, emotional exhaustion, and somatic symptoms.² Similar findings were reiterated in numerous research studies investigating the mental health impacts of COVID-19 on healthcare professionals with the addition of distress,^{3,5} sleep problems,⁴ and post-traumatic stress disorder.⁶ Throughout this pandemic, healthcare providers have experienced the vicarious traumas of their patients, sometimes watching patients die without the support of their loved ones as a result of strict hospital protocols aimed at limiting the spread of the virus. In addition, many healthcare workers have had to quarantine away from their families and friends, leading to increased feelings of isolation and loneliness and reduced access to critical support systems.² Evidently, both vicarious trauma and isolation have negatively impacted the mental health of healthcare professionals throughout this pandemic.

While the negative impact of COVID-19 on the mental health of healthcare professionals is quite evident, it is important to note that not all individuals have been affected equally. Numerous factors such as COVID-19 exposures,

“[...] many healthcare workers have had to quarantine away from their families and friends, leading to increased feelings of isolation and loneliness [...]”

epidemiology, health policies, material resources, human resources, and personal factors, have been associated with the impact of COVID-19 on healthcare professionals' mental health.²⁻⁵ Healthcare workers with increased workload^{2,4} and exposure^{2,3} to the virus reported poorer mental health outcomes than those with less workload and less COVID-19 exposure. Emergency departments and ICUs have been previously recognized as stressful and taxing work environments and the current pandemic has only exacerbated these demands.^{3,6} Friends and family members of frontline workers have been infected and/or have died during the pandemic, with numerous frontline workers becoming infected themselves – leading to a reduction in workforce capacity, increased social and physical isolation as well as poor mental health consequences.^{2,6} Healthcare professionals working in countries with no recent epidemic outbursts reported more traumatic experiences than their counterparts in

“It is important to note that many healthcare professionals were ill-prepared for the demands of COVID-19.”

countries with recent epidemic experience (e.g. SARS in Canada).⁶ Limited access to personal protective equipment was also found to be associated with healthcare workers' increased fear of infecting themselves, their families, and/or patients.^{2,3,6} Moreover, several personal factors such as female sex,^{2,3,4} age,² access to social supports,^{2,5} personality traits,² pre-morbid mental conditions,² and low self-efficacy⁵ were found to be associated with poorer mental health outcomes for healthcare professionals during the COVID-19 pandemic.

It is important to note that many healthcare professionals were ill-prepared for the demands of COVID-19. Prior to the pandemic, healthcare workers received limited training on how to navigate the copious stressors and increased workload associated with a global pandemic. In order to mitigate the negative mental health implications of COVID-19 on healthcare workers, it is essential to recognize its impact on mental health and

acknowledge potential risk factors to best address the needs of healthcare providers and prepare for future global health crises. Currently, there is a mismatch between what healthcare workers require and the mental health services available to them.³ For instance, providing healthcare professionals with occupational protection, reduced workloads, and increased social support all helped lessen healthcare workers' physical and emotional exhaustion from the pandemic.^{2,4,6} Emerging data indicates that taking such a person-centered approach can reduce morbidity and mortality amongst healthcare workers³ and that healthcare workers preferred this approach to receiving professional psychological help.⁴ Debriefing and emotional ventilation have also been suggested as ways for healthcare professionals to express their emotions in a controlled and safe environment.⁶ It is fundamental to support healthcare workers during this challenging time, provide education on stress-management techniques, and invest in resources in research, prevention, and treatment to promote their mental health.⁶

It is the provision of organizational level supports and resources that will empower and equip healthcare providers to best address the increased mental health burden associated with the COVID-19 pandemic, allowing health professionals to care for themselves so that they can effectively provide care to others. Due to COVID-19, healthcare workers have experienced increased work hours, mental workload, and emotional suffering – resulting in increased stress and

emotional fatigue.⁶ Providing healthcare professionals with occupational protection, reduced workload, and numerous social supports is necessary to lessen the mental health implications of the pandemic on healthcare workers and improve their long-term mental health, especially since patients around the world rely on them so heavily.^{2,4,6} It is important to emphasize that physical distance is not synonymous with emotional distance and that, with the proper services in place, healthcare professionals can continue providing quality care during the COVID-19 pandemic without compromising their own mental health. ■

References:

1. World Health Organization. WHO coronavirus disease (COVID-19) dashboard. World Health Organization, Geneva, Switzerland. <https://covid19.who.int/>. Accessed. 2020 January;17.
2. Braquehais MD, Vargas-Cáceres S, Gómez-Durán E, Nieva G, Valero S, Casas M, Bruguera E. The impact of the COVID-19 pandemic on the mental health of healthcare professionals. *QJM: An International Journal of Medicine*. 2020 Sep;113(9):613-7.
3. Shaikat N, Ali DM, Razzak J. Physical and mental health impacts of COVID-19 on healthcare workers: A scoping review. *International Journal of Emergency Medicine*. 2020 Dec;13(1):1-8.
4. Muller RA, Stensland RS, van de Velde RS. The mental health impact of the covid-19 pandemic on healthcare workers, and interventions to help them: A rapid systematic review. *Psychiatry research*. 2020 Sep 1:113441.
5. Spoorthy MS, Pratapa SK, Mahant S. Mental health problems faced by healthcare workers due to the COVID-19 pandemic—A review. *Asian journal of psychiatry*. 2020 Jun 1;51:102119.
6. Blanco-Donoso LM, Moreno-Jiménez J, Gálvez-Herrer M, Moreno-Jiménez B, Garrosa E. Occupational psychosocial risks of health professionals in the face of the crisis produced by the COVID-19: From the identification of these risks to immediate action. *International Journal of Nursing Studies Advances*. 2020 May 16.

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Combatting COVID-19 myths in the South Asian community

Raumil Patel

University of Toronto, Class of 2023

Arjuna Maharaj

University of Toronto, Class of 2023

AT THE OUTSET OF THE COVID-19 pandemic, a great deal of uncertainty existed globally around the transmissibility and severity of SARS-CoV-2, and the preventative measures implemented. Unfortunately, amidst the paucity of scientific evidence and ambiguous messaging early in the pandemic, people were more susceptible to misinformation as they tried to protect their families and themselves. We realized that misinformation was a problem when family members started to share WhatsApp messages and videos with us that conveyed false information about COVID-19. Some examples include a video that explained how eating garlic, bathing in hot water, or taking traditional Ayurvedic medications could prevent COVID-19 infection. Although these messages had good intentions, it was clear that they were doing more harm than good by giving people a false sense of security and reassurance. Since these messages would come from loved ones or trusted community members, it was easy to believe them over the rapidly evolving guidance

from reputable health organizations and regional public health units. Another reason these false messages were easily propagated is that more effort is often needed to refute false claims than to produce them in the first place. The circulation of false information may have contributed, if only modestly, to the marginalization of the South Asian community, which has been disproportionately affected by COVID-19.¹

With the help of our colleagues, Jayneel Limbachia and Dr. Brij Karmur, we created infographics in Gujarati and Hindi to curb the spread of false information. These infographics addressed myths using information from the World Health Organization and were disseminated through various social media platforms, like WhatsApp. Our infographics were a tremendous success, and we received positive feedback from family, relatives, and friends who shared them within their networks. As the pandemic progressed and the South Asian community continued to be disproportionately affected, we were relieved to see the creation of the South Asian COVID Task Force – a group of physicians and healthcare professionals

hoping to make public health messaging more accessible to the South Asian community. We have started to collaborate with this group and have shared our infographics with them to expand our reach.

This experience has elucidated the value of culturally-tailored messaging. Our infographics were successful because they conveyed messages in a language familiar to the recipients and were therefore more understandable. It also helped that these messages were coming from people within the community, which highlights that it is critical to recruit community members to disseminate crucial public health information. Our work underscores the power of not only open and honest communication, but also the importance of trust in public health messaging. With this initiative, we saw the value of targeted and accessible public messaging in multi-ethnic populations. All the public health messaging in the world is futile if the target community members do not trust or understand the information. Moreover, from this experience, we learned how to use appropriate communication channels and harnessed the power of social media to reach a large audience. Evidently, there is a need to push for public health measures that educate the public on critically evaluating facts online. As medical students, this advocacy project has taught us the importance of trust and effective communication, and fostered a budding interest in South Asian health. ■



Infographic on garlic and COVID-19 in English



Infographic on garlic and COVID-19 in Gujarati

References

1. Khunti Kamlesh, Singh Awadhes Kumar, PareekManish, Hanif Wasim. Is ethnicity linked to incidence or outcomes of covid-19? BMJ 2020; 369 :m1548

Healing virtually: the medical response to COVID-19

Neel Mistry

University of Ottawa, Class of 2023

Paul Rooprai

University of Ottawa, Class of 2023

“For over seven thousand people to die while trying to save others is a crisis on a staggering scale.”

HEALTH CARE professionals (HCPs) have an inherent duty to treat patients. However, in saving the lives of others, their own health and well-being is often compromised. Since the initial outbreak, 1 in 5 HCPs in Canada has tested positive for COVID-19 and over a dozen have died.² While measures have been implemented to ensure the well-being of HCPs,³ an alternative approach – one that minimizes the risk of viral transmission – is needed. In this paper, we assess the use of telemedicine in primary care clinics and highlight the need for mandatory virtual care training for all Canadian medical students.

“Health care professionals (HCPs) have an inherent duty to treat patients. However, in saving the lives of others, their own health and well-being is often compromised.”

A call for action

Canada’s progress in telemedicine and virtual care has often lagged behind that of other countries. In 2015, telemedicine accounted for less than 1% of the 270 million billable services in Canada.⁴ Comparatively, 15% of all primary care consults in England were conducted over telephone or video conferencing.⁵ Although the use of virtual care has improved over the years, more work still needs to be done.

Telemedicine in clinical settings

Telemedicine refers to the use of technology to provide medical care over a long distance. For HCPs tasked with the dilemma of seeing patients with suspected COVID-19, telemedicine is an invaluable tool. It minimizes the need for in-person interactions, enabling patients to receive care in the comfort of their own homes. Patients no longer have to travel long distances, take time off work, or wait hours in a queue just to attend a 15-minute appointment. Telemedicine also encourages compassionate and patient-centered care since physicians get to know patients better in their natural environment. As such, preliminary stress and authoritative barriers that may arise in the clinic are eliminated. Virtual care leads to improved clinical outcomes among patients. In particular, using technology has been found to streamline outpatient visits, decrease wait times, reduce overcrowding in hospital emergency departments, and effectively triage individuals.⁶ Such a tool is invaluable at a time when close to 30% of physicians report COVID fatigue and 20% have suicidal thoughts.⁷ In the context of COVID-19, a move to virtual care not only minimizes the risk of viral transmission, it also

“Telemedicine provides patients with access to timely and effective treatment from the comfort of their own homes.”

saves valuable health care resources for those who need it most. In spite of these benefits, telemedicine has several limitations. A lack of trust in virtually receiving care is common, as is the fear among doctors of losing focus – due to multitasking – when interacting with patients. Although many hospitals and clinics have started to adopt telemedicine across the country, more work must be done.

Revisiting the clerkship curriculum

Medical education has faced a major challenge during COVID-19 with clerkship students being greatly affected. In March, core rotations for third-year medical students were abandoned. The return to clerkship has been marked by shortened rotations, rigid safety protocols, and lower patient volumes.⁸ To ensure that students develop the basic competencies needed to graduate on time, remote learning in the form of telemedicine can be implemented. Primarily, mandatory in-person lectures can be delivered in the form of self-learning modules to be completed on students’ own time. In addition, clerks can continue

“In the context of COVID-19, a move to virtual care not only minimizes the risk of viral transmission, it also saves valuable health care resources for those who need it most.”

to hone their clinical skills by sitting in during physician-patient consultations and rounding with the team, albeit virtually. As students from various cohorts are accommodated within a limited number of clinical placements, a virtual platform that allows for a greater number of trainees will be needed. With many aspects of medicine shifting to an online format, exposure to telemedicine in clerkship

may better prepare medical trainees for the future. The incorporation of telemedicine and virtual care aligns with the need to “diversify learning contexts,” one of 10 recommendations outlined by the Association of Faculties of Medicine of Canada (AFMC) in a report detailing the future of medical education in Canada.⁸

Conclusion

The COVID-19 pandemic has wreaked havoc worldwide. Health care providers, in particular, are at high risk of contracting the virus given the nature of their work. Therefore, it is imperative to establish a safer standard of care through the use of telemedicine and virtual care. Telemedicine provides patients with access to timely and effective treatment from the comfort of their own homes. For physicians, this means quicker patient consultations and a lesser degree of burn-out. In addition, exposure to telemedicine in clerkship will equip students with the required competencies to effectively serve the needs of their patients. The coronavirus is relentless. With no signs of resolving anytime soon, a shift to virtual care may be the primary step in tackling this crisis. ■

References

1. Global: Amnesty analysis reveals over 7,000 health workers have died from COVID-19. Amnesty International; 2020. Available from: <https://www.amnesty.org/en/latest/news/2020/09/amnesty-analysis-7000-health-workers-have-died-from-covid19/>
2. COVID-19 cases and deaths among health care workers in Canada. Canadian Institute for Health Information; 2020. Available from: <https://www.cihi.ca/en/covid-19-cases-and-deaths-among-health-care-workers-in-canada>
3. Health-care support workers need more PPE, access to rapid testing, union says. CBC News; 2020. Available from: <https://www.cbc.ca/news/canada/manitoba/health-care-support-workers-ppe-testing-covid19-1.5776665>
4. 2015 Canadian Telehealth Report. Canada's Health Informatics Association; 2015. Available from: <https://livecare.ca/sites/default/files/2015%20TeleHealth-Public-eBook-Final-10-9-15-secured.pdf>
5. Appointments in General Practice June 2019. NHS Digital; 2019. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/appointments-in-general-practice/june-2019>
6. Kalvapalle R. U of T physician builds virtual ER system, safer oxygen mask to protect front-line workers from COVID-19. University of Toronto; 2020. Available from: <https://www.utoronto.ca/news/u-t-physician-builds-virtual-er-system-safer-oxygen-mask-protect-front-line-workers-covid-19>
7. Virtual Care in Canada: Discussion Paper. Canadian Medical Association; 2019. Available from: https://www.cma.ca/sites/default/files/pdf/News/Virtual_Care_discussionpaper_v2EN.pdf
8. Association of Faculties of Medicine of Canada. The future of medical education in Canada (FMEC): a collective vision for MD education. Association of Faculties of Medicine of Canada (AFMC); 2010.

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COVID-19 and the value of human connection

Wesley Tin

Western University, Class of 2021

THE COVID-19 PANDEMIC HAS given me a new perspective on human connection and the importance of our relationships. It has separated us more than anything thus far in my life. By taking away physical links to friends and family and seeing the effects this had on patients in a clinical setting, it simultaneously taught me the importance of maintaining these connections and making them a priority. My view on the significance of close relationships has been forever changed by my COVID experience.

Throughout my life, I have always been a social person who enjoys interacting in different social circles. As I travelled two hours from home to London, Ontario for my studies, I did not truly appreciate the significant distance from my family. Even when my brother pursued further education in the United States, I never felt separated; if anything, I enjoyed the independence it offered me and rarely missed home. However, a combination of the pandemic and maturity has changed my perception of the relation between connectivity and wellness.

I still remember my brother calling and telling me to not go home to our parents because of COVID-19 and their age. The significance of the message was felt twofold. For one, I was used to a comfortable support system at home – any time I wanted, I could get in a car and drive home to my parents, home-cooked meals, and of course, cable TV. Now, that was gone. I also had never considered the mortality of my parents. They had been regular, active, and healthy adults. Suddenly, not only was I worried about their well-being, but spending time with them was the very thing that might endanger them even more. Finally, social distancing restrictions meant not seeing my other social supports – my friends. For the first

time in my life, I felt restricted and cut off. The anxiety of feeling alone and the guilt over not thinking of isolating from my parents in the first place were striking.

I was fortunate to be able to stay with my partner in London, but I kept thinking back to the feelings I had, how people experience them on a daily basis, and how they were especially experiencing them now. As outbreaks spread, I thought of long-term care residents who were undoubtedly anxious about their health and were also isolated from their families. My thoughts went to my late grandmother who had suffered from Alzheimer's disease, and how frightened and confused she would have been with these new changes and without familiar faces.

Inspired to make an impact, I looked for ways to contribute to the COVID-19 fight and to support the elderly, who were now isolated. I volunteered to help with contact tracing for the Middlesex London Health Unit. I also discovered an initiative connecting medical students with long-term care residents to participate in activities such as paint nights and musical performances. I dusted off my violin and played on several occasions for different homes, accompanied by humorous discussion of the weather and why I did not have more music to play for them. These proved to be exceptionally rewarding and I felt, at the very least, that I was providing a distraction from the constant unease now present in their lives.

The connections in my personal life also became a priority. My family began a weekly Zoom meeting and a monthly meeting with extended family, where I was introduced to distant relatives whom I had not even met in person yet. My friends and I adapted to the new state of affairs with regular virtual trivia and game nights. These events proved to be comforting and

“The anxiety of feeling alone and the guilt over not thinking of isolating from my parents in the first place were striking.”

allowed us to stay in-the-know of each other's lives, something that I had never appreciated before as much as I should have.

The pandemic has disrupted lives, businesses, and careers. It has separated us from one another and taken away crucial supports from those who need it. Hopefully, we can take some positives from the drastic changes it has imparted on us. Globally, businesses have been forced to use updated technology. From an environmental standpoint, there has been a push for less transit and waste. The speed of vaccine development has shown what can be accomplished with focussed personnel and resources. Personally, my experience through the pandemic has taught me to feel fortunate about my family's health, my access to a home, and the supportive friend groups I have around me. I have a newfound respect for the importance of visitors and familiar faces, especially in healthcare. The traditions and routines that my family and friends have developed to stay in touch with one another will be crucial as our lives become busier and we become more physically distant. COVID has forced me to develop a new appreciation for the value of human connection, which I am thankful for and will carry forward in my practice and personal life. ■

Discovering the visual language of COVID-19

Camilla Parpia
University of Toronto, Class of 2023

With mentorship and support from: Alia Dharamsi (MD, FRCPC). Dr. Dharamsi is a Staff Emergency Physician at the University Health Network in Toronto. She is a passionate simulationist with an interest in simulation-based quality improvement and knowledge translation. She is one of the co-authors of the COVID-19 simulation case described here. It is available free and open access at <https://emsimcases.com/2020/02/18/suspected-covid-19/>.

ON JANUARY 23, 2020, THE first case of COVID-19 was confirmed in Canada and subsequently, five COVID-19 rapid-cycle in-situ simulations (RCISS) took place at the University Health Network (UHN) to augment departmental preparedness and rapidly develop protocols. This novel program combined the iterative process of rapid-cycle simulation with quality improvement methodology to quickly create,

“As a first-year medical student, I joined the fight against COVID-19 by addressing this challenge in protocol dissemination through the development of infographics.”

IN-SITU PEARLS

ED PROTECTED CODE RESUS TEAM OVERVIEW

KEY PRINCIPLES	AIRWAY AND INTUBATION
<ol style="list-style-type: none"> 1 Team huddle and role assignment 2 Minimize the number of people in the room 3 All procedures done by the most experienced person 	<ol style="list-style-type: none"> 1 Avoid bagging, NIPPV, and nebulized solutions 2 Use paralyzing medications for and after intubation 3 Optimize first pass success for intubation → Consider VL

** NEGATIVE PRESSURE ROOM IF AVAILABLE OR ROOM WITH HEPA FILTER AND CLOSED DOORS **

RN ROLES (ROTATION)

- 1** CPR/LUCAS DEVICE
- 2** DRUGS

Communication to charting nurse outside

Extra RN added in room PRN

ARREST ROOM

GLASS

MD ROLES

- 1** AIRWAY MOST EXPERIENCED INTUBATOR
- 2** RUNNING CODE

SUPPORT STAFF OUTSIDE OF ROOM:

ROLES:

- RUNNER
- CHARTING AND COMMUNICATION

EQUIPMENT & ENVIRONMENT:

AIRWAY BOX (IN RESUS ROOM)

PRE-PACKAGED COVID EMERGENCY BOX

Outside each negative pressure room

2-WAY COMMUNICATION DEVICE

PPE:

SAFETY OFFICER

Coaching all donning and doffing

DONNING ORDER:

- 1** IMPERVIOUS GOWN
- 2** N95 MASK
- 3** FACE + NECK SHIELD
- 4** EXTENDED CUFF GLOVES

DOFFING ORDER:

- 1** EXTENDED CUFF GLOVES
- 2** IMPERVIOUS GOWN
- 3** FACE + NECK SHIELD
- 4** N95 MASK

GO SLOW

+

TAKE YOUR TIME

Created by: Camilla Parpia and Dr. Alia Dharamsi
Brought to you by UHN SimCom

“Infographics serve as a simple knowledge translation tool to convert a complex protocol into a consumable form for providers to use as they help patients.”

modify, and trial protocols, processes, and equipment. Feedback provided by healthcare provider participants after each session informed the next, cycling through solutions to improve communication, safety, and clinical care. The most important challenge to overcome was knowledge translation:

how do we quickly disseminate the protocols and solutions being developed to the 250 nurses and 80 physicians at the 2 hospital sites? How could we ensure there was a common understanding in resuscitations when seconds matter?

As a first-year medical student, I joined the fight against COVID-19 by addressing this challenge in protocol dissemination through the development of infographics. These infographics were developed as a pocket reference guide and wall poster that could be used in real-time resuscitations. Through collaboration with 10 healthcare providers, 18 versions of the graphic were revised and edited to be finally published within 2 weeks. I was able to translate the information gathered from the RCISS into a common visual language for all staff in the emergency department – one that brought the team together through mutual understanding.

The unique combination of colour, logical sequence, clear and succinct statements, and icons enabled healthcare providers to have access to the protocols they needed to abide by in a form that

was easily digestible. During resuscitation, where provider and patient safety concerns are omnipresent and a patient’s life is in danger, a quick glance at the infographics could provide guidance and clear next steps in care.

Infographics serve as a simple knowledge translation tool to convert a complex protocol into a consumable form for providers to use as they help patients. By combining the comprehensiveness of the RCISS and the accessibility of the infographics, healthcare providers could provide safe and up-to-date care to patients with confidence that they were doing their best for them. These infographics were disseminated to the greater medical community to help other teams prepare their departments. The visual language of infographics brings comfort and guidance and can act as the sword that healthcare providers need to fight the battle against COVID-19. ■

Oxford COVID-19 government response tracker

Dr. Henry Annan, CFMS President 2017-18
Chevening Scholar, Oxford University 2020-2021

Julia Sawatzky, National Officer of Global Health Education 2018-2019
Rhodes Scholar, Oxford University 2019-2021



THE OXFORD GOVERNMENT Response Tracker (OxGRT) is a database created and maintained by the Oxford University Blavatnik School

of Government. It tracks the policies that governments around the world are implementing to control COVID-19 outbreaks in their countries. This project is used in real time by policymakers and policy analysts worldwide to determine which government policies are most effective at curbing the COVID-19 pandemic. The OxGRT team includes Henry Annan (CFMS President 2017-2018) and Julia Sawatzky (University of Alberta Faculty of Medicine, Class of 2023) who are currently pursuing Master of Public Policy degrees at Oxford on Chevening and Rhodes scholarships, respectively. As part of their work examining COVID-19 policies in countries around the world, Julia

and Henry are also part of a smaller team that is looking at policy responses amongst Canadian provinces. “In many ways, CFMS taught me very early in my medical career that there are multiple avenues by which physicians can positively impact health outcomes,” Henry says. “It means a lot to be able to contribute to the fight against the pandemic in such a meaningful capacity, even though I am away from the frontlines of healthcare delivery. This work is already making a difference in many parts of the world and it is a real privilege to be a part of it.” ■

For more information, please visit <https://covidtracker.bsg.ox.ac.uk>.

COVID community virtual care team

Dr. Ashley Miller, CFMS VP Advocacy 2010-2011
Chief Medical Information Officer, Nova Scotia

THE EXPERIENCE OF COVID-19 in Nova Scotia has been influenced by a unique combination of luck, collectivist culture, social cohesion, geographic isolation, and significant innovation in health care and public health. Countless physicians have stepped up to lead the way on a “COVID zero” approach that includes aggressive and proactive public health measures, the creative use of rapid

asymptomatic testing, and leveraging virtual care not only to maintain access to critical health care services but also to address COVID-specific care needs.

The COVID Community Virtual Care Team (CCVCT) provides patients with 24/7 access to on-call physician support. Enrolment in CCVCT is offered to all patients with a positive COVID test. These patients receive a portable pulse oximeter at their home as well as access to

a home health monitoring app to support regular clinical self-monitoring. This self-monitoring helps to inform when patients require additional physician support and/or potential transfer to the hospital for enhanced care. The theory is that early detection of asymptomatic hypoxemia can prevent rapid deterioration, while a dedicated physician support helps to facilitate seamless transitions of care to mitigate the risk of COVID transmission in hospital.

This program is being actively evaluated under a grant through the Nova Scotia COVID-19 Research Coalition.

This pioneering program of care was developed by CFMS alumnus, Ashley Miller. Ashley is a general internist and has recently taken on the role of Chief Medical Information Officer (CMIO) for Nova Scotia. “My involvement in the CFMS was the most important and

formative experience in my career as a young physician leader,” Ashley says. “The dynamic and demanding nature of a CFMS executive role taught me to question how medical education and health care systems can evolve to better serve the needs of the patients we ultimately serve. I learned to navigate the complex challenge of pushing against sometimes antiquated power structures without

compromising my own legitimacy as a trusted representative within those organizations. Ultimately, I have witnessed significant positive transformation within our profession over the last decade in large part thanks to the progressive voice of the CFMS and partner organizations such as Resident Doctors of Canada at key decision-making tables.” ■

What Bonnie taught me

Dr. Jesse Kancir
CFMS President 2013–2014

FROM FEBRUARY TO APRIL 2020, I worked as a senior Public Health resident with Dr. Bonnie Henry, BC’s Provincial Health Officer, and assisted with the SARS-CoV-2 pandemic response. Months earlier, I had planned to be in the provincial capital during budget season in case budget announcements surfaced particularly interesting interactions between the political and public health aspects of the Health Portfolio. In that sense, I went to Victoria to seek out the action and landed squarely in the middle of it.

When I reflect on working with Dr. Henry, I count myself lucky during training to have had a preceptor who manifests empathy while still being an

astoundingly effective system leader. I’ll let experts write about her humility and crisis management, but it’s not a surprise to me that she’s been praised as one of the world’s most effective public health officials. Her soft- and slow-spoken daily public health outreaches have been instrumental to developing how I understand strength and leadership in this pandemic.

Another important lesson was on effective physician advocacy. The experience allowed me to work with doctors involved in all aspects of the response, including those advising the government response, those leading medical organizations, and those working the frontlines. There are many ways to engage in advocacy, and I saw the full-range:

from insiders and outsiders, the effective and ineffective, the helpful and the harmful. My own reflection is that many of the greatest advocacy impacts in this pandemic have been made by people who will never be recognized – their influence is not through social media but through relationships and efforts not on display.

We live in an age where it seems as if effective advocacy is measured in retweets and publicity. But if there’s anything that Bonnie taught me, it’s that tact matters as much as tactics, and that the most effective leadership and advocacy can be gentle, quiet, and humble. When it comes to having an impact, deciding to speak up is critical, but it’s not always your loudness that matters most. ■





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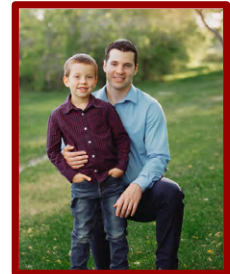
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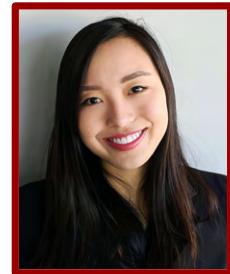
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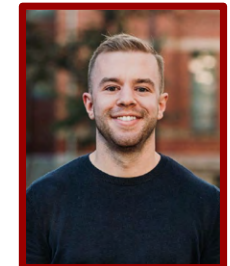
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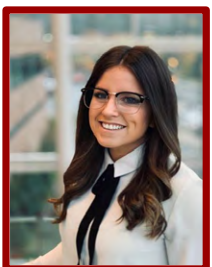
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CFMS Awards 2020

Congratulations to our CFMS Alumni for being awarded the 2020 CMA Leadership Awards! These individuals have demonstrated superb leadership and advocacy skills in various areas of engagement, including education, community service and initiative.

CMA Award for Young Leaders (Early Career)



Dr. Vanessa Poliquin

2006 CFMS Textbook Evaluation Committee

During her OB-GYN residency, Dr. Poliquin and her mentor were managing a patient whose water had broken prematurely. They wanted to prolong the patient's labour to protect her from infection. In their discussions, however, they realized how little training and information they had received on managing or treating infections in pregnant women. To address this knowledge gap, Dr. Poliquin collaborated with reproductive infectious disease experts in Canada to develop a training program at the University of Manitoba. Since then, she has been considered a leading expert in the field of reproductive infectious disease. She continues to bring awareness to physicians through educational material and the publication of national guidelines. During the pandemic, one of her objectives is to ensure that prenatal care providers have access to the most up-to-date evidence-informed guidelines on obstetric and gynecologic management.

www.cma.ca/cma-award-young-leaders-early-career-2020-recipient-dr-vanessa-poliquin



Dr. Naheed Dosani

2009 McMaster Medical Society President

In July 2014, Dr. Dosani launched the Palliative Education and Care for the Homeless (PEACH) program. During his final year of residency, he met a homeless man with terminal cancer. Together, they developed a pain management plan for the patient. Unfortunately, the next day, the patient died from a substance overdose. This experience left an impression on Dr. Dosani, who realized that there were equity gaps in palliative care access for the homeless and vulnerably housed. He started the PEACH program to provide palliative care services for marginalized individuals and address their emotional and psychosocial needs. PEACH delivers community-based, trauma-informed palliative care 24/7 at shelters and on the streets using a mobile unit. PEACH functions as a collaboration between palliative care providers, community care providers, housing agencies, and hospice volunteers among others. The program has expanded to several communities across Canada, and now includes the Healing Circles program as well as the Good Wishes program.

www.cma.ca/cma-award-young-leaders-early-career-2020-recipient-dr-naheed-dosani

CMA Award for Young Leaders (Residents)



Dr. Anthea Lafreniere

2015-16 CFMS President, 2014-15 VP Communications, 2013-14 Ontario Regional Representative

Dr. Anthea Lafreniere has always been intrigued by organizational leadership and advocacy work. Her leadership has spanned several years and multiple committees. She is the former president of CFMS and PARO. She has also served on the CMA, CaRMS and Resident Doctors of Canada (RDOC). Her advocacy work ensures equity and fairness for Ontario resident trainees. In fact, she helped negotiate the 2019 resident collective agreement.

She is also an advocate for patient empowerment. She and a fellow resident developed MyPathologyReport.ca to help patients read and understand their pathology reports. MyPathologyReport.ca has been widely integrated across Ontario into several electronic medical record systems.

After residency, she plans to complete a pediatric pathology fellowship but will also continue with organizational leadership.

www.cma.ca/cma-award-young-leaders-resident-2020-recipient-dr-anthea-lafreniere



Dr. Kimberley Williams

2013-14 Western Regional Representative, 2012-13 Director Global Health

Dr. Kimberley Williams is a neuropsychiatry fellow at the University of Calgary with an interest in global health equity and leadership. On a placement in Tanzania during her undergraduate medical education, she noticed that Mwanza Region had access to only one psychiatrist. Upon her return to Canada, she co-founded Kolabo to expand psychiatry training in Tanzania and improve mental health resources globally. The program is a collaboration with the Catholic University of Health and Allied Sciences Medical School in Tanzania to ensure cultural sensitivity and to meet the needs of Tanzanian medical students. Since its inception, the program has trained over 800 Tanzanian medical students and provided scholarships to 2 Tanzanian psychiatry trainees.

She has also embraced national leadership across several areas, serving on CMA, Resident Doctors of Canada (RDOC) and acting as chief resident at the University of Calgary. As RDOC president in 2016-2017, she championed the rights and well-being of residents and physicians. Her portfolio as a national leader includes helping to expand RDOC's resiliency curriculum and improving accommodations for medical trainees with a disability.

www.cma.ca/cma-award-young-leaders-resident-2020-recipient-dr-kimberly-williams

CMA Award for Young Leaders (Students)



Vivian Tsang

CFMS Health Promoting Learning Environment Task Force
University of British Columbia

Tsang is committed to protecting the rights of vulnerable and marginalized populations to fulfill the conviction that equitable health care access should be universal. As a 2018 intern with WHO, she directed her efforts at helping to prevent the spread of HIV and TB among health care workers in Zimbabwe and South Africa. In high school, she launched the non-profit Humanitarian Organization for Providing Empowerment (HOPE). Among other initiatives, HOPE provides peer mentorship for at-risk youth, sexual health hygiene workshops to women in the Downtown Eastside, and supplies to the homeless. HOPE works to identify and address the needs in the community through human connection, storytelling, and conversation. HOPE is internationally recognised and supported by the Clinton foundation.

Tsang attributes her success to hard work, long hours, and choosing the path of most resistance. She longs for a world where people are not afraid to challenge the status quo.

www.cma.ca/cma-award-young-leaders-student-2020-recipient-vivian-tsang



Niharika Shahi

CFMS/MDF Leadership Award Winner 2019
Northern Ontario School of Medicine

In her first year at the Northern Ontario School of Medicine, Shahi joined the Compass North Student-Led Health Outreach to provide services, like health promotion clinics, to underserved populations in Thunder Bay. The NOSM curriculum, however, seemed to provide little training on the management of opioid overdoses. Shahi thus spearheaded an initiative where Compass North collaborated with local needle exchange programs and provided workshops on administering naloxone. These workshops have since been delivered to the public.

She has used multiple leadership positions to advocate for her colleagues and underserved populations. As OMA's chair of Northern & Rural Medical Student Engagement, Shahi recognises the barriers that Northern and rural medical students face when trying to engage with initiatives and conferences. To address some of these geographic barriers, conferences and important talks are now live-streamed. Her advocacy work spans several areas, including the development of workshops for staff interacting with Indigenous youth with mental health challenges.

She plans to complete a Radiology residency in Hamilton after which time, she will return to serve her community.

www.cma.ca/cma-award-young-leaders-student-2020-recipient-niharika-shahi

Posthumous Singular Award of Merit



Mohammad Asadi-Lari
CFMS Global Health Liaison
University of Toronto

Mohammad Asadi-Lari is dearly remembered by the CFMS for his active role in the medical student community and for his contributions as a Global Health Liaison. His exceptional leadership, advocacy and entrepreneurship have warranted this posthumous honour. Asadi-Lari cofounded STEM fellowship, which provides mentorship and experiential learning to increase exposure of students to science, tech, math and engineering. There are more than 300 volunteers in 60 secondary schools and 22 universities.

Asadi-Lari was also passionate about innovation and entrepreneurship. He co-founded PI Canada, a network of physicians interested in innovation and health care transformation. He also moderated at national and international conferences and has been honoured with prestigious awards, like the Sandra Banner Student Award for Leadership and a Governor General's Bronze Medal. He believed in advocating for youth civic engagement, serving as youth advisor to the Canadian Commission for UNESCO and contributing to Canada's first youth policy. In recognition of his exemplary leadership, initiative, and commitment, Mohammad Asadi-Lari has been awarded the Posthumous Singular Award of Merit.

Mohammad's friends honour him in "Remembering Mohammad" (pg. 19).

www.cma.ca/posthumous-singular-award-merit

Dr. Howard Njoo: Reflections on COVID-19

Clara Osei-Yeboah
University of Toronto, Class of 2023



DR. HOWARD NJOO IS THE DEPUTY CHIEF Public Health Officer (DCPHO) and Interim Vice-President of the Infectious Disease Prevention and Control Branch at the Public Health Agency of Canada. He directly supports the CPHO in providing public health advice, speaking to Canadians and representing the Agency in a variety of domestic and international fora. Among other distinguished appointments, he is the current Designated International Health Regulations State Party Expert for Canada to the World Health Organization. He was also involved at the senior management level in the Government of Canada's response to the 2003 SARS and 2009 H1N1 outbreaks and has extensive international experience, including deployments to Haiti in 2010 and Guinea in 2015 for the Ebola Virus Disease outbreak.

Dr. Njoo earned his medical degree and a Master's in Health Science, specializing in community health and epidemiology, from the University of Toronto. He subsequently completed a fellowship and certification with the Royal College of Physicians and Surgeons of Canada in community medicine.

In our conversation, Dr. Njoo reflects on some of the lessons learned during the COVID-19 pandemic. We had our conversation via video chat on February 5, 2021.

How has your experience as Deputy CPHO, especially during the COVID-19 pandemic, impacted you? How do you manage the stress of being a leader during this time?

I don't think any of us, myself included, ever would have imagined that we would encounter or experience something like this during our lifetime. I've had a long public health career, but certainly something like this is unprecedented. For me, at the beginning, it was all new and exciting – you're talking to the Canadian population as a whole, giving public health advice based on the science and evidence available at that time. As the science evolved, so did our advice. Overall, most Canadians did their part and we were successful in addressing the first wave of the pandemic, but here we are now – second, possibly a third wave – and people are getting tired. With respect to health care workers, I've seen and heard the stories – the stress, not just on them, but on their families. There's the stress and strain of caring for patients. Sometimes, the healthcare worker is the last person the patient sees before they pass away. So the stress is wearing on lots of people, including myself.

I think the best thing is to remain connected. I think family and friends are the most important things to keep in mind. We all need social contact. Unfortunately, it's not possible at this time for it to be physical. But we can connect with family and friends throughout the world through other means such as video chats. Besides family and friends and good support, for me personally, it's all about trying to have a good balance of physical, mental, and emotional health. I try to exercise. I know it's hard to squeeze it in the day but I try to do a bit in the morning so at least I know I've done my exercise, and I feel good about myself for the rest of the day. So that's how I deal with the stress and hopefully that carries me through this winter. This is really our first full winter dealing with COVID-19 and it's been a struggle for everyone.

COVID-19 has exposed some of the health care inequities in Canada. How can we redress some of these inequities on a national level to improve the COVID-19 response?

We've seen it in terms of specific population groups, such as the elderly in our long-term care facilities, and I think everyone would agree that what has occurred in these settings is a national tragedy. But we also saw outbreaks among workers in meatpacking plants and temporary foreign workers coming to pick our fruit in the summer in the agricultural sector. Many of these essential workers have no choice – they don't have paid sick leave or the ability to work from home, and so they have to go out there without these types of protective measures that others have. In her CPHO report, Dr. Tam says that it's not just the health sector that needs to deal with COVID-19; rather, it has to be a multi-sectoral response. All levels of government are recognizing that no one sector or level of government can do it all on its own. In the public health world, we have this phrase – there's a difference between public health policy and healthy public policy. For healthy public policy, any time a potential policy goes through a government and its approval process, it is taken for granted that the Minister of Finance has to be involved for an economic impact analysis. I would say that we should also have it as standard practice to examine any potential public policy through a public health and health equity lens.

There's a higher COVID-19 death rate among older people living in long-term care facilities, especially in Ontario. What does this say about how we care for our older population?

It speaks to and reflects on how we view the elderly in our society. It's not just here in Ontario or Canada, but we should look around the world for examples of best practices in the care and treatment of the elderly. For example, we need to

address many issues related to long-term care facilities, including structural design. What's the balance between saving money and having, to the extent possible, single room accommodations with a separate sink and bathroom for individual residents? Even with COVID-19, you want to make sure that aspects such as HVAC are also considered in the design and function of long-term care facilities.

How we value the care and treatment of our seniors is also reflected in how we treat our caregivers in long-term care facilities. They are essential workers who, in general, do not have the same salary and benefits as many other types of workers in our society. Enhancement of infection and prevention protocols in long-term care facilities is another example of an area where lessons learned need to be applied.

There's a lack of race-based data collection on COVID-19. Some provinces and municipalities are starting to work on this. What are your thoughts on race-based data collection relating to COVID-19?

I think it's a double-edged sword. Information is power, so the key is how the data will be used. At the national level, or even at the provincial level, aggregate data is important to inform policy. Sometimes, race-based data may reinforce the idea that there are differences between "races" in terms of risk of disease. Depending on the disease in question, it is important to examine the potential factors for differences in incidence among various population groups. . . . What is the relative importance, if any, of genetic, behavioural, or environmental factors such as socioeconomic status?

It's true that, for certain diseases, there is a genetic component. However, in the case of COVID-19, it has been recognized to date that there is no genetic or racial predisposition. In Canada, there has been some race-based data collected on COVID-19 cases, such as for Indigenous Peoples. There has also been some data collected related to socioeconomic status.

For example, data has shown an increased incidence of cases in certain census tracts or certain neighborhoods which also have lower income levels or higher population densities. It is important to collect the data but equally important is how you analyze, interpret, and use the data (to inform policy).

The COVID-19 vaccine is currently being administered to at-risk populations and frontline workers. There is vaccine hesitancy among Black Canadians. What are some ways that leaders can address this issue?

There are multiple ways to address this issue. One general approach is to address the population as a whole. In the general population, there is a group that you might refer to as your “early adopters” – people who are really keen, already believe in vaccines and understand the science and the benefits of vaccination. You need to reinforce communication messages aimed at this group to maintain their vaccine confidence. On the other hand, you’ve got your hardcore anti-vaxxers who may not generally believe in mainstream science and may instead believe in alternative theories as to what vaccines do or don’t do. You’re never going to convince those people about the benefits of vaccination. Therefore, the key group to focus our public health efforts on is the “movable middle” – people who appreciate the science and know, in a general way, that vaccines are probably good for them. But they have some unanswered questions – what are the side effects? What are my chances of getting side effects compared to being protected? For those people, it’s important to give them the information that they need. The most trusted group of people that the general population will go to for answers is health care professionals. We need to make sure we provide the right information and tools to family physicians, for example, so that they are comfortable and feel empowered to be proactive with their patients, give them the right information, and be supportive of their patients’ informed decision-making.

Community leaders are also important. Everyone needs to acknowledge that there is a history and there are reasons why racialized communities such as Black Canadians might mistrust government and health care authorities. You need to engage with community leaders who are trusted people in the community. For example, we work closely with our colleagues in Indigenous Services Canada as well as with Indigenous physicians, leaders, and networks to support Indigenous communities with their vaccination efforts.

With evolving science, we’re constantly learning about COVID-19. As a decision-maker, how do you adapt to the newly-evolving challenges of COVID-19? How do you educate the public when there is still so much uncertainty about COVID-19?

Dr. Tam and I, along with our public health colleagues, are humble and transparent about the fact that we don’t necessarily have “all the answers.” We are always following the science and evidence that continue to evolve. When the pandemic started, many of us initially thought that the transmission dynamics of COVID-19 were similar to other respiratory infectious diseases, such as influenza. As the science and our knowledge continue to grow and evolve, so too have the recommendations including those related to the use of masks. One of the challenges is going out and translating this information in a way that the general public can understand so that they take the appropriate actions to protect themselves. And that’s part of the art of “risk communications.” As the science evolves, how do you actually translate it into terms that are understandable to the general population so that a specific recommendation will be accepted. Most Canadians believe in science and the scientific method. As the science evolves, it is important to show and clearly communicate the scientific evidence that underlies a specific measure or behaviour, especially when we know that these measures

or behaviours are effective in mitigating the transmission of the virus.

COVID-19 has exposed the shortcomings of our healthcare systems. What are some changes that will be sustainable in the “post”-pandemic era?

Hopefully, down the road, there will be enhancements and investments in our public health system as well as the health care system. One area that could be changed for the better is the linkages between data systems and IT platforms used in the laboratory, health care, and public health systems. The data needs to be collected, analyzed, and disseminated rapidly so that it can be useful (both at the local and national levels) to inform decisions and actions in a timely fashion. As a concrete example of something that could be improved, every province currently has its own way of managing immunization registries within its own health care system.

Another issue is the challenge in demonstrating the return for investment in prevention. For many people, it is difficult to make the connection between the investment of resources and the cases of a disease that consequently do not occur. In public health, we often refer to the U-shaped curve of concern. When the incidence or number of cases of a specific disease is high, there is a lot of interest and concern which leads to an investment of resources to decrease that incidence and number. Subsequently, when the investment pays off and the incidence or number of cases decreases, the concern, interest, and political will – more often than not – decrease as well. There is then a decrease in investment that results in an increase in incidence and number of cases. The cycle then repeats itself with interest and concern increasing once again. Hopefully, we can avoid that this time with COVID-19.

Beyond the new stringent infection prevention and control protocols in hospitals, which are likely to continue as we move forward, there are many examples of what may become new “norms.” For

example, when you go to the grocery store, the physical plexiglass barriers may continue to exist at checkout. Day-to-day habits such as wearing a mask when you leave your house (especially if you have a respiratory infection) as well as the frequent use of hand sanitizer and handwashing will become much more the norm as expected behaviours. One interesting consequence this winter is that the rates of diagnosed flu cases have gone way down, which is to be expected. All of the same measures to prevent COVID-19 would also decrease the risk of transmission of influenza. I would still recommend that everyone get their flu shot every year. However, the improvement in good personal infection and control practices has resulted in a decrease in the incidence of certain infectious diseases.

Canadians are experiencing COVID fatigue. There is still fear and uncertainty about this virus and how life has changed. What has this pandemic taught us about Canadian resilience?

There are different ways to deal with what might otherwise be an isolating and lonely experience. Having said that, we recognize that there are mental health stresses on everyone. There are lots of resources out there. In the past, people might have been ashamed or reticent about challenges with their mental well-being. People are recognizing more and more that it's extremely important to acknowledge and be open about mental well-being. It's important for us to realize that we need each other and we need to support one another.

Being Canadians, we're also tough. You don't live in Canada with our winter weather and not be tough! To endure our Canadian winters, I think there's a natural communal spirit that comes to the fore. For example, it's natural for many of us to look out for and help our neighbours – to make sure that if they're shut in, we help them get their groceries. If someone's stuck in their driveway with their car and can't get out, we help them shovel and push their car out. So I think that neighbourly spirit has always been there among Canadians, and it's only been reinforced by COVID-19 in terms of caremongering and communities getting together to help out their more vulnerable residents. . . . COVID-19 is just another thing that we will all eventually get through together. ■

Dr. Howard Njoo : réflexions sur la COVID-19

Clara Osei-Yeboah

Université de Toronto. Graduation prévue en 2023

Traduction révisée par le comité du bilinguisme de la FEMC



LE DR HOWARD NJOO EST SOUS-ADMINISTRATEUR en chef de la santé publique et vice-président intérimaire de la Direction générale de la prévention et du contrôle des maladies infectieuses à l'Agence de la santé publique du Canada. Il appuie directement l'ACSP en prodiguant des conseils en matière de santé publique, en s'adressant aux Canadiens et en représentant l'Agence lors de différents forums nationaux et internationaux. Parmi les nombreuses et distinguées nominations qu'il a reçues, notons qu'il est l'actuel expert désigné des réglementations de santé internationale pour le Canada auprès de l'Organisation mondiale de la santé. Il a également participé, au niveau de la haute direction, à la réponse du gouvernement du Canada aux flambées du SRAS en 2003 et de la grippe H1N1 en 2009 et possède une vaste expérience internationale, y compris des déploiements en Haïti en 2010 et en Guinée en 2015, lors de l'épidémie de maladie à virus Ebola.

Le Dr Njoo a obtenu son diplôme en médecine et une maîtrise en sciences de la santé, avec une spécialisation en santé communautaire et en épidémiologie, de l'Université de Toronto. Par la suite, il s'est vu octroyer une bourse et une certification de surspécialisation du Collège royal des médecins et chirurgiens du Canada en médecine communautaire.

Au cours de notre conversation, le Dr Njoo revient sur certaines des leçons tirées durant la pandémie de COVID-19. Notre entretien s'est déroulé le 5 février 2021 via vidéoclavardage.

Quel impact votre expérience à titre de chef adjoint de la santé publique, surtout pendant la pandémie de COVID-19, a-t-elle eu sur vous? Comment gérez-vous le stress lié au fait d'être un leader durant cette période?

Je pense qu'aucun d'entre nous, moi y compris, n'aurait pu imaginer que nous allions éprouver quelque chose comme ça de notre vivant. J'ai eu une longue carrière en santé publique, mais ceci est certainement sans précédent. Pour moi, au début, tout était nouveau et exaltant... vous parlez à l'ensemble de la population canadienne, vous donnez des conseils en santé publique fondés sur la science et les preuves scientifiques disponibles à l'époque. Au fur et à mesure que la science évoluait, nos conseils faisaient de même. Dans l'ensemble, la plupart des Canadiens ont fait leur part et nous avons réussi à faire face à la première vague de la pandémie, mais nous voici maintenant en présence d'une deuxième, peut-être même d'une troisième vague et les gens commencent à être fatigués. En ce qui concerne les travailleurs de la santé, j'ai vu et entendu leurs histoires, leur stress, non seulement pour eux-mêmes, mais pour leurs familles. Il y a le stress et la tension de s'occuper des patients. Parfois, le travailleur de la santé est la dernière personne que le patient voit avant de mourir. Donc, le stress épuise beaucoup de gens, y compris moi-même.

Je pense que la meilleure chose à faire est de rester connecté. Je crois que la famille et les amis sont les plus importants à garder à l'esprit. Nous avons tous besoin de contacts sociaux. Malheureusement, ces contacts ne peuvent pas être physiques pour le moment. Mais nous pouvons communiquer avec la famille et les amis à travers le monde par d'autres moyens tels que le vidéoclavardage. Outre la famille et les amis et un bon système de soutien, pour moi personnellement, l'important est d'essayer d'avoir un bon équilibre entre la santé physique, mentale et émotionnelle. J'essaie de faire de l'exercice. Je sais que c'est difficile d'intégrer l'exercice dans ma journée, mais j'essaie d'en faire

un peu le matin, donc au moins je me sens bien dans ma peau pour le reste de la journée. Voilà donc comment je fais face au stress et j'espère que cela me permettra de passer à travers l'hiver. C'est vraiment notre premier hiver complet où nous devons composer avec la COVID-19 et cela est un défi pour tout le monde.

La COVID-19 a révélé certaines des inégalités en matière de soins de santé au Canada. Comment pouvons-nous remédier à certaines de ces inégalités au plan national pour améliorer le plan d'action contre la COVID-19?

Nous avons vu ce phénomène dans certains groupes spécifiques de la population, comme les personnes âgées dans nos établissements de soins de longue durée, et je pense que tout le monde serait d'accord pour dire que ce qui s'est passé dans ces milieux est une tragédie nationale. Mais nous avons également vu des éclosions de cas chez les travailleurs des usines d'emballage de viande et chez les travailleurs étrangers temporaires venus cueillir nos fruits et légumes en été dans le secteur agricole. Bon nombre de ces travailleurs essentiels n'ont pas le choix, ils n'ont pas de congés de maladie payés ou la capacité de travailler de la maison, et ils doivent donc aller au boulot sans les types de mesures de protection dont bénéficient d'autres travailleurs. Dans son rapport de l'ACSP, la Dre Tam affirme que ce n'est pas seulement le secteur de la santé qui doit faire face à la COVID-19; il doit plutôt s'agir d'une réponse multisectorielle. Tous les niveaux de gouvernement reconnaissent qu'aucun secteur ou palier de gouvernement ne peut tout faire tout seul. Dans le monde de la santé publique, nous avons cette expression « il y a une différence entre les politiques de santé publique et les politiques publiques saines ». Pour une politique publique saine, chaque fois qu'une potentielle politique passe par un gouvernement et son processus d'approbation, il est tenu pour acquis que le ministre des Finances doit participer à une analyse d'impact

économique. Je dirais que nous devrions également avoir comme pratique courante d'examiner toute politique publique potentielle sous l'angle de la santé publique et de l'équité en matière de santé.

Le taux de mortalité de la COVID-19 est plus élevé chez les personnes âgées vivant dans des établissements de soins de longue durée, surtout en Ontario. Qu'est-ce que cela révèle sur notre façon de prendre soin de notre population âgée?

Cela explique et reflète la façon dont nous voyons les personnes âgées dans notre société. Ce n'est pas seulement ici en Ontario ou au Canada, mais nous devrions regarder autour du monde afin de trouver des exemples de pratiques exemplaires en matière de soins et du traitement des personnes âgées. Par exemple, nous devons nous pencher sur les nombreux problèmes présents dans les établissements de soins de longue durée, y compris la conception structurale. Quel est l'équilibre entre économiser de l'argent et avoir, dans la mesure du possible, un hébergement en chambre individuelle avec un évier et une salle de bain séparés pour les résidents individuels? Même avec la COVID-19, il faut s'assurer que des aspects tels que le CVC (chauffage, ventilation et climatisation) soit également pris en compte dans la conception et le fonctionnement des établissements de soins de longue durée.

La façon dont nous valorisons les soins et le traitement de nos aînés se reflète également dans la façon dont nous traitons le personnel soignant dans les établissements de soins de longue durée. Ce sont des travailleurs essentiels qui, en général, n'ont pas le même salaire et les mêmes avantages sociaux que beaucoup d'autres types de travailleurs dans notre société. L'amélioration des protocoles d'infection et de prévention dans les établissements de soins de longue durée est un autre exemple d'un domaine où les leçons apprises doivent être appliquées.

Il y a un manque de collecte de données fondées sur le groupe ethnique en matière de COVID-19. Certaines provinces et municipalités commencent à travailler là-dessus. Que pensez-vous de la collecte de données fondées sur le groupe ethnique en matière de COVID-19?

Je pense que c'est un couteau à double tranchant. L'information représente du pouvoir, donc la clé est de savoir comment les données seront utilisées. À l'échelle nationale, ou même au niveau provincial, les données agrégées sont très importantes pour orienter les politiques. Parfois, les données fondées sur le groupe ethnique peuvent renforcer l'idée qu'il existe des différences entre les «les groupes ethniques» en termes de risque de maladie. Dépendamment de la maladie en question, il est important d'examiner les facteurs pouvant potentiellement créer des incidences différentes entre les divers groupes de population. Quelle est l'importance relative, s'il y en a une, des facteurs génétiques, comportementaux ou environnementaux tels que le statut socioéconomique?

Pour certaines maladies, c'est vrai qu'il y a une composante génétique. Toutefois, dans le cas de la COVID-19, on reconnaît à ce jour qu'il n'existe pas de prédisposition génétique ou raciale. Au Canada, certaines données fondées sur le groupe ethnique ont été recueillies sur les cas de COVID-19, notamment sur les peuples autochtones. Certaines données ont également été recueillies sur le statut socioéconomique. Par exemple, les données ont montré une incidence accrue de cas dans certains secteurs de recensement ou quartiers qui ont également des niveaux de revenus inférieurs ou des densités plus élevées de population. Il est important de recueillir les données, mais c'est tout aussi important de savoir comment les analyser, les interpréter et les utiliser (pour éclairer les politiques).

Le vaccin pour la COVID-19 est actuellement administré aux populations à risque et aux

travailleurs de première ligne. Les Canadiens noirs hésitent à se faire vacciner. Comment les dirigeants pourraient-ils aborder cet enjeu?

Il existe de multiples façons d'aborder ce problème. Une approche générale consiste à s'adresser à l'ensemble de la population. Dans la population en général, il y a un groupe que vous pourriez désigner comme vos «convaincus initiaux», c'est-à-dire des gens qui sont vraiment enthousiastes quant au vaccin, qui croient déjà aux vaccins et qui comprennent la science et les avantages de la vaccination. Vous devez renforcer les messages à l'intention de ce groupe afin de maintenir leur confiance envers les vaccins. De l'autre côté, vous avez les antivaccins purs et durs qui généralement ne croient pas en la science traditionnelle, et peuvent plutôt croire en des théories alternatives sur ce que les vaccins font ou ne font pas. Vous n'allez jamais convaincre ces gens sur les avantages de la vaccination. Par conséquent, le groupe clé sur qui concentrer nos efforts de santé publique est le «centre orientable», c'est-à-dire les gens qui apprécient la science et savent, d'une manière générale, que les vaccins sont probablement bons pour eux. Mais ils ont quelques questions sans réponse : quels sont les effets secondaires? Quelles sont mes chances de souffrir d'effets secondaires versus mes chances d'être protégé? C'est important de donner à ces gens les informations dont ils ont besoin. Le groupe de personnes à qui la population générale fait le plus confiance et vers qui elle se tournera pour obtenir des réponses est constitué des professionnels de la santé. Nous devons nous assurer de fournir les bons renseignements et outils aux médecins de famille, par exemple, afin qu'ils soient à l'aise et qu'ils se sentent habilités à être proactifs avec leurs patients, à leur donner l'information exacte et à les appuyer dans leur processus de prise de décision afin que celle-ci en soit une éclairée.

Les leaders de la communauté sont également importants. Tout le monde doit reconnaître qu'il y a une histoire et

des raisons pour lesquels des communautés racialisées comme les Canadiens noirs pourraient se méfier du gouvernement et des autorités de soins de santé. Vous devez vous engager avec des leaders communautaires qui sont des gens de confiance auprès de la communauté. Par exemple, nous travaillons en étroite collaboration avec nos collègues de Services aux autochtones Canada ainsi qu'avec des médecins, des dirigeants et des réseaux autochtones pour appuyer ces communautés dans leurs efforts de vaccination.

Avec l'évolution de la science, nous apprenons constamment sur la COVID-19. En tant que décideur, comment vous adaptez-vous aux nouveaux défis de la COVID-19? Comment éduquer le public alors qu'il y a encore tant d'incertitude au sujet de la COVID-19?

La Dre Tam et moi-même, ainsi que nos collègues de la santé publique, sommes humbles et transparents quant au fait que nous n'avons pas nécessairement «toutes les réponses». Nous suivons toujours la science et les preuves qui continuent d'évoluer. Lorsque la pandémie a commencé, beaucoup d'entre nous ont d'abord pensé que la façon dont la COVID-19 se transmettait était similaire à d'autres maladies respiratoires infectieuses, comme la grippe. Au fur et à mesure que la science et nos connaissances continuent de croître et d'évoluer, les recommandations, y compris celles liées à l'utilisation de masques, ont suivi le même chemin. L'un des défis consiste à transmettre cette information de manière à ce que le grand public puisse comprendre afin qu'il prenne les mesures appropriées pour se protéger. Et cela fait partie de l'art de la «communication des risques». Au fur et à mesure que la science évolue, il faut se demander comment on peut la traduire en termes compréhensibles pour le grand public afin qu'une recommandation spécifique soit acceptée. La plupart des Canadiens croient à la science et à la méthode scientifique. Au fur et à mesure que la science évolue, il est

important de montrer et de communiquer clairement les preuves scientifiques qui sous-tendent une mesure ou un comportement spécifique, surtout lorsque nous savons que ces mesures ou comportements sont efficaces pour atténuer la transmission du virus.

La COVID-19 a mis en évidence les lacunes de nos systèmes de soins de santé. Quels sont les changements qui seront durables lors de l'ère post-pandémie?

J'espère qu'à l'avenir des améliorations et des investissements seront faits dans notre système de santé publique ainsi que dans le système de soins de santé. Un domaine qui pourrait être changé pour le mieux est les liens entre les systèmes de données et les plates-formes informatiques utilisées dans les laboratoires, dans les systèmes de soins de santé et le système de santé publique. Les données doivent être collectées, analysées et diffusées rapidement afin qu'elles puissent être utiles, tant au niveau local que national, pour prendre des décisions et poser des gestes en temps opportun. À titre d'exemple concret de quelque chose qui pourrait être amélioré, chaque province a actuellement sa propre façon de gérer les registres d'immunisation au sein de son propre système de soins de santé.

Un autre problème est la difficulté de démontrer un retour sur l'investissement en matière de prévention. Pour beaucoup de gens, il est difficile de faire le lien entre l'investissement des ressources et les cas d'une maladie qui, par conséquent, ne se produisent pas. En santé publique, nous nous référons souvent à la courbe de préoccupation en forme de U; lorsque l'incidence ou le nombre de cas d'une maladie particulière est élevé, il y a beaucoup d'intérêt et d'inquiétude chez les gens, ce qui mène à un investissement de ressources afin de réduire cette incidence et ce nombre. Par la suite, lorsque l'investissement porte fruit et que l'incidence ou le nombre de cas diminue, les préoccupations, les intérêts et la volonté politique, le plus souvent, diminuent

également. Il y a alors une diminution des investissements, ce qui entraîne une augmentation de l'incidence et du nombre de cas. Le cycle se répète alors et les inquiétudes augmentent une fois de plus. Espérons que nous pourrions éviter cela cette fois avec la COVID-19.

Au-delà des nouveaux protocoles rigoureux de prévention et de contrôle des infections dans les hôpitaux qui devraient se poursuivre à mesure que nous avançons, il existe de nombreux exemples de ce qui pourrait devenir de nouvelles «normes». Par exemple, lorsque vous allez à l'épicerie, les barrières physiques en plexiglas pourraient continuer à exister à la caisse. Les habitudes quotidiennes, comme le port d'un masque lorsque vous quittez votre maison (surtout si vous avez une infection respiratoire) ainsi que l'utilisation fréquente de désinfectant pour les mains et le lavage des mains deviendront des comportements normaux et attendus. Une conséquence intéressante remarquée cet hiver et qui était prévisible est que le nombre de cas de grippe diagnostiqués a diminué de façon importante. Toutes les mêmes mesures visant à prévenir la COVID-19 diminueraient également le risque de transmission de la grippe. Je recommanderais quand même que les gens se fassent vacciner contre la grippe chaque année. Cependant, l'amélioration des bonnes pratiques personnelles en matière d'infection et de contrôle a eu comme conséquence de diminuer l'incidence de certaines maladies infectieuses.

Les Canadiens éprouvent de la fatigue COVID. Il y a encore de la peur et de l'incertitude au sujet de ce virus et de la façon dont la vie a changé. Qu'est-ce que cette pandémie nous a appris au sujet de la résilience des Canadiens?

Il existe différentes façons de faire face à ce qui pourrait autrement être une expérience isolée et solitaire. Cela dit, nous reconnaissons que tout le monde vit du stress en matière de santé mentale. Beaucoup de ressources sont disponibles. Dans le passé, les gens avaient peut-être

honte ou éprouvaient de la réticence à relever des défis liés à leur bien-être mental. Les gens reconnaissent de plus en plus qu'il est extrêmement important de faire preuve d'ouverture face au bien-être mental. Il est important que nous réalisons que nous avons besoin les uns des autres et que nous devons nous soutenir mutuellement.

En tant que Canadiens, nous sommes aussi résilients. Vous ne pouvez pas vivre au Canada avec notre climat hivernal et ne pas être résilient! Pour supporter nos hivers canadiens, je pense qu'il y a un esprit communautaire naturel qui remonte à la surface. Par exemple, il est naturel pour beaucoup d'entre nous de veiller sur nos voisins et de les aider, de nous assurer que, s'ils sont enfermés à l'intérieur, de les aider à faire leurs courses. Si quelqu'un est coincé dans son entrée de garage et que sa voiture est prise dans la neige, nous les aidons à pelleter et à pousser leur voiture. Donc, je pense que l'esprit de voisinage a toujours été présent chez les Canadiens, et la COVID-19 n'a fait que renforcer cette philosophie en termes de réconfortisme et des communautés qui se réunissent pour aider leurs résidents les plus vulnérables. La COVID-19 est simplement une autre épreuve que nous finirons tous par traverser ensemble. ■



◀ **Therapeutic touch**

Watercolour

Megan Kerr
University of Toronto, Class of 2021



▲ **New reality**

Drawing, Digital Drawing

Amolpreet Toor
University of British Columbia
Class of 2024



▲ **The student and the screen**

Digital, with brushes from Procreate

Kathy Zhang, Western University, Class of 2024



▲ **Art of medicine**

Watercolour

Kay Wu
McMaster University, Class of 2022

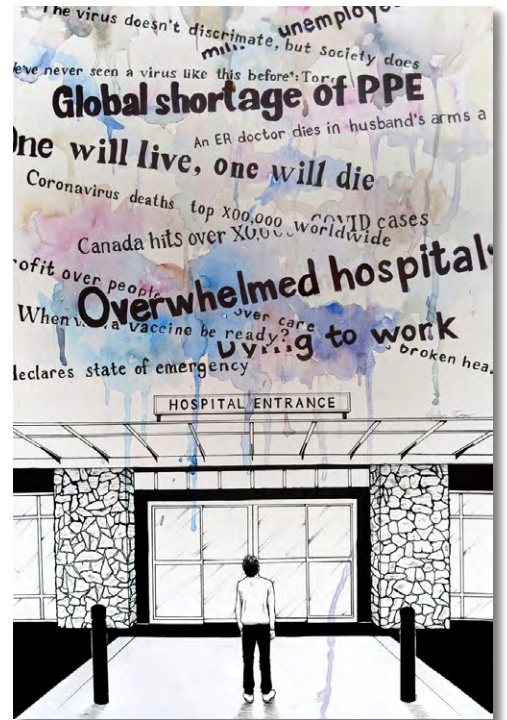


◀ A healthy heart

Watercolour

Kay Wu

McMaster University, Class of 2022



Sidelined ▶

Pen and watercolour on paper

Helen Tang

University of Saskatchewan

Class of 2021



▶ Growth

Adobe Illustrator and iPhone Camera

Kiera Liblik

Queen's University, Class of 2023

Solidarity ▶

Pen and watercolour on paper

Helen Tang

University of Saskatchewan, Class of 2021

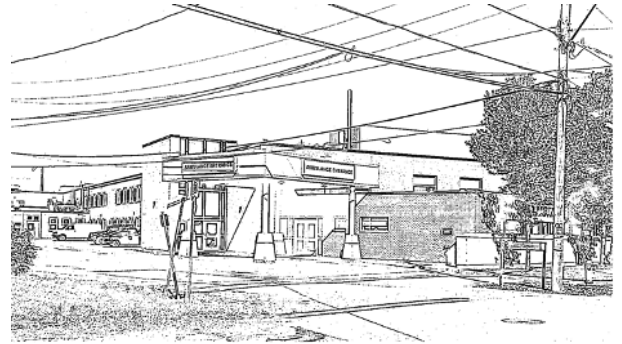


The town's elementary school

Shaima Kaka

University of Ottawa, Class of 2022

AFTERWARDS, WHEN WE SAT TOGETHER, STRANGERS TO THE local coffee shop they told me there was a certain symmetry in witnessing my first birth and death on the same day in climbing steps two at once arriving at the bedside just in time to study the features of a father's face the moment he becomes one then weakly holding only hours later, the calloused hand of a man whose widow at home stood clutching tightly at her phone. In all the rush I had forgotten to take notes. Perhaps there was humour in the way I had just yesterday mistaken that small pale brick building that would be teaching me life's two most valuable lessons at the age of twenty-two for the town's elementary school. ■



Autonomy, a love letter

Harper Perrin

University of British Columbia, Class of 2021

OLD FRIEND; I'VE MISSED you.
Our long awaited, hard won
friendship has taken a pause.
It feels only a moment
we've been together,
since learning you'd been
stolen away
my whole life.

Our time together calm
We reclaimed my body
We reclaimed my mind
We reclaimed my time.
Yet she has been taken away.

First: time.
Buying shreds of wellbeing with minutes
spent awake.
Trading meals for minute approval
Rigid expectations request rigid slates

Isolated, she knows no family
Isolated, she knows no counsellor
Her only friends those who share a
similar fate

Second: body.
Begin the rotting internal
Teeth to toes
she withers away.
Thirty pounds disgowned
She hunkers down,
Through tears she deserts thoughts of
thrive
Dormancy and monotony
She gorges on grey shadows
Surviving till tomorrow.

Third: mind.
External sterility to inner austerity
to absent individuality
To err solicits supplementary
dehumanization

Bitterness outdoes complacency
Efficiency outdoes joy
For an inhuman pace whose only
reason is:
Historic.

New's claim for joy crashes into old's
bitterness of duty.
Ensuing carnage asks each learner:

"Can you survive years without
autonomy,
And remember her name when you're
free?"

She is hope. ■

Touch of hands

Austin Lam

University of Toronto, Class of 2022

Maurice Merleau-Ponty: "Our body is not an object for an 'I think,' it is a grouping of lived-through meanings that moves towards its equilibrium."

MY HANDS
crack
explode with exudate
coloured in metallic gold and silver
swell from anticipation

The lines, the crevasses fill in
as the stream of molten goo slithers
through

I hold my hands
in horror
wondering why
No blood
No pain

My hands grow to become
jelly balloons
inviting to be consumed
like candy

Licorice fingers flit with my heart
they float, taking me into the air
over the hilltop, I rise

My hands take me to see
to see so much more than my eyes could
ever afford. ■

A personal topography

Sarah Klapman

McMaster University, Class of 2023

I CLEANED MY ROOM THIS
afternoon
Not sure whether prosaic
Or an act of fundamental optimism
Like, with time and a bit of control,
A cleaner window, a little breeze,
This too should pass.

Clothes stacked on the ground in a personal topography
Reading between the lines -
A shallow elevation
Of not getting around much anymore.

This is just it:
A paradoxical dilation, space over time -

Like, if I can grow this room,
Roll out these floors,
Widen this window,
Its edges will push back against the sun
that seems to shrink against the walls
The air that seems to hang against the
skin
The rolling-up of sidewalks as the edges
of the world recede like a hairline

I ask more of this space I'm in.

The shallow pile of clothes are put away
And play at elegance
As if, at any moment, I could dress
In silk and satin and saunter to the opera

Dark since March
Another wide open world, another horizon
narrowing

Another belt cinching the dress from the
floor
The one I wore last week - or yesterday?
tomorrow? - in the heavy sunshine that
crawled toward us like a tired old man
Ready for rest
Leaning against my fresh clean window
Leaving streaks the shape of handprints ■

Medicine is...

Emma Spence

Queen's University, Class of 2021

HOW OFTEN ARE WE
honest with ourselves,
How seldom in others we confide,
And yet the moment one is in a doctor's
office,
So suddenly there is nothing to hide.
The composure, the propriety or the
gusto,
Maintained for most of society,
Subsides to a supported vulnerability,
Simply because faced with an MD (or
their trainee).
Inherent promises of professional trust,
Confidentiality and healing potential,
Open verbal and physical floodgates,
The outrush of pains and fears
therapeutically torrential.

Sometimes, though, the room holds
much more muted,
Even the air, it seems, hangs laden,
Burdened with the heavy information,
Brought upon by a difficult conversation.
To share in these challenging moments,
To speak. To listen. Just to sit.

As world-upheaving or heartbreaking as
they may be,
To be seen as their ally is a gift.

As poetic as some of these instances,
Can be made to seem,
Medicine is chock-full of aspects,
That are simply just...well ugly!
From offenses to the senses,
To trauma patients traumatic just to see,
To struggling patients or family members,
In face of an exhausted care team.
As provoking as these experiences are,
Bright-eyed trainees get to step best-foot
first,
Because it's a healthcare worker's
prerogative,
To see, accept and care for people at their
worst.

Medicine places its workers,
So enrichingly at the forefront of science,
It gives an individual a position and a
voice,
That, when used thoughtfully, can make
poignant difference.

Not all humans have the beautiful
opportunity,
To actively, continually learn,
And for most a voice that is listened to,
Is not inherent through title but duly
earned.

So all this to answer,
A dually broad yet simple question,
My thoughts are warm when asked,
To you, what is Medicine?
To receive individuals,
In unique vulnerability,
To sit together in heartbreak,
Or witness them in moments that are
ugly.
To be given the gift of forever learning,
Lessons as numerous as the world is
populated,
To earn a voice with impact,
I suppose my meaning to Medicine has
consolidated.
From a day-one medical student,
To an MD of any vintage,
Each may have their own thoughts,
But to me, Medicine is: A Privilege. ■

clerkship, interrupted

Veronica Marie Stewart

McMaster University, Class of 2021

unprecedented times
i experience behind my screen
in the bedroom that holds the remains
of my childhood and its illusions.

I was there you know
not so long ago
weeks? months?
does it matter anymore
the convention of time
slowly unravelling.

how are you feeling now?
when did it start?
on a scale of 1 to 10
the pain or the panic
does anything make it better?

i looked back
this was the last time
the end of the before
the last night in the ER
did I know it then?

as i pushed through those doors
did i realize
how much of myself
i was leaving behind. ■

Untitled

Manu Kahlon

McMaster University, Class of 2021

G^{-U-A-C}, FOUR BASES
arranged with a changed pattern.
Similar to before, but not quite
the same. An evolving intricate dance
of the atomic elements. As the code
changes, so does the world. Traffic
stops, politicians fall, generations rise,
institutions collapse, and my electives are
cancelled. I change into scrubs just like
before, pausing to reflect before I don
my mask, my brown skin and curly hair
in the mirror's reflection. As I head to
the ER, I feel a familiar presence, neither
friend nor foe – change.

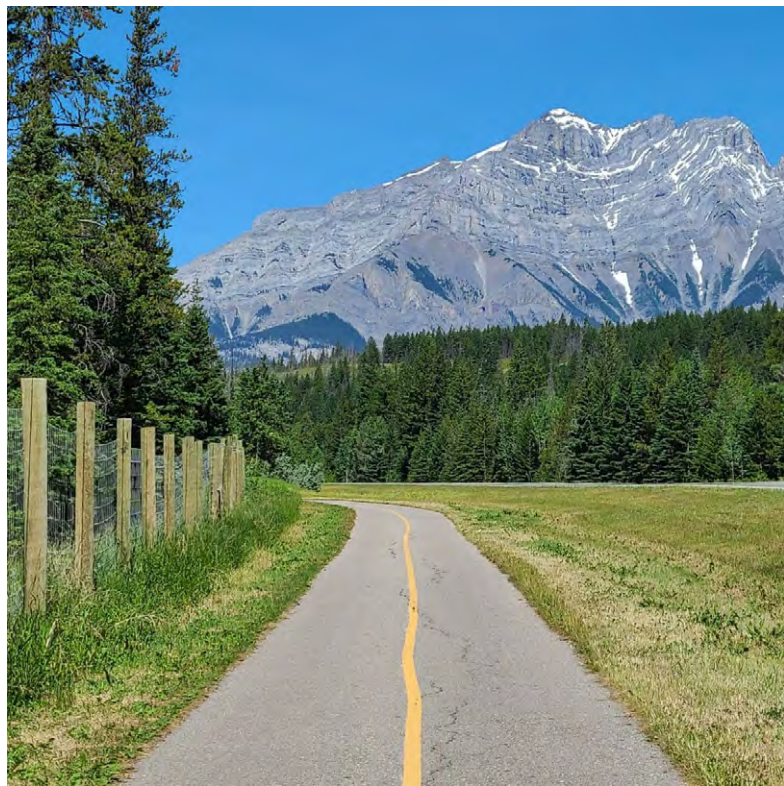
I enter the first patient room and take

a history as history unfolds outside these
hospital walls. Abdominal pain, unable to
see her family physician, started yesterday.
It does not sound like her gallbladder,
nor her pouches of intestine. In reality, I
am uncertain of what it could be, like so
many things these days. What do I make
of virtual health care? Am I obliged to
stop seeing friends? I know I am expected
to come to work, and there is no pan-
demic pay for me – everything else is
uncertain.

The day passes by, uncertainty becom-
ing my shadow patient room after patient
room. Occasionally, my mind wanders,

uncertain about electives, the profession's
future, about the last diagnosis, a new
pandemic policy by the school, hospital,
or fragile levels of government, and about
the contradicting opinions of health
experts.

Home. I open my door and am
greeted by a wagging tail. As I lean over,
he licks my face and I tell him thank
you for the kisses. I smell the aroma of
chicken noodle soup brewing, placed
on the stove to slowly heat several hours
ago to be ready for my arrival. A familiar
voice asks how my day was, and as I sink
into the couch, I sigh, then smile. ■



◀ What lies ahead

Photography
 Taken in the summer on Rocky Mountain Legacy Trail – a 26 km hiking/biking trail that connects Banff and Canmore, AB

Jasmine Gill
 University of Alberta, Class of 2024



A day in the life ▶

Photostory
 Different stages in the life cycle of a face mask,
 2020's most important accessory

Ishita Aggarwal
 Queen's University, Class of 2023

Fugue in C Minor, “Pestilence”

Michael Scaffidi

Queen’s University, Class of 2022

PESTILENCE – ALONG WITH Death, Famine and War – appears as one of the four Biblical horsemen of the Apocalypse. Currently, we find our society in the time of pestilence – the COVID-19 pandemic. As a reflection on this tumultuous period, I wrote a fugue to depict the present pestilence. A fugue is a musical form that has its roots in the Baroque period of the 17th to 18th centuries,

during the time of J.S. Bach. Typically, it involves taking a short theme, called a “subject,” and developing it using contrapuntal techniques. I based the subject of this fugue on a melodic fragment from the Latin sequence, Dies Irae (Day of Wrath), which is a Medieval chant that describes the “end times.” Though I do not believe that we are in the Apocalypse, I nonetheless chose this melodic fragment to reflect the

dire straits in which we find ourselves. Throughout the piece, I use several devices to highlight different aspects of the pandemic. I believe that we will end the COVID-19 pandemic on a “major chord,” so to speak. Though we suffer now, God will not abandon us, and we must have courage that one day, we will overcome this current Pestilence. ■

Please listen here: <https://open.spotify.com/album/2KLeSBSDWw7ekNjn4PVoIA>



▲ **Lucas King**
(CFMS Director of Student Affairs)
married his partner, Sarah, on July 1st. They
welcomed their second child on April 5th,
2020.



▲ **Caleb Alexander Collins**
born January 6, 2021
Parents: Marie-Pier Bastrash (CFMS VP
Student Affairs, 2015-16) and Jonathan Collins



▲ **Elise Maser**
born April 24, 2020
Parents: Brandon Maser (CFMS VP Services,
2013-14/Student Affairs, 2014-15) and Kristen
Reipas



▲ **Dax Bourcier**
(CFMS Atlantic Regional Director
2018-19) and Jessica Desousa



▲ **Dr. Lauren Griggs**
(CFMS VP Finance 2017)
and Ryan Taylor married May 23rd, 2020



▲ **Dr. Lucy Luo**
(CFMS Quebec Regional
Representative 2016)
and Victor DeSousa married June 27th, 2020



▲ **Eve Cornelia Holland**
born September 14, 2019
Parents: Dr. Tim Holland (CFMS Atlantic Regional Rep
2011) and Dr Alyson Holland (CFMS National Officer of
Human Rights & Peace 2011) and big sister, Arianna

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