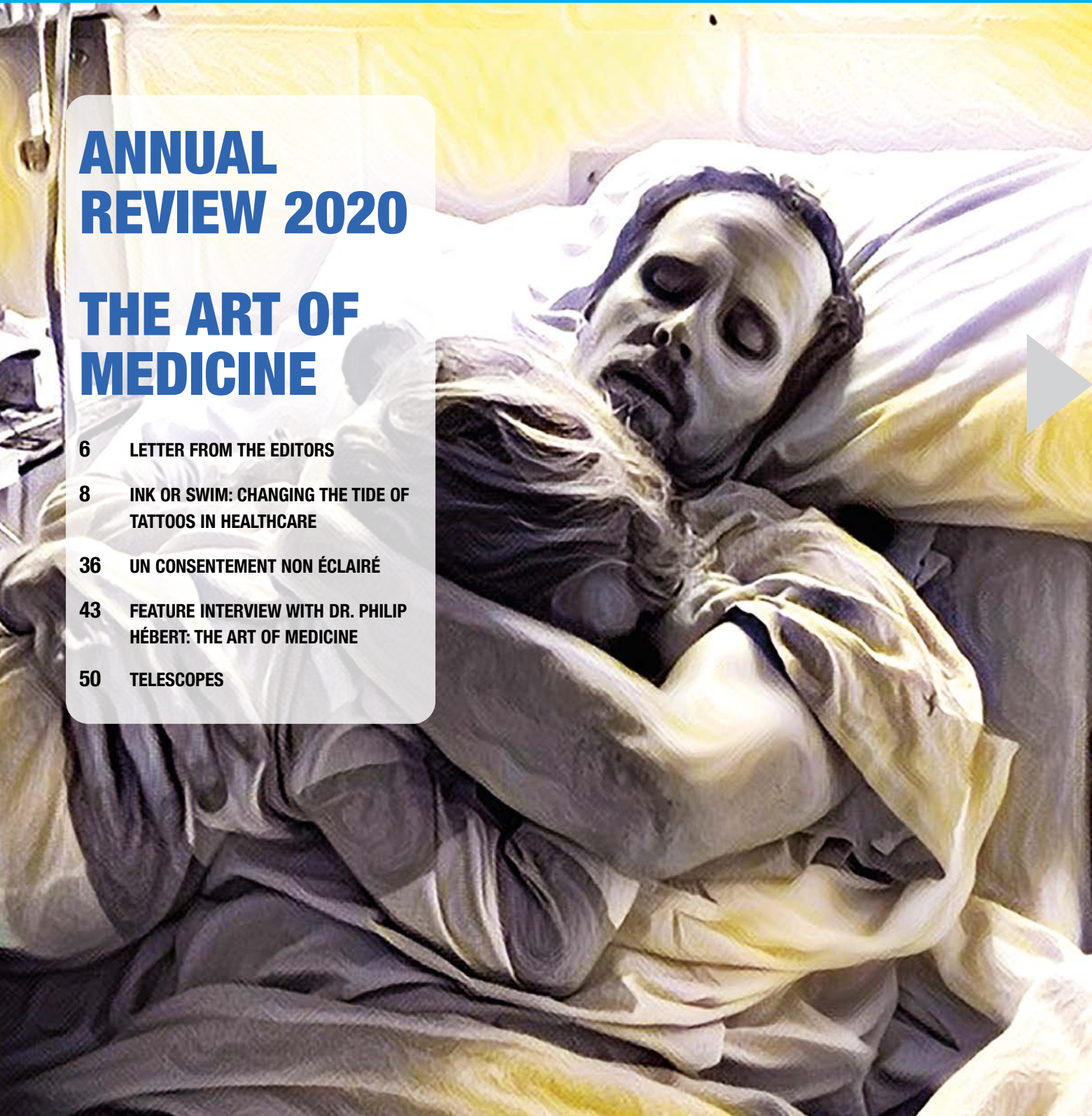




ANNUAL REVIEW 2020

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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 8000 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 for 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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Jenny Thomas
Northern Ontario School of Medicine
Class of 2021

"This photo captures the powerful moment when a child sees their father for the first time since the accident that left him paralyzed."



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Letter from the editors

Dear friends and colleagues,

We are proud to share with you the 2020 issue of the Canadian Federation of Medical Students Annual Review. The Annual Review is our cherished connection between the CFMS and the Canadian medical students it represents. This publication is both an opportunity for students to showcase their inspiring work and experiences, and for the CFMS to share updates on the activities of our national executive team. Last year in 2019, the CFMS commemorated our 42nd anniversary with an issue themed around “Disruptive Innovation”: celebrating the fast-changing landscape of medicine, and the individuals responsible for it. This year, for our 43rd anniversary, we wanted to cast our attention to those enduring aspects of the medical profession which can sometimes be underestimated amidst the technological innovation that permeates our work. The theme of the 2020 CFMS Annual Review is “The Art of Medicine”.

The art of medicine defies precise definition, but it is a complex myriad of concepts which underpin the practice of healing. It includes some of the most rudimentary and enduring skills in a physician’s medicine bag (things like the ability to truly listen to a patient, synthesize information in real time, maintain integrity, and demonstrate compassion), which are essential in every medical encounter and necessary for the formation of meaningful connections with patients. It is the “soft skills”, and those aspects of medicine transcending applied science, which are fundamental to forming therapeutic relationships and gathering the information that will lead to high-quality, patient-centered care. Although the era of evidence-based medicine has provided endless clinical guidelines to follow, the virtuous clinician can engage the art of medicine by considering each patient as an individual human being with their own unique challenges and circumstances, rather than just a point on a treatment algorithm. By exercising the soft skills and working with a patient (not a ‘case’) to choose a treatment plan that is optimal for them, we are able to provide more tailored care which aligns with individuals’ conditions and values. Patient-centered medicine is rarely black and white, but the art of medicine helps us to navigate the grey zones in order to connect with patients where they are at.

Over the last several years, we have seen increasingly frequent examples in the media of technological advances beginning to outperform clinicians in certain aspects of the medical practice, such as the visual pattern recognition tasks inherent to radiology and dermatology. With the well-evidenced expectation that technology may in some domains be surpassing doctors, some students and clinicians are uncertain about their own future practice. However, it is comforting to recognize that the work of the clinician goes beyond those algorithmic tasks which can be performed by machines. Borrowed from Sir William Osler: “The good physician treats the disease; the great physician treats the patient who has the disease”. The healer does not only operate machines and follow algorithms, they also perform the so-called “Art of Medicine”: the incorporation of their own humanity and individual values, which generates trust and helps patients to define good health on their own terms. This skill will not be replaced by machines, no matter how sophisticated.

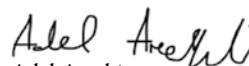
The theme of last year’s Annual Review was “Disruptive Innovation”. In contrast to the evolving environment of medicine, this year we are returning to the roots of our profession in order to remember what makes it a “human” vocation. Although medicine is often recognized and represented as an applied science, we recognize in the way that good care is inextricably linked to the relationship between a doctor and their patient that its practice is really inherently an art. It is for this reason that in the 2020 edition of the CFMS Annual Review, we are celebrating the relationship between medicine, arts, and humanities.

This edition of the Annual Review features an interview with Dr. Philip Hébert (author of *Doing Right and Good Medicine: The Art of Ethical Care in Canada*), which offers professional insights on the art of medicine and what it really means for current students in the field. The 2020 Annual Review is also packed with ongoing student initiatives, intensely personal reflections, creative works, rich personal experiences, and thought-provoking opinions of medical students across Canada. To all of the medical students who contributed to the 2020 edition of the Annual Review, we would like to thank you for sharing your thoughtful work. To all of the readers of the Annual Review, we hope you enjoy reading these pieces as much as we have. ■

Thank you for sharing in this journey with us,



Connor Brenna
CFMS *Annual Review* Editor
University of Toronto, Class of 2021



Adel Arezki
CFMS VP Communications
McGill University, Class of 2021



Connor Brenna
Annual Review Editor
University of Toronto,
Class of 2021



Adel Arezki
CFMS VP
Communications
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Letter from the president

Dear CFMS Members,

It is with great pleasure that I provide introductions to the CFMS Annual Review. I consider myself so fortunate to serve as the CFMS President. Every day, medical students across the country inspire me with their creativity, passion and pursuit of excellence. This publication gives a brief snapshot into the future of the medical profession; CFMS members creating positive change. Every year we take the opportunity to highlight amazing member and organizational accomplishments, provide an update on our projects and initiatives and feature original pieces of creativity by our membership.

This year's annual review theme "Arts and Humanities in Medicine" is very timely in the face of the significant changes that the medical profession will be confronting in the coming years. As AI and technology become increasingly prevalent it is paramount that we consider the core principles that make physicians effective. The "human" aspect of our work is critical to our therapeutic relationship with patients and broader society. Arts and Humanities in medicine can refer to many aspects of medicine. I would like to take a bit of time to talk about "Humanism" in medicine.

To me Humanism encompasses a number of important organizational areas of focus including learner health and wellbeing, and promoting equity, diversity and inclusivity. The CFMS believes very strongly in expending significant effort towards creating a more health-promoting culture in medicine. Unfortunately, mistreatment and harassment are still all too common in medical education and healthcare. Burnout, anxiety and depression continue to be significant concerns for the medical profession. Women, people of colour, of sexual minorities, of lower socioeconomic background and other groups continue to face significant barriers for advancement in medicine. These same inequities are true for our patients and society as well.

This year the CFMS has continued to expand our efforts to support learner wellbeing through our National Wellness Program. With major threads of programming, advocacy, awareness and resilience and personal development, our novel, national student-led initiative continues to make a difference for learner wellbeing and medical education culture. The concept of health-promoting learning environments, which the CFMS was an early adopter of within medical education, is becoming more commonplace and in the future. I look forward to the continued advances we will make over the coming years.

We also launched an Equity, Diversity and Inclusivity (EDI) task force with a mandate to create a CFMS strategy that considers how we can strategically promote EDI within the CFMS and be leaders in the greater medical community. Our Indigenous representation working group is considering how we ensure proper engagement and consultation of Indigenous students in our work. This is just a brief snapshot of our work in this area.

I am proud of the leadership the CFMS is taking on these issues and I believe that as learners we can and must take ownership in ensuring that the future of medicine promotes the "human side" of medicine. While we should embrace innovations and must adapt our practice to the new challenges our profession and human health face, we should never forget what made medicine the respected, caring, field it is.

I would like to thank the entire CFMS board and all the authors and contributors to this publication. In particular I want to acknowledge Connor Brenna, our Annual Review Editor for the past two years, for his amazing work. This publication would not be possible without his commitment.

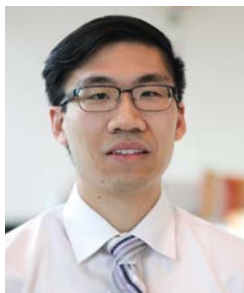
I hope you find this year's edition of the Annual Review engaging, informative and inspiring. I hope reading about our efforts and observing the insights of others helps to spark your inner passion for ensuring Arts and Humanities in Medicine, and specifically Humanism, stays strong as our profession continues to grow.

The CFMS theme this year is, "The Future of Medicine is CFMS, The Future of Medicine is You". Let's embrace our role and opportunity to help medicine as a field reach its greatest potential, while embracing our own potential as well. ■

Sincerely,



Victor Do
CFMS President,
2019-2020



Victor Do
CFMS President
2019-2020

Ink or swim: changing the tide of tattoos in healthcare

Clara Long
CFMS Atlantic Regional Director
Dalhousie University, Class of 2022

WE EXPRESS OURSELVES through our words, actions, and the things we create. As the most visible organ, the skin can act as a canvas. People have used tattoos in a variety of contexts throughout human history, including medically. Over the past 40 years, tattoos have shifted from being countercultural to an aesthetic and personal choice, in what is often referred to as a “tattoo renaissance” in Western societies.¹ A quarter of Americans aged 18-50 have tattoos, and the presence of tattoos in medicine is expanding.² This may represent evolving relationships with our bodies and changing notions of professionalism.

Tattoos have an intimate tie to self-expression; a tattoo becomes a part of you, literally. Not surprisingly, they can heal our sense of self. Today, tattoos are used in innovative ways to restore appearance after injuries and operations. For example, medical tattoos are used after

“We express ourselves through our words, actions, and the things we create. As the most visible organ, the skin can act as a canvas.”

post-mastectomy breast reconstruction to create a realistic nipple. Tattoos have also been used to hide scars, burns, and dermatological conditions such as vitiligo and alopecia areata.² These procedures tend to have high patient satisfaction as they can restore confidence and improve body image.^{3,4} While they are not typically performed by physicians in Canada, some tattoo artists work in Canadian hospitals to perform nipple reconstructive tattooing. There is a potential role for tattoo artists on an interprofessional team. In contrast, tattoos can also be used to simulate disease; temporary tattoos have been validated to simulate dermatological conditions during OSCEs.⁵

While tattoos have a place in medical education and patient care, what does this mean for healthcare providers with tattoos? After all, medicine has a longstanding tie to conservative notions of professionalism and traditional power structures. Although this definition has changed over time to become more inclusive, doctors are expected to be a certain

way. Research suggests that patients have less confidence in healthcare providers with tattoos.¹ However, a recent study has shown that emergency doctors with body art, including tattoos and piercings, were not rated differently by patients in terms of competence, trustworthiness, and professionalism.⁶ A qualitative study within the medical community demonstrated that students had preconceived notions about tattooed individuals, and both students and physicians felt that visible tattoos, especially facial tattoos, have the potential to impair communication and deter from professionalism.¹

However, tattoos can create connections with patients. When I asked about her tattoos, Christine, a medical student in New Brunswick, said “[p]atients have asked me about the ones on my forearms... I had one patient say that the semicolon [tattoo] is a nice signal... that I’m probably not going to be judgemental in a mental health related capacity.” Similarly, Emma, a medical student in Nova Scotia, said “I haven’t really had many negative



“I’ve had a few paediatric patients ask me if I know I have a bee on me. I even had one kid colour in the black and white bee I have on my left forearm in an appointment.” – Emma

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interactions with my tattoos, but this may be because other than the tattoos, I have quite a non-intimidating, 'clean' presentation.... I honestly think being tattooed is something that makes certain demographics, like teenagers, less afraid of me and makes me seem more approachable. I know it has the opposite effect on some people too." Qualitative research has highlighted similarly positive patient responses

to tattooed doctors. While institutions may have specific policies regarding attire, especially regarding safety or infection control, guidelines on what is considered professional, such as in the case of tattoos, tend to be more ambiguous.⁶

In the anatomy lab, a tattoo on a cadaver humanizes the body and prompts us to make whole someone who has otherwise been cut apart. Similarly, tattoos

can make patients feel complete. As tattoos become normalized, I expect there will be more discussions around what a doctor should or not do, or to or not tattoo. ■

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"I feel like tattoos can be a comfort to some patients." – Christine

HEART: a year in review

Kelsey MacQueen
CFMS HEART Committee (2018-2019)
University of Calgary, Class of 2021

Finola Hackett (editing)
CFMS HEART Committee (2018-2019)
University of Alberta, Class of 2019

George Kitching (editing)
CFMS HEART Committee (2018-2020)
University of Western Ontario, Class of 2021

Sasha Letourneau (editing)
CFMS HEART Committee (2018-2020)
Queen's University, Class of 2021

Arienne Cohen (editing)
CFMS HEART Committee (2018-2019)
University of Toronto, Class of 2020

AS THE NEW YEAR BEGINS with unprecedented forest fires in Australia, the urgency of climate change everywhere is affirmed. More than 150 fires are ripping through southeastern Australia, blazing through more than 60,000 square kilometers of bush and forest on the heels of the devastating Amazon fires. Around the world thousands of students are taking to the streets, further evidence of the growing appetite for climate action. Closer to home, the CFMS Health and Environment Adaptive Response

“More than 150 fires are ripping through southeastern Australia, blazing through more than 60,000 square kilometers of bush and forest on the heels of the devastating Amazon fires.”

Taskforce (HEART) has mobilized over the past year to address growing concerns linking climate change and health.

Throughout the past year, CFMS HEART implemented a number of initiatives at a national level. The 2019 Earth Day Photo Contest was the most successful to date. With nearly 200 submissions from medical students across the country, choosing a winner was not easy. Ultimately, Candace Nayman from the University of Ottawa, was selected as our two-time contest winner. We asked students to reflect on their photos to find what made their pictures valuable, in order to appreciate the environment as we hope to preserve it.

We mobilized medical students around the growing momentum of the Fridays for Future campaign. As medical professionals, we have a powerful and trusted voice, and recognize the importance of our involvement in this movement. Climate change is a public health emergency and framing it as such can help the public understand the far-reaching implications for health. On September 27, hundreds of medical students joined the Global Week for Future that saw millions of young people demanding action around the world. HEART was excited to be a part of this event and will continue to build on this advocacy initiative.

As the world can see from the Fridays for Future movement, young people have the energy and passion required to drive a healthy response to ecological change. However, to address

“Closer to home, the CFMS Health and Environment Adaptive Response Taskforce (HEART) has mobilized over the past year to address growing concerns linking climate change and health.”

the growing challenges associated with climate change, young physicians must first learn about those challenges and their responsibilities as healthcare providers. As such, HEART undertook the first ever evaluation of planetary health-related education in Canadian medical schools. A survey was distributed to all members of the HEART network, which consists of student leaders in environmental health at each of the Canadian medical schools. With the assistance of faculty representatives, we received input from every Canadian medical school. The results of the HEART evaluation outline

a clear deficiency in climate change and environment-related education in many Canadian medical schools. It is the responsibility of institutions to recognize and address these educational shortcomings to prepare future physicians for practice in a changing world. Ultimately, Canadian physicians must be equipped with the knowledge and skills to serve as medical experts and health advocates in their communities. This evaluation is a vital tool in documenting our progress towards this goal, and may also serve as a model for other institutions and countries with similar goals. The results of the National Report on Planetary Health Education and recommendations for curricular development launched on January 9th, 2020 with associated articles published in *Lancet Planetary Health*¹ and *The Star*.²

Numerous organizations, including the Canadian Association of Physicians for the Environment (CAPE), The Lancet, Canadian Public Health Association, and the WHO, have endorsed calls to action on climate change. The International Federation of Medical Students' Associations (IFMSA) has specifically called upon medical schools to integrate climate change related teaching into their curricula by 2020. We as students must gain the tools to understand and address the health impacts and evolving challenges of climate change to better serve our future patients and communities. Through the work that CFMS HEART is undertaking, we hope that medical schools will support students across the country to tackle climate-driven health impacts and become leaders in the field of planetary health. ■

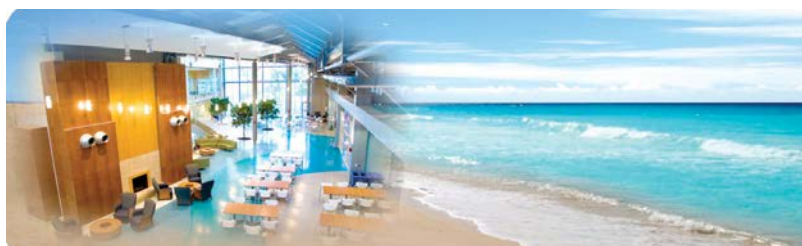
Acknowledgements

2018-2019 Heart Committee:

Finola Hackett
George Kitching
Sasha Letourneau
Kelsey MacQueen
Arianne Cohen
Jessica Benady-Chorney
Tiffany Got
Natalya O'Neill

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Why you should come to work at Bluewater Health

Two-tiered healthcare: a misguided solution for our Canadian health system

Anson Lee

CFMS Vice-President Finance
McGill University, Class of 2021

IN AN ERA WHERE provincial, territorial, and federal governments are all facing significant budgetary constraints, it is not unreasonable for them to examine one of the elephants in the room: health spending. In fact, total health expenditure is expected to represent 11.6% of Canada's gross domestic product (GDP) in 2019 – that is \$264.4 billion. Many governments across Canada are attempting to contain costs by trimming out certain health services and shifting service provision into the private sector.

Private health services are not new in Canada but their presence is becoming increasingly felt, for example in the form of private virtual care, boutique medical clinics, and concierge medicine. Two-tiered healthcare has been touted by some as a solution to the underfunded and 'crowded' public system. A court ruling in Québec in 2005 is often cited to cement this position. In the Supreme Court of Canada (SCC) ruling on the *Chaouilli v. Québec* case, the conclusion reached was that the prohibition of private medical insurance was in violation of the *Québec Charter of Human Rights and Freedoms*. However, the ruling is binding only in Québec. Fast forward 14 years, a similar challenge from British Columbia is being argued in the SCC today. The premise of allowing private health services is often argued on providing patients the autonomy and ability to direct their own care, often in the context of the long wait times that are witnessed in the public system. The proponents of two-tiered healthcare center their argument on the

individual's choice. But who is thinking for Canadians, as a collective?

There are serious implications on health equity for collective Canadians. Canadians take great pride in our universal medical system, where access is based on need and not ability to pay. This concept is entrenched in the *Canada Health Act* as the principle of universality. Two-tiered healthcare permits those who have more resources to jump the queue to access care in an expedited manner. In certain instances, this can also lead to additional queue-jumping when follow-up care is needed within the public system. A patient chooses to obtain a private MRI scan because they do not want to be subjected to the waitlist of the public system, but then chooses to use the public system thereafter for their follow-up care. What does this queue-jumping mean? This gives immense individual power to wealthier patients to hop between the private and public systems as they wish. The explosion of the private sector in Canada would also cause erosion of the public system because it will draw human capital and resources away from an already-underfunded public system. In sum, Canadians, as a collective, do not come out ahead with a two-tiered system. Two-tiered healthcare will disproportionately bear on the most vulnerable and exacerbate health inequities.

Canadians, as a society, need to have an honest conversation on how to best protect this cherished element of our identity. Health equity should not only be defended when it is convenient to do so. With all due respect for the individual, and for patient's autonomy, care must be

“Private health services are not new in Canada but their presence is becoming increasingly felt, for example in the form of private virtual care, boutique medical clinics, and concierge medicine.”

taken to address the broader deleterious consequences that a two-tiered healthcare model would bring. Instead, the focus should be on how to make our universal public healthcare system more agile. And yes, we can strengthen this system through innovation from within. ■

The intersection between global health and diversity in medicine

Achieng Tago

CFMS Director of Global Health

University of Manitoba, Class of 2020

WHAT DOES GLOBAL Health mean to me? Growing up on an Indigenous Reserve in Manitoba as the child of Kenyan immigrants, I learned at a young age how health disparities can negatively affect marginalized communities. This is when I began to define global health as equitable health care for all populations.

During my first two years of medical school the idea of equitable health care became interspersed with tackling the social determinants of health. From then on, I felt the best way to work towards tangible results was through advocacy.

“During my third year of medicine, I witnessed how chronic conditions such as heart disease, liver disease, and diabetes disproportionately affected marginalized groups.”

This is why I became involved with the Canadian Federation of Medical Students (CFMS). As a Global Health Advocate for the CFMS I was able to advocate for the health and well-being of Canadians on both a national and a local level, on topics ranging from the opioid crisis to Indigenous mental wellness.

During my third year of medicine, I witnessed how chronic conditions such as heart disease, liver disease, and diabetes disproportionately affected marginalized groups. I began to realize that while large scale advocacy could positively impact these groups, making a difference on a smaller scale – at the individual patient level – was an important starting point. As well, going through clerkship as a racialized woman, a minority in a community where few health professionals looked like me, I realized how difficult it is to feel like you belong when you look like you do not. This realization helped me to connect with my Indigenous and other racialized patients who had experienced similar feelings of not belonging within the health care system. I began to wonder if there was a connection between patient care, health outcomes, and diversity within medicine. Much of the research on this topic has been done in the US which faces a similar lack of balance when it comes to representation of diverse groups within healthcare workers. This research has shown that patients from minority groups are not always treated in an equal manner when they are in the healthcare system.¹ As well, this fact combined with the reduced access and increased poverty that is often experienced by marginalized groups has the effect of relegating entire subsets of the

population to worse health outcomes.¹ This began to sound very much like the social determinants of health that I had been so driven to tackle throughout medical school. This gave me a new layer to add to my initial foundation of advocacy: increasing diversity amongst healthcare providers.

This new layer is based on the work of many who have come before me, who also found that there is a direct connection between improved health outcomes for minority groups and increasing the numbers of minority health care practitioners within the healthcare system.² With this in mind, I began to wonder what we as medical students can do to contribute to this important task. While contemplating how to accomplish this I was reminded of the CFMS vision “Tomorrow’s physicians leading for health today”. As medical students, we truly are the future of healthcare and we will soon be entering the workforce as physicians. As we enter into our chosen specialties, we need to remember that enhancing diversity within healthcare is a goal that needs dedication and accordingly commit ourselves to ensuring that we find ways to contribute to this goal, no matter how big or small. We should remember that all specialties have an equal role in this promotion because we all have an equal role in providing the best patient care for all Canadians. ■

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Advocating together: Western medical schools annual meeting 2019

Henry Li

CFMS Western Regional Director
University of Manitoba, Class of 2021

Devon Mitchell

CFMS Western Regional Director
University of British Columbia, Class of 2020

“Together, we are stronger”

THIS IS THE THOUGHT THAT we had running through our minds as we approached the Western Medical Schools Annual Meeting 2019. This annual meeting is a unique event which brings together faculty and staff from all of the medical schools from the Western region to problem-solve and innovate together. Over time, students have become more and more involved in the meeting. At first, students were only invited as observers. Over the years, and through the hard work of our predecessors at the CFMS, we were invited to participate in the meeting and provide our perspectives. Typically, this takes place in the form of a presentation over 45-60 minutes where students from the Western medical schools share their common concerns and requests for change.

This year, we took a different approach.

The CFMS is a national representative organization whose strength lies in the engagement of its members. Given its ability to bring together passionate leaders and advocates from each of the western medical schools, we knew that there was more to be achieved through this unique opportunity.

With the input of our team of student leaders, we trialled a roundtable format of discussing our concerns and requests. In this format, faculty and staff rotated

through four tables discussing four different topics for twelve minutes each. Leading up to the meeting, we gathered data from all of the schools on each topic, before boiling the information down into single page primers which were sent out to the attendees a few days prior to the meeting. These primers also included specific, measurable asks to make progress on the issues in question. Our topics this year were Absence Policies, AFMC Portal, Unmatched Canadian Medical Graduates, and Visiting Clerk Wellness.

The new format exceeded expectations. It allowed us to have productive conversations and discuss concerns in a way that was not possible previously. We received glowing praise about its effectiveness from each and every school, both from facilitators and participants. Our only criticism was that we did not have enough time to talk. Not only did it help inform the faculty and staff about student concerns, but it helped students understand the barriers that lay in the way of solutions from the administrative perspective. This mutual understanding is what sets the foundation for making progress.

The innovation did not stop at the meeting, though. Afterwards, we outlined a structured and consistent follow-up plan to ensure that conversations continued to be had and change was put in place. This was communicated to all of the schools, linking Undergraduate Medical Education Deans with their respective Medical Student Association President. In addition, emails were sent out to all of

“Our topics this year were Absence Policies, AFMC Portal, Unmatched Canadian Medical Graduates, and Visiting Clerk Wellness.”

the student bodies highlighting the strong advocacy that their representatives had engaged in during the meeting, and our goals moving forward.

As time went on, we continued to engage our team and update each other on a regular basis. This allowed us to stay on top of progress made at each school and help each other advocate for change, both locally and nationally. The importance of continued communication and collaboration cannot be overstated. If there is one lesson learned from this experience, it is that together we are stronger, and together we can advocate better. ■

Wellness on the Road

Sarah Zahabi

CFMS Director of Student Affairs
McGill University, Class of 2020

AS MY ELECTIVES TOUR HAS just come to an end, I find myself reflecting on the whirlwind that was this experience. Sometimes stressful, sometimes fun, but always exciting!

My clerkship travels took me to Akwesasne, Quebec City, Montreal, London, Vancouver, Toronto, and Halifax. Living arrangements varied from having a med school buddy as a roommate in a cute bungalow apartment, to sharing a room in a house with a young family, to living in a local resident's extra bedroom to living in a one-room basement apartment with 6-foot ceilings under a vape shop (true story).

There were lowlights and I realized toward the end there was a distinct pattern to the timing of the lowlights: it was always day one to day three. I don't think there is anyone out there who enjoys getting ID badges, EMR training, usernames and passcodes, scrub cards and figuring out where things are in huge buildings. On top of the orientation process, there is the understanding of the medical team dynamics, the expectations of your role as the elective student and the underlying constant evaluation that is inherent in

“As my electives tour has just come to an end, I find myself reflecting on the whirlwind that was this experience.”

the process of doing what is essentially a two-week interview that can be stressful. When the Wednesday afternoon of the first week came along, I consistently felt a wave of relief as I had figured out where to go, how to get there and what to do once I got there. Having those basics are obviously crucial to actually being able to work productively and show your potential. All in all, I always found my groove and one aspect that was consistently comforting was the support from residents who had themselves been through a similar process not too long before and were able to make the transition period much smoother.

As I look back, I now think that the key to getting through all of these experiences were relationships, and making efforts to maintain certain habits from home such as eating and physical activity. Although difficult, finding a local yoga studio, Crossfit class, or running buddy is actually manageable. I found when I was getting most tired, fitting in these activities was actually rejuvenating and stress-relieving. Another aspect that was crucial was cooking and eating right. Towards the end of the tour I admit I kind of let go and relied mostly on restaurant foods to get by, whereas the “fresher,” early-elective version of myself was all about doing groceries and cooking. The fatigue sets in, and picking battles of course is inevitable, however I can't deny that I definitely felt overall “better” when I took the time to make small meals. Finding a place that was within walking distance was also really important. In Halifax I had to rely on the bus system, which limited precious sleep time and added to the stress of trying to be on time (aka early) for morning rounds.

Unexpectedly, finding a friend or making a new one was easy. I encourage

“I encourage those who have yet to embark on their tour to keep an open mind to meeting other students.”

those who have yet to embark on their tour to keep an open mind to meeting other students. In my experience, most of the other elective students I came across were also alone in an unfamiliar city and welcomed an invite for a dinner, drink, or day out being tourists. Meeting other students is amazing, and learning about their lives and medical school journeys was definitely a highlight of the tour. I also got to bond with peers from my class who I otherwise had not had the chance to get to know. Again, I encourage you to reach out and go out!

Overall, as I look back, I can't think of a better way to travel across our beautiful country. I had had the unique opportunity of meeting many individuals with my shared passion for medicine and got to treat patients from many diverse backgrounds. I observed the many similarities and certain differences relating to medical care that varied based on province, setting and hospital/department culture. I am so happy to have been able to do this and hope to carry this perspective of medicine in Canada with me for many years to come. ■

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A medical student's reflection on a global health elective with save a child's heart

Laura Sheriff

University of Ottawa, Class of 2021

IN THE SUMMER AFTER MY second year of medical school, I completed a clinical elective at the Wolfson Medical Center in Holon (Israel), organized by Save a Child's Heart, an international non-profit organization which provides pediatric cardiac care and surgery for children in developing countries. This elective experience highlighted the restrictions on access to health care and surgery that exist in low-income countries, and how a non-profit organization can intervene to provide competent clinical care. During my elective I observed how this non-profit organization provides healthcare to patients, who are flown to Israel from numerous different countries for the sole purpose of receiving medical care. Upon their arrival, they live in a children's home with other children receiving care, alongside their mothers and various nurses. They live in this home for several weeks while receiving medical care at the hospital. Afterwards, they return to their native countries (Tanzania and Ethiopia, among others), with continued access to Save a Child's Heart services should they require them again in the future.

This experience allowed me to learn about the significant barriers to healthcare that exist when one's place of residence lacks access to safe and accessible services such as cardiology or cardiac surgery. One specific challenge in providing medical care to children from developing countries is that many of these children had conditions that should have been diagnosed and followed by a pediatric cardiologist since birth. However, due to the lack of medical services in their native countries, many of these patients

were being treated as older children on a delayed schedule, which could have significant impacts on their prognosis. If I had not participated in this global health elective, I would not have had the opportunity to witness firsthand the limitations to healthcare resources in developing countries.

During my elective, I was also looking forward to gaining clinical skills relating to the fields of paediatric intensive care, paediatric cardiology, anaesthesiology, and cardiac surgery, while applying my knowledge of paediatric congenital heart diseases in the PICU, catheterization lab, and operating room. My weekly schedule included attending morning interdisciplinary meetings or lectures, rounding on pre- and post-op patients with residents, seeing patients in the ECHO clinic, and observing catheterization procedures and cardiac surgery. Throughout this elective I was able to practice my physical exam skills and identify findings present in children with cardiac disease. One congenital cardiac condition I encountered numerous times was patent ductus arteriosus. Signs of this condition include a pathognomonic, continuous, machinery-like murmur best heard over the left sternal border, and manifestations of heart failure from volume overload, presenting in infants with increased anterior-posterior diameter of the chest wall, respiratory distress, hepatomegaly, poor feeding, and failure to thrive. During my elective, I observed many patients undergo closure of their patent ductus arteriosus with an occluder device in the cardiac catheterization lab. This elective thus allowed me to improve expand on my knowledge of

the pathophysiology of cardiac diseases, as well as improve my physical exams and presentation skills while rounding on patients pre- and post-operatively.

A significant lesson I took from this elective experience was how to incorporate human connection into patient care, and ways to foster empathy and compassion for patients. In addition to my medical elective at the hospital, I also had the opportunity to live in the children's home and spend my evenings and weekends volunteering and participating in recreational programs with the children. This provided me with the unique opportunity to connect with the children in a playful way, and then carry this knowledge forward into my clinical encounters with them at the hospital. This allowed me to view the patients from a much more personal and holistic perspective. No patient was reduced to their medical condition, because I also knew about each child's personality, who their friends were in the house, or their favourite free-time activities. What made this such a unique and educational experience for me was that I was able to see patients for more than their disease, and learn how it impacted their personal life outside the hospital, simply by living side-by-side with patients. This elective highlighted for me a message that medical care is not just about providing a diagnosis and treatment, but also engaging with patients in a way that allows them to feel comfortable and supported.

I would like to thank everyone at Save a Child's Heart for this unforgettable and eye-opening global health elective experience. ■

Detour Health: a healthcare innovation multimedia platform

Azzra Mangalji

University of British Columbia, Class of 2021

Vishwathsen Karthikeyan

University of British Columbia, Class of 2021

Faizan Bhatia

University of British Columbia, Class of 2021

Geoffery Ching

University of British Columbia, Class of 2021

HERE IN CANADA, MEDICAL students are trained in a traditional curriculum that provides a thorough knowledge base and ample clinical opportunities. Furthermore, students are encouraged to pursue academic research that fulfills their interests and goals as an aspiring physician. As we move forward, the amount of medical knowledge continues to grow beyond our capacity to thoroughly remember it, bringing about the challenge of information overload. Medical technology such as artificial intelligence is being used to coalesce large amounts of information and provide diagnostic and management recommendations. However, medical students today are not trained to be technologically literate, nor are there many resources for students interested in contributing to medical innovation or entrepreneurship as an adjunct to their clinical pursuits. This discrepancy is creating a gap in the knowledge that medical professionals will be required to have in order to ethically and appropriately deliver care via technological tools in the future.

“Together, we hope to ease the barrier to entry to healthcare innovation [...]”

Detour Health is a multimedia platform created by medical students and engineers in British Columbia to:

1. Help enhance the knowledge of students around healthcare technology and how it can be used to provide better quality of care to patients on a local and global scale.
2. Support collaboration between medical professionals and engineers, designers, and industry professionals to encourage and ease the path to becoming a medical-entrepreneur. Through this initiative, we hope that healthcare students will be well-equipped to use their unique and fresh perspective to identify areas of care that can be improved via technology and contribute to the growing field.

Our platform takes a multi-pronged approach and has components to serve each type of learner and every level of healthcare-innovation enthusiast.

1. Newsletter: this offers a light-hearted approach to keep learners up to date on current advancements in medical technology and relevant current events. It also breaks down each chapter of “Biodesign: The Process of Innovating Medical Technologies,” a textbook developed at Stanford University that is used to deliver their fellowship programs. For those that are looking for more in-depth understanding, there is a “Deep Dive” section that provides details on how a certain piece of technology or software operates. Lastly, there is a business-oriented

section that features an existing company and looks at their fundraising, commercialization and financing process.

2. Podcast: this features students and professionals in Canada that have experience in the medical-innovation space. We discuss the challenges and successes of this field, and showcase various projects.
3. Collaboration forum: this component of our platform allows healthcare students and professionals to connect with anyone they need to bring their idea to light. In addition, users can discuss challenges they see in practice and brainstorm together ways to solve them. This feature is currently in development and will be launched in Spring 2020.

While this multimedia platform has currently reached the medical community at UBC, we are hopeful that it can be of use to anyone involved in healthcare, including allied health professionals. Together, we hope to ease the barrier to entry to healthcare innovation, and support those interested with the skills and resources in reaching their goals. Overall, it is important to prepare medical students with the understanding of how technology is being used to welcome the information overload era. We hope to create a community that can confidently innovate and utilize these products for patient care. ■

Reach us at: detour.healthcare@gmail.com

The Stem Cell Club: working together across Canada to support stem cell donor recruitment

Michael Shao
University of British Columbia, Class of 2020
Xiu Qing (Jenny) Wang
University of British Columbia, Class of 2021
Valeriya Zaborska
University of British Columbia, Class of 2021
Grace Zheng
University of British Columbia, Class of 2022
Maryam Vaseghi-shanjani
University of British Columbia, Class of 2026
Alyssa Zucchet
University of British Columbia, 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
Dylan Coupal
University of Saskatchewan, Class of 2021

Alexander Sharp
University of Manitoba, Class of 2021
Youstina Soliman
University of Manitoba, Class of 2022
Kenneth Williams
University of Toronto, Class of 2023
Rupal Hatkar
University of Toronto, Class of 2023
Setti Belhouari
University of Toronto, Class of 2023
Shamini Vijaya Kumar
University of Toronto, Class of 2023
Michael Xie
McMaster University, Class of 2019
Sally Lin
McMaster University, Class of 2020
Ali Eshaghpour
McMaster University, Class of 2021
Alexander Anagnostopoulos
McMaster University, Class of 2022
Jared Cohen
McMaster University, Class of 2020

Kyle Evans
McMaster University, Class of 2020
Kianna Chauvin
Western University, Class of 2021
Neha Sharma
Western University, Class of 2021
Lorenzo Saad
Western University, Class of 2022
Donald Bastin
Western University, Class of 2022
Matthew Fruhstuck
Western University, Class of 2022
Kaveh Farrokhi
Western University, Class of 2023
Raman-Deep Sambhi
Western University, Class of 2021
Michael Cameron
Western University, Class of 2021
Charlie Choi
Western University, Class of 2021
Fuad Chowdhury
Western University, Class of 2022

Cristina Andronic
University of Ottawa, Class of 2021
Esther Lee
University of Ottawa, Class of 2021
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University of Ottawa, Class of 2021
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University of Ottawa, Class of 2021
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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
Romy Segall
Dalhousie University, Class of 2023
Warren Fingrut
University of British Columbia, PGY5 Hematology

THE STEM CELL CLUB IS A student-run non-profit organization that works to recruit Canadians as stem cell/bone marrow donors.¹ We are a community partner of Canadian Blood Services, and we are accredited through them to run our own stem cell donor-recruitment drives. At these drives, we guide potential donors to provide informed consent and a tissue sample (cheek swab) – this information is then inputted onto the Canadian Stem Cell Registry. Transplant physicians use this database to find matches for their patients who need a stem cell transplant and who cannot find a genetic match in their family. Since 2011, we have recruited over 17,500 potential stem cell donors (representing 3.9% of all donors on 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.²⁻⁴

We have reported on our initiative in the past five issues of the CFMS 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 University of Saskatchewan and University of Manitoba.⁷ In 2018, we reported achieving a recruitment milestone with over 10,000 donors recruited.⁸ In 2019, we reported on our expansion to University of Calgary, as well as the development of a whiteboard video to support the education and recruitment of potential stem cell donors (available here: <https://youtu.be/V4fVBtxnWfM>, and profiled in the Canadian stem cell research blog Signals).¹⁰

In the present review, we are pleased to report three main updates. First, in November 2019, we held our most successful national campaign ever, including twenty-seven drives at eighteen university campuses in six provinces across Canada. We recruited over 800 donors, and the campaign was covered by media outlets across Canada including Toronto Star, CBC News, Global News, CTV News, London Free Press, and Windsor Star.¹¹⁻¹⁸

Second, Stem Cell Club members from across Canada collaborated to develop and launch Why We Swab, a library of stories in stem cell donation (Facebook: <https://www.facebook.com/WhyWeSwab/>; Instagram: <https://www.instagram.com/whyweswab/>; twitter: <https://twitter.com/WhyWeSwab>). Why We Swab reports stories 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. Through sharing these stories, we hope to illustrate the reason why people sign up as potential stem cell donors, why they donate, and the people, families, and communities they impact. To date, we have published over 20 stories to across our social media channels. Two examples of stories published to Why We Swab are shown (Figure 1A-B).

Third, this year Stem Cell Club is launching a new chapter at Dalhousie University, and the team is set to run their first drive in spring 2020.

Our initiative provides medical students with experiential learning opportunities, allowing them to develop across



Watershed Moment

"I was in a fairly unique situation because when I got called... I was in a period of intense distress in my life. I was actually going to see a psychologist for cognitive behavior therapy. I was on medication for anxiety. I was dealing with both a generalized anxiety disorder and a panic disorder. These are things that were just... really stressful. On the other hand, this was a unique opportunity for me and not only to help someone but to really evaluate my own priorities in my life; to see how much I'm willing to call on myself or how much I'm willing to challenge myself to try to overcome these struggles. I definitely had a very restricted safe space in my life, areas where I felt comfortable, and this did not include even routine blood donation. Yet, when I got the call, I was so primed for this moment with all my previous volunteer experience. I knew this was important. And again, I think it was one of those watershed moments for me where it's like, yes, there are other people out there in the world that are struggling. Is it my fault that this person had some sort of illness? No. But that being said, I couldn't stand by when I could have done something. I would have felt culpable in some way because I could have alleviated a certain degree of suffering.... I'm a utilitarian - I try to do things that promote the maximal happiness and compassion in the world - and for me what I gave up barely registers on the scale compared to what a person with leukemia or lymphoma is giving up on a daily basis."

In the Fall of 2016, Daniel received a call informing him that he was a potential stem cell match. He went on to successfully donate his stem cells to an international patient. Daniel now serves as one of the University of Toronto Stem Cell Club's Co-Presidents, where he passes on his experience and enthusiasm to incoming volunteers and potential donors.



Signing Up the World

*"Getting diagnosed with this and being a part of the Stem Cell Club in my first year, I knew what I was getting into. But I didn't expect to find a match within my own family because it's just what we've been taught, that it's really hard to find matches. And knowing that for me, being ethnically diverse, it would have been almost impossible to find a match within the registry. I was just so happy that my siblings were a match with me; I was just like thank you so much just for being you. Then I kind of thought about the people who aren't able to find matches and I was like sh*t. We need to work on that and get more registrants. Before my diagnosis, I was just kind of volunteering with the Stem Cell Club as something to put on a resume. But then after my diagnosis, I was just determined to get the whole world to sign up. One of the first things that we ask everyone who wants to be a donor is, are you willing to help everyone? And I'm not saying I wouldn't help everyone before, but now I wouldn't think twice about it. And you never really think that every little part, every cell, is really important in your body. Stem cell, blood cell, bone cell, anything. As long as it's working well, appreciate it."*

Ali has been a dedicated volunteer with the Stem Cell Club at Western University since 2015, working to recruit other students as potential donors. Unfortunately, in the summer of 2016, Ali was diagnosed with acute lymphoblastic leukemia. Ali went through treatment and is currently in remission from his cancer and back at Western as a student. He continues to advocate for stem cell donation.

Ali tells us that he doesn't need a stem cell transplantation right now, but might need one in the future. His mixed racial background (half Pakistani and half Iranian) would have made it very challenging for him to find a matched unrelated donor for transplant anywhere in the world, and from that perspective, we are glad he has a match available in his family if needed.



CanMEDS roles. We empower students to become leaders in Canadian healthcare and health advocates for patients in need of stem cell transplants. We hone 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 skillsets 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 work collaboratively with each other and with students from other disciplines across their university to recruit donors. Through 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 up 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. We can, together, dramatically increase the number of individuals we recruit to become stem cell donors, and save lives of patients who cannot find a match today. Interested students can email Dr. Warren Fingrut at warren.fingrut@bccancer.bc.ca to discuss the next steps. ■

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The NORTH clinic: a unique, interdisciplinary SDOH initiative for refugee health

Oliver Fung
University of Ottawa, Class of 2022

Cameron Bardwell
University of Ottawa, Class of 2022

Alannah Mulholland
University of Ottawa, Class of 2022

Madeleine Bondy
University of Ottawa, Class of 2022

Joseph Benjamin
University of Ottawa, Class of 2023

Salmi Noor
University of Ottawa, Class of 2023

ACCORDING TO THE United Nations High Commissioner for Refugees (UHNCR), Canada welcomed more than 28100 refugees in 2018, with a significant population settled in Ottawa. This is a population that faces unique social and health challenges that necessitate access to local resources. Unfortunately, many barriers exist that compromise access to these resources and impacts the well-being of newcomers in Canada. As medical students and future physicians, there is a need to foster social accountability throughout our medical training and practice to better meet the needs of our diverse population.

“The NORTH Clinic [...] is a new, interdisciplinary, student-run clinic aimed at connecting referred clients of refugee status to community-based resources.”

With this in mind, and a shift towards a greater emphasis on global health, the idea of establishing a clinic focused on refugee health and the social determinants of health was founded.

The NORTH Clinic (short for Navigating Ottawa Resources To improve Health) is a new, interdisciplinary, student-run clinic aimed at connecting referred clients of refugee status to community-based resources. The clinic addresses issues surrounding the social determinants of health, including housing, food insecurity, and employment. In addition to serving the needs of Ottawa’s refugee community, NORTH was designed to promote and enrich the educational experiences of future professionals in multiple disciplines. This initiative is a joint collaboration between medical and law students at the University of Ottawa, supported by experienced social workers and members of the Faculties of Medicine and Law at the University of Ottawa. The NORTH clinic operates through an executive team headed by student co-leads and supported by various executive roles, shared equally between the two disciplines of medicine and law.

Each member of the executive team also serves as a navigator at the NORTH clinic. As navigators, students work under the supervision of community social workers to explore each client’s individual social needs, discussing the challenges they face in navigating the healthcare system and obtaining resources. Students then use different networks and databases to find the most appropriate community resources and programs for clients, based

“This initiative is a joint collaboration between medical and law students at the University of Ottawa, supported by experienced social workers and members of the Faculties of Medicine and Law [...]”

on their specific needs and considering social barriers. Clients are connected to these resources and programs in follow-up meetings.

After eight months of a pilot program and preparation for the official clinic opening, a comprehensive student-organized training was conducted with help from physicians, lawyers and social workers experienced in refugee health. Students were trained in several key components including intercultural communication, the social determinants of




health, refugee health and how to navigate several resources like 2-1-1. October 2019 marked an exciting start to the official NORTH clinic, partnered with the Ottawa Newcomer Health Centre and the Somerset West Community Health Centre.

NORTH has provided us great insight into the social and health needs of the refugee population here in Ottawa. Barriers such as limited language and

literacy skills, complex resource eligibility requirements, and lack of familiarity with community resources are common issues that have prevented clients from accessing the help they need. Throughout this experience, we have additionally started to reflect on trauma-informed care and the practices we can bring to the medical environment to better incorporate social needs and the social determinants of health. Connections fostered with local resources, such as the Parkdale Food Bank, have also helped us gain greater familiarity with the resources available in Ottawa, as well as an appreciation for the great work done in this city to serve its at-risk populations. NORTH has been very gratifying to be a part of, and the experience has been such a great learning opportunity. The interest and enthusiasm we have seen from all the students, social workers and faculty in addressing the social determinants of health has been really inspiring.

With the clinic in operation for a couple of months, adjustments are constantly being made to improve clinic management and client satisfaction. We want to ensure that the clinic properly serves Ottawa's refugee population by connecting them to helpful and reliable community-based resources. In addition, we want to ensure that students are developing key communication, leadership and collaboration skills while building on their understanding of global and refugee health. Through a multidisciplinary approach, it is our hope to encourage future physicians to appropriately address the many psychosocial aspects involved in patient care. ■

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uOMed Speaks Up: removing stigma's stubborn hold on mental health

Charlene Habibi
University of Ottawa, Class of 2021

Sam Seyedin
University of Ottawa, Class of 2020

Mishaal Umar
University of Ottawa, Class of 2020

MEDICINE AS A VOCATION, with its implicit life-long learning and growth, comes with its unique share of victories, but also crises that go unshared amongst medical professionals (be they medical students, residents, or staff physicians). But this reality is not news. The statistics on mental health among those working in medicine and its allied health networks are surely familiar to any healthcare provider:

- Among physicians, there exists a 40% and over 50% increased risk of suicide among male and female physicians respectively, relative to their non-physician counterparts.¹
- Among residents, 51.9% suffer burnout symptoms throughout their training, and over 75% report experiences of harassment and intimidation in the last year.²
- Among medical students, suicidal ideation was found to be prevalent at 11.1%.³

It seems ludicrous to ever want to embark on a career with occupational hazards at such alarming rates. And yet, every year, thousands of prospective medical students continue to add their names and applications into the running, hoping to gain admission into one of Canada's 17 medical schools. All the while, the aforementioned statistics remain virtually unimproved year-to-year, and the associated cycle of stigma continues to fester.

As healthcare providers who have dedicated our lives to alleviate suffering, it's unfortunate that we contribute in some form or another to a culture wherein our colleagues feel like there is no room to seek help for personal distress. Even worse, they feel as though they are not allowed to suffer, ashamed to experience their own ills, knowing that they have patients who are relying on their provider's fortitude and strength to continue providing quality care to them and their families.

This hidden reality of the "silent sufferer" contributes to a culture in which the impossible expectation of total perfection becomes the standard. As such, "imperfection" and other mistakes or failures are often hidden from view. The idea of being seen as incompetent, underserving, or lesser than those around you is a common fear that most medical professionals have experienced at some point in their careers yet abstain from explicitly discussing in the public sphere. We often perceive that medicine has no room for personal stressors or struggles, because to experience any struggles with mental health or personal relationships somehow translates into a lack of focus on what we perceive to matter most: medicine. We feel that in order to succeed, we must remove our own selves from the lives we lead, paying no heed to ourselves as a full and wholistic "person" like any other such individual in our care. As efficient as

this self-denial appears to be in achieving one's career goals, it is ultimately self-destructive.

UOMed Speaks Up is a University of Ottawa medical student-led initiative that was created to contribute to the discourse surrounding mental health and wellbeing amongst healthcare professionals by targeting medical students at the very beginning of their careers. We are a team of dedicated medical students advocating for medical students by encouraging our colleagues to feel empowered to recognize and expose the pre-existing shame-filled climate by sharing our own experiences in mental health.

"Medicine as a vocation, [...] comes with its unique share of victories, but also crises that go unshared amongst medical professionals"

“The statistics on mental health among those working in medicine and its allied health networks are surely familiar to any healthcare provider”

Our objective is simple: to make strides in removing the aforementioned stigma surrounding mental health in healthcare. Our model for this is an online platform in which medical students have a voice to share their stories, their struggles, what they've learned, or simply their stage in their own journey with mental health and wellbeing.

To share one's personal stories with colleagues takes an incredible amount of vulnerability. This much is clear. But to share one's story is also tremendously empowering, not only for the contributor, but also to those experiencing a similar

issue. Our platform gives students the voice to speak to their own realities, to find strength and power in their own candour so that readers might better understand that they are not alone and that there is a whole generation of current and future healthcare providers looking to help remove that very stigma.

The idea of an online open communication platform was inspired by a group of students at the University of British Columbia who had begun to experiment with student engagement in mental health through the Mental Illness Network for Destigmatization (MIND) initiative. Their success prompted us to create a similar group, specific to medical students at the University of Ottawa, which would later expand to include various initiatives that would give students varied opportunities to share their stories in whichever format they feel comfortable.

Our first, and principle, project remains our “Photo Series” initiative in which we help facilitate our colleagues' stories from all 4 years of medical school to be shared widely online. Such insights and experiences are all tales that would otherwise not be made known so apparently to others. Our platforms of choice are Facebook and Instagram, so as to reach as large of an audience as possible.

Students choosing to share have the option to send a blurb in to our team for consideration, or to sit down for a casual interview to share some thought or experience in-person, for later transcription.

In keeping with other forms of social media, and in a manner similar to *Humans of New York*, a photo of each participant is published alongside their associated blurb – associating familiar faces to unfamiliar stories, traditionally kept hidden away. Such a stark association between blurb and portrait serves to reflect our working goal of removing stigma's stubborn hold on mental health.

Having students featured from all years has further allowed us to open up the conversation between trainees at all levels. Thus, incoming students are uniquely able to glean insights from those who have already been in their shoes, at the very outset of their medical careers. Seeing that they have experienced similar struggles and seeing them come out on the other side is tremendously empowering. Our firm belief is that there is nothing shameful in having insights or experiences around our mentality, a foundational aspect of health and wellbeing that affects us all. Thus, “Photo Series” serves as a true manifestation of this belief in practice.



Adam Suleman, Class of 2019



David Ripsman, Class of 2021



Shabana Jamani, Class of 2022

“As efficient as this self-denial appears to be in achieving one’s career goals, it is ultimately self-destructive.”

Our second initiative, “Soul Stories” was created in order to cater to the group of medical students who preferred to share their stories anonymously. Despite our objective of removing stigma surrounding mental health, our team understands that we are still at an age in medicine where perceived barriers exist that prevent our colleagues from being as forthcoming as they would like to be. Fortunately, these students are still willing and eager to share their stories if the proper measures are in place. Thus, “Soul Stories” gives students the freedom to contribute their stories of personal struggle, failure – or success – anonymously on an alternate online platform. Our team believes that all students should have

the opportunity to share their unique stories regardless of their willingness to reveal their identities. Anonymous stories undoubtedly have unique value, and we hope that with this addition, we will be able to gather a more comprehensive and inclusive collection of submissions from which our audience could benefit.

Our third initiative, “Destigmatizing mental health among medical professionals”, still very much in its infancy, is an annual event put on by our team in which we invite a member of the medical community to share their own experience navigating their mental health while in medicine. This talk is set to be followed by a series of interactive break-out workshops meant to explore the topic of mental health further in intimate groups as well as equip participants with a set of skills they might find useful employing as they go forward into their own journeys.

At its heart, the ultimate goal of *UOMed Speaks Up* is to establish a culture of medical students who believe that they are not alone or unworthy, in their own unique struggles with mental health. We hope that we will be able to empower medical students, both at the University of Ottawa and beyond, by giving them a place where they have the opportunity to be heard. By starting these conversations,

we intend to create a learning environment where students know that being successful trainees and being a person are not mutually exclusive endeavours. The ideal of “perfection,” is not a goal anyone has been able to, or is capable of, achieving. And yet, the fear of being seen as incapable is ever-pervasive throughout medicine. The first step in normalizing the fear of failure or inadequacy, whatever that may mean to an individual, is to speak up.

We would like to thank our fellow classmates who have taken the time to contribute to our initiative for their awe-inspiring candour, transparency and courage. ■

For more information, please feel free to reach out to our team at: [facebook.com/UOMEDSpeaksUp](https://www.facebook.com/UOMEDSpeaksUp)

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The 3 H's of Medicine: reflections from the 2019 medicine and humanities summer school

Oliver Fung
University of Ottawa, Class of 2022

HEALTH, HAPPINESS AND Humanities, “the 3 H’s of Medicine”, are a simple way of describing the focus of the 2019 Medicine and Humanities Summer School. The 2019 Summer School was hosted by the Jiao Tong University in Shanghai and the Shanghai University of Traditional Chinese Medicine, bringing in students from the University of Ottawa and the Université de Lyon. It was a privilege to be part of this cohort of University of Ottawa students and to learn from this international collaboration.

Without a doubt, medicine is intertwined with health, though it is often forgotten that it also draws heavily from the humanities. Throughout my medical education so far, it has been continuously emphasized that the goal of medicine

is to treat people and not only disease. However, as medical knowledge accumulates, it becomes easy to forget that medicine is not purely a science. The Medicine and Humanities Summer School was a great reminder of how medicine cannot be practiced properly without humanities.

According to Stanford University, “humanities can be described as the study of how people process and document the human experience,” using literature, art, music, history, and language. The international collaborative component of the summer school program between four universities from three countries offered a unique opportunity to study the humanities. It heavily emphasized how differences in culture impact medical perceptions and in turn, how medicine is practiced in different cultures. The diversity in culture, language, and history between

“The international collaborative component of the summer school program between four universities from three countries offered a unique opportunity to study the humanities.”



The University of Ottawa delegation in Shanghai, participating in the 2019 Medicine and Humanities Summer School.

“Throughout my medical education so far, it has been continuously emphasized that the goal of medicine is to treat people and not only disease.”

students and the opportunities to engage in intercultural exchange made studying the vastness of the humanities more real, experiential and engaging.

During the first week of the summer school at Jiao Tong University, I was able to learn so much about how differences in culture impact communication styles. Through case-based learning activities and simulations in breaking difficult news, I was able to pick out differences in patient-physician interactions between the Western cultures of France and Canada and the Eastern culture of China. I observed how, in Western medical practice, the patient is at the centre of attention with emphasis on patient confidentiality. On the other hand, in China it is not uncommon for a patient's health to be discussed and relayed to a large group of family and friends. There are also differences in the nature of communication: Western communication can be described as low-context, meaning that people typically communicate in a more explicit and direct manner. In China and other eastern cultures, communication can be described as high-context, where proper

interpretation of verbal communication must include contextual considerations, as people typically communicate in a more implicit manner. Having an understanding of the intersectionality of culture and communication is really important, especially for Canadian medical students who are preparing to provide medical services to our diverse population.

Throughout the second week of the summer school program, hosted by the Shanghai University of Traditional Chinese Medicine, I learned about the foundations of Traditional Chinese Medicine. Traditional Chinese Medicine stems from Chinese history, language, and art. Their perspective of health and medicine is based largely on their understanding of balance and bodily energy. First, balance can be illustrated in the concept of *yin* and *yang*, where the body is seen as a garden which must be in harmony with the environment. When there is an imbalance between human beings and their environment, the result is pathology and disease. Second, the concept of bodily energy is understood as *qi*, and one principle of Traditional Chinese Medicine is to reinforce the healthy *qi* and expel the pathogenic *qi*. Taking these two concepts into consideration, the basis of Traditional Chinese Medicine approaches medicine from an empirical standpoint with a focus on the whole body. From a western perspective, these philosophies can be quite difficult to grasp and understand, but it is easy to appreciate how culture heavily impacts the understanding of medicine, and subsequently how this perception can lead to a more holistic and different approach to health.

After the completion of the summer school, I visited Nanjing with two other students, Francis Demontigny and Jade Taki. While touring the city, we visited the Memorial Museum for the Massacre

of Nanjing. Here, we learned about the work of Dr. Robert Wilson and Dr. John Rabe, two physicians who cared for the Chinese at the time of the Japanese invasion during World War II. They helped thousands of victims and refugees through attentive medical treatment, and were exemplary physicians who demonstrated compassion, altruism and a dedication to humanity through their medical work. Although they are exceptional examples in an extreme situation, the message of the interconnectedness of humanities and medicine can be translated to our everyday training and practice of medicine.

Returning back to the “3 H's of Medicine”, it is important to also remember happiness. I believe that fully incorporating the humanities into medical education and practice leads to a more holistic, fulfilling and rewarding experience for patients, learners and care providers. I had a wonderful experience in Shanghai and I would like to thank all those involved in the organization. I hope to be able to attend the 2020 summer school program in Lyon, France. ■

“The Medicine and Humanities Summer School was a great reminder of how medicine cannot be practiced properly without humanities.”

Community: the clinical skill your textbook left out

Jessica Froehlich

University of Saskatchewan, Class of 2022

IN THE MORNING LIGHT I SAT at the kitchen table, plucking away at fat and fascia with my little knife, as if the meat in front of me were the most delicate specimen. I'm flustered at how ineffective my knife skills are when Martha comes up the stairs with an entire moose leg swung over her shoulder and begins to dismantle the knee anatomy in front of me. Thankfully she didn't mind my slow attempt at dissection. She was simply grateful for my excitement to help and maybe learn a thing or two.

This is Dillon, situated on Treaty 10 in Saskatchewan and the reserve territory of Buffalo River Dene Nation. Some colleagues and I made the long drive North as part of the College of Medicine's "Making the Links" program. It prepares students for work in underserved communities and involves course-based learning, volunteering at an inner-city health clinic, and practicums in rural Indigenous communities and abroad. After a term of academic night classes, I was ready and excited to delve into some community-based learning. We were warmly embraced by the community: our host family Martha, Warren, and their two daughters; community Elder James and his family; Chief Elmer; local clinic staff; and schoolteachers.

In the six weeks I spent in Dillon, we presented on various health topics at the school and hosted community events. We worked with the doctors who flew in every Wednesday for clinic and were introduced to both the joys and the challenges of rural medicine. We went fishing, duck egg hunting, quadding along the river, and we attended Treaty Days. We went to a Pow Wow and we partook in many of the sweats that Elder James held. We spent a night at James' cabin on

Vermette lake, roasting moose and potatoes over the fire and exchanging stories. He told us of land and treaty rights and shared his experiences from the Beauval Residential School.

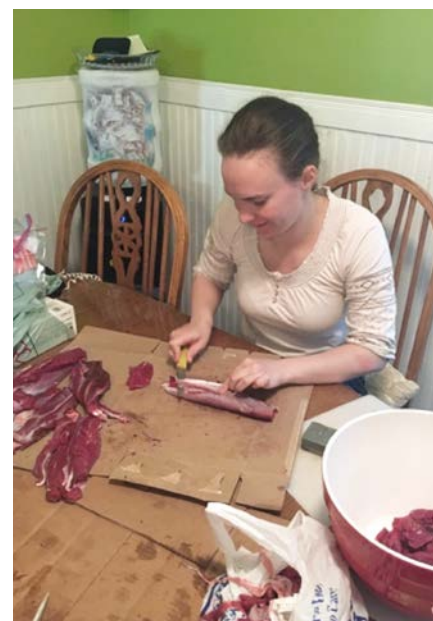
I loved hearing the stories James, Martha, and many wise community leaders generously shared. Sometimes our discussions weighed heavy. "Our community doesn't have time to heal before there is another tragedy. We can't start healing because there is always something else that happens too soon after," Martha said. Dillon is a community that has faced a lot of colonial trauma and ignoring that would not do justice to the growth, resilience, and love of the people. "Every house here has a story like that," she told me.

When Martha and I finished with the moose, we bleached down the kitchen. "You'd make a great orthopaedic surgeon!" I told her, and we laughed. Despite my amazement, Martha expressed that she didn't think she was very good at cutting up the moose. "My girl, you should see Huma (mother)," she told me. She shared of her experience growing up at a Residential School and explained that she had to teach herself traditional practices on her own. Despite growing up in an institution with colonial goals and mindsets, her love and respect for her community home runs deep. In Martha's home, food is medicine. It is a way to honor the abundance of the land and take care of one another. This is but one way that healing happens outside the white walls of the health clinic.

Dillon taught me that, as health-care providers, we can only help to heal when we honor the lived experiences of our patients and dismantle the assumptions we are making about their health and healing. It taught me how living in community and building solidarity is a

clinical skill, and this clinical skill is the kind of knowledge that you only accumulate by living it. There is no lecture or textbook that can replace this kind of transformative learning. One must step outside the boundaries of the clinic and see how healing happens in the community where people spend the bulk of their lives. Healing and medicine come at many times and in many forms, be it on the fishing dock or in Huma's kitchen. It happens to the steady drum of a Pow Wow or sweat lodge. It happens to the vibrant sound of children laughing and aunties cracking jokes.

To practice medicine in a community such as Dillon, understanding the difference between curing and caring – between health and healing – is as important as any other clinical skill that we learn as medical students. Learning medicine here has been one of my greatest honors, and I will hold these experiences, stories, and lessons closely throughout my career. ■



Learning to cut up moose meat with Martha

Therapeutic clowning and remembering to play: let's create lollipop moments

Yipeng Ge

University of Ottawa, Class of 2020

AS A MEDICAL STUDENT AT the University of Ottawa approaching the end of my clerkship year, rotating through various hospitals within and outside of Ottawa while gaining experience and lessons from many different specialties of medicine, I realized there was one area left unexplored. During the past three years of being a medical student and walking through the halls of CHEO (Children's Hospital of Eastern Ontario), I watched – in awe and curiosity – the relationships that Molly Penny, the therapeutic clown, fostered with those around her. Recently, I mustered up the courage to learn from Molly Penny as a clown trainee or clown-in-training, resulting in one of the most impactful,

informative, and transformative experiences of my medical education journey as not only a medical trainee, but as a person and human being.

I learned and was reminded that we are all human. We experience disease and illness in different ways and suffering in its many forms can be a very personal and isolating experience. I learned to laugh and play again, and I think we all have a lesson to learn around the importance of 'play': to not take ourselves too seriously, but also to be curious and approachable in the fast-paced and complex world we live in. Through my interactions with children and youth of various ages, it was reemphasized to me how important our behaviour, body language, and the words we choose are constantly being perceived

and interpreted by children and youth. And of course, I learned of the power and importance of laughter and humour, that small acts of kindness can go an incredibly long way for children, youth, and their families, and also that even passers-by can be uplifted by observing or hearing about a shared special moment. This inspired me to share with Molly Penny a TED talk on 'lollipop moments' by Drew Dudley: a talk about the profound moments that make huge impacts on others' lives can be seemingly small acts from someone that may not even recognize the impact they have had on others, and the idea that we are more powerful than we might believe.



Molly Penny and Yipeng Ge

“I learned and was reminded that we are all human. We experience disease and illness in different ways and suffering in its many forms can be a very personal and isolating experience.”

“Be somebody who makes everybody feel like somebody” - Kid President (Robby Novak)

The ‘lollipop moment’ is a concept that small acts of kindness, humanity, and leadership can make profound positive impacts on others. They are the moments when someone said or did something that made you feel that they made your life fundamentally better. Drew Dudley, a speaker and author on leadership, discussed this very concept in his inspirational TED Talk on “everyday leadership: leading with lollipops”.

“We’ve made leadership about changing the world. And there is no world: there are only six billion understandings of it. And if you change one person’s understanding of it, one person’s understanding of what they’re capable of, one person’s understanding of how much

people care about them, one person’s understanding of how powerful an agent for change they can be in this world, you change the whole thing.” - Drew Dudley from his TEDxToronto talk “Leading with Lollipops”

At CHEO and at many other hospitals and clinical environments, therapeutic clowns do this very feat of creating ‘lollipop moments’ by fostering an atmosphere and environment of fun, humour, and humility with children, youth, and their families. Molly Penny, the therapeutic clown, sometimes hears and learns of the positive impacts she makes on children, youth, and their families either directly from families or indirectly from other members of the healthcare team. By empowering children and youth with a fun atmosphere, offering moral support, and helping to find the humour in various situations, she facilitates and fosters

lasting ‘lollipop moments’ for many that she has interacted with, including myself.

Many individuals such as youth, children, families, and staff/volunteer team members of CHEO, are also making profound impacts on one another on a daily basis in a way that is often not as intentional or directly commented on by those that have felt they have been impacted or helped. Small and random acts of kindness ought to be encouraged and highlighted just as much as my thanking Molly Penny for her role as a therapeutic clown at CHEO. Let’s build a movement and acknowledge that we each possess the power and influence to impact others in an incredibly positive way with acts of compassion and kindness on a daily basis. ■

“People will forget what you said, people will forget what you did, but people will never forget how you made them feel.” - Maya Angelou



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The best medicine: how the shared pasts of pharmacology and medicine will shape the care of tomorrow

Alessandro Pedicelli
McGill University, Class of 2021

DURING HIS CAMERON Prize Lecture at the University of Edinburgh in 1928, Sir Frederick Banting is quoted as saying “It is not within the power of the properly constructed human mind to be satisfied. Progress would cease if this were the case.” The words of this famous Canadian physician, medical scientist, and Nobel laureate, perfectly embody the relationship between pharmacology and medicine, in that it describes the relentless desire of pharmacologists to answer the multitude of questions that modern medicine poses. Whereas the contemporary medical physician focuses on disease alone, the pharmacologist focuses on drugs and disease. In doing

“Throughout history, we see many examples of how the work of devoted basic scientists can translate into ground-breaking advancements in medical practice and therapeutics.”

so, pharmacologists concern themselves with how drugs are processed within the body, their mechanism of action, their overall physiological impact, and their therapeutic applicability.

Through these processes, pharmacology is able to assume two important roles within clinical medicine. First, the discovery of new and novel molecules allows pharmacologists to test these candidate drugs against various diseases and conditions in the hopes of unearthing a breakthrough treatment for one or more ailments. Second, pharmacology scientists develop drugs for specific indications with the goal of improving therapeutic efficacy, drug safety, and treatment adherence, which collectively contribute to improved patient satisfaction and disease outcomes.

In this essay, I will explore how historic discoveries in pharmacology exemplify the important connection between this scientific discipline and the practice of medicine and how these two fields together will pave the way for the future of medical practice.

Serendipity on the Windowsill

No discussion of monumental discoveries in pharmacology can begin without first mentioning Alexander Fleming and his unexpected discovery of penicillin in 1928. We all know the story. Fleming leaves on vacation and fails to clean his lab bench, where a petri dish impregnated with staphylococci is left next to an open window. Mould spores from the fungi lab a floor below float upwards, land in the petri dish, and grow in the nutrient- and oxygen-rich environment. The mould

begins producing a molecule that kills the surrounding staphylococci, a process that is noted by Fleming upon his return some weeks later. While it would take another decade before Howard Florey and Cecil Paine could finally purify the penicillin molecule and apply it therapeutically to systemic infections, the results of this immense discovery would change the world forever.¹ In the decades since the discovery of penicillin and the golden-era of antibiotics that followed, life expectancy in Canada has risen more than 24 years – from 57 to 81 years – in part fueled by a significant drop in infectious disease-related morbidity and mortality.²

This fortuitous discovery embodies the first manner in which pharmacology and medicine are intimately linked. Specifically, how a novel pharmacologic development can be applied to an existing medical problem, with the goal of optimizing patient care. In this regard, pharmacology – through its discovery of a therapeutic molecule – is the driving force behind treatment development and the medical practitioner is the willing recipient of the scientist’s work. Throughout history, we see many examples of how the work of devoted basic scientists can translate into ground-breaking advancements in medical practice and therapeutics. Whether it be the 1948 discovery of the analgesic properties of a previously unknown molecule called acetaminophen or the study of the blood pressure lowering effects of newly unearthed drugs like propranolol and chlorothiazide in the 1950s and 60s, it is indisputable that laboratory work, conducted by curious

“In the early 20th century, a diagnosis of diabetes mellitus was a death sentence [...]”

and dedicated scientists, has been providing physicians with the essential tools needed to combat illness and mortality for decades.

The Dog Days of Summer

In 1921, some years before Fleming would discover the unprecedented antibacterial capabilities of mold, the University of Toronto-affiliated team of Sir Frederick Banting, Charles Best, and their colleagues John Macleod and James Collip, were dedicating themselves to the daunting task of isolating and extracting a glucose-lowering substance known to be found in the pancreas of mammals. In the early 20th century, a diagnosis of diabetes mellitus was a death sentence, with pediatric patients dying very young as a result of malnutrition and dehydration, and elderly patients withering away as their organs systematically starved and perished. Based on experiments conducted in the late 1800s, the team knew that the key to treating diabetes lied within the islet cells of the pancreas. However, the substance was yet to be identified or purified due to the extensive proteolysis that occurred whenever the pancreas was disturbed and sampled. Working feverishly throughout the summer of 1921, Banting, Best, Collip, and Macleod were able to develop a protocol that allowed for the adequate extraction of a pancreatic substance capable of significantly lowering the blood sugar of diabetic dogs and prolonging their life: they called it “isletin”. Weeks later in January of 1922, a 14-year-old boy who lay dying of what we now know as diabetic ketoacidosis, was the first ever human recipient of Banting and Best’s insulin extract. Treatment with

the extract completely resolved the boy’s symptoms and would allow him to live an additional 13 years, while receiving insulin injections regularly.¹

The incredible story of Banting and Best’s momentous discovery exemplifies the second manner in which pharmacology and medicine intertwine; namely that, when presented with a specific medical problem, pharmacology is able to develop a precise therapy meant to meet the needs of a pre-defined patient population. Whereas Alexander Fleming made a discovery and then applied his results to the problem of infectious diseases, Banting and Best started with the problem of diabetes and devised investigations intending to find an effective therapy for the disease. In contrast to the pharmacology-driven drug discovery process described above, here we see how medicine presents the initial spark that fuels the development of a focused therapy by motivated pharmacologists. Again, the ability of talented scientists to seek out solutions to known problems permeates throughout history. For instance, captopril – the first ever angiotensin-converting enzyme (ACE) inhibitor – was reverse-engineered by specifically targeting the active site of the enzyme, thus allowing clinicians to more effectively treat hypertension, heart failure, and kidney disease. Scientists at Bayer in the late 1990s did the same when they designed the first ever direct factor Xa inhibitor, rivaroxaban, in a targeted attempt to develop more effective and safer oral anticoagulants to treat and prevent thromboembolic events.³ When medicine presented a problem in need of a solution, pharmacology relentlessly stepped up and provided that answer.

“The Future is Today” – Sir William Osler, 1913

The future of medicine is one that will be paved by the unique and fundamental relationship between pharmacology and clinical practice. It seems that with each passing day, the practice of medicine becomes more and more complex. We are constantly discovering novel ways to

detect, treat, and prevent diseases that may have crippled the healthcare system just a few decades past. However, with this innovation and complexity comes the crucial responsibility of delivering therapies that are more effective, safer, and more affordable. In order to meet these expectations, I firmly believe that the future of medicine and pharmacology is profoundly linked, and their paths will unite in the era of personalized medicine.

For the first time in the history of mankind, pharmaceutical manufacturers and academic drug researchers are able to develop therapies that can be tailored to each individual patient, with an unprecedented specificity. Through the use of processes like pharmacogenomics, immunotherapy, CAR-T cells, and CRISPR-Cas9, physicians have at their disposal tools that can fundamentally alter medical practice. Pharmacogenomics allows medical practitioners to better predict the pharmacokinetic and pharmacodynamic properties of drugs within individual patients, thus allowing for more precise prescribing strategies.⁴ Immunotherapy has already revolutionized the treatment of malignancies and inflammatory conditions, by maximizing the therapeutic efficacy of a patient’s own immune system.⁵ CAR-T cell therapy, an extension of immunotherapy, has shown that basic scientists have the ability to train the immune systems of lymphoma

“The future of medicine is one that will be paved by the unique and fundamental relationship between pharmacology and clinical practice.”

patients to better target and eliminate their cancers.⁶ Finally, CRISPR-Cas9, the process whereby scientists can precisely edit the genome of cells and which is considered to be one of the most important scientific advancements in our generation, is being investigated as a potential cure for a wide spectrum of diseases, including cystic fibrosis, hemophilia, HIV, and some malignancies.⁷ It is clear that as we move into the future of healthcare, the basic sciences – especially pharmacology, molecular biology, and genomics – will play a critical role in the development of safe, effective, and highly personalized medicines that will fundamentally change the modern experience of illness. Additionally, the role of the basic scientist and clinical physician is changing – or rather, merging – with clinician-scientists becoming the new standard in large academic health centres. In speaking of the importance of patient-centered care, Osler remarked, “it is much more important to know what sort of patient has a disease than what sort of a disease a patient has.”

The future of medicine is one where the therapeutic choices, medical treatments, and health investigations are tailored to each individual on a molecular level: a truly patient-centered model.

Ever since there has been disease, humankind has been trying to develop ways to treat and eradicate them. In the early days, humanity turned to the various plants, fungi, and natural medicines used by local healers – the prototypic clinical pharmacologist. Since then, as described above, history has shown us that pharmacology and medicine have flourished together as one informs the other. When pharmacology comes up with a discovery or innovation, medicine ensures its utility and benefit. When medicine comes up with a problem, pharmacology takes measures to develop the solution. This fascinating synergetic relationship has given us the likes of Fleming, Banting, and Best and will continue to provide the drive for the incredible scientific minds of tomorrow. I, for one, cannot wait to see what they come up with. ■

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Two steps back

Sophia Frost

University of Western Ontario, Class of 2021

“What’s it like in medical school?”

STRUGGLE TO KNOW HOW TO answer this question.

Mostly it feels like being a child. We’re taught that certain responses follow certain cues, even if we don’t yet know why. At my niece’s second birthday, we sang and brought out a cake with candles. When we were done singing, she blew hard, because that’s what you do. However, the cake was still on the other side of the room. Medical school is a bit like that. If you don’t understand the reason for your actions, of course you’ll miss cues.

During an ER observership in first year, a patient was brought into the resuscitation bay. I remembered to put on a mask before joining the team. During the debrief, the attending and resident shared a glance and chuckled. It took some time before I realized why: I’d put on my mask upside down!

Most people don’t like being laughed at, they don’t like seeing amusement on someone’s face without understanding why. It can feel embarrassing and uncomfortable. But there’s no ill will – it’s usually genuine amusement. I laughed

“Being in medical school means accepting that it will be years before you’re a competent, functional, employed adult.”

at my niece too. Her response was so unexpected, and in that moment, I could see what she knew and what she didn’t. Perhaps my attending felt the same way.

Sometimes it feels like being a child meeting their developmental milestones, but at other times, medical school feels like moving to a new country. Outside of medicine, you may be a fully functional adult and even have achieved mastery in some areas. But things are different here. The social customs may not be intuitive for you, unless your family taught you. It may also be hard to understand the structure and how you fit in. In medicine, this doesn’t just mean accepting that you are at the bottom of the hierarchy. It means saying yes without guilt when the attending offers you a coffee, scrubbing in for one minute longer than your senior, not being more cynical than your attending. There will be many *faux pas*. The first time you do a complete respiratory exam, you will probably include tactile fremitus, and they’ll realize you’re working straight from the textbook. But you persist, you adapt. Next time you won’t do tactile fremitus.

In this new country of medicine, there is also a new language to master. There’s more to this than the formidable vocabulary. Certain words carry implications beyond their literal meanings. For example, saying a patient has peritonitis carries meaning beyond simply that the peritoneum is inflamed: you are offering an opinion about diagnosis and management. There’s also a grammatical structure to master. Your audience will be puzzled if you don’t start with the patient’s age and sex, or if you present subjective and objective findings out of order. Certain words can also lull you into a false sense of security. Just like in French class, not all endings mean the same thing. If you see a drug ending in “-azole”, you might

assume that this is a proton pump inhibitor and the patient must have GERD, but it could just as easily be antifungal or antipsychotic.

It takes a long time to become “fluent” and the only way is through trial and error. When you speak, the attending’s brow might furrow as they try to understand. You might wonder, “did I mispronounce it? Was my grammar off?” Then you’ll do the dictation, which will be painfully slow. Like a child learning to type, hunting and pecking across the keyboard, you’ll fumble and pause to look things up. In a few minutes you’ll do it all again, and by the end of the day you’ll be exhausted, but over time you’ll notice it takes less effort. After a while, you’ll learn the difference between hard-and-fast rules and suggestions, developing your own communication style.

Being in medical school means accepting that it will be years before you’re a competent, functional, employed adult. This can be hard to swallow for people who are used to being high-achievers. But it’s easier if you maintain a sense of humour, particularly about yourself and your abilities. After all, from their point of view our mistakes must be entertaining. So long as they let me know how to do it right, I don’t mind if my efforts sometime amuse more than I intended.

My niece’s third birthday is coming up. This time I’ll make sure she knows to blow on the candles. ■

Un consentement non éclairé

Andréanne Chaumont
University of Ottawa, Class of 2020

A CHAQUE SEMAINE OU presque, parfois à tous les jours, nous sommes jumelés à un médecin précepteur, un possible mentor. D'ordinaire, ce précepteur nous est imposé. À l'externat de médecine il s'agit de notre routine. C'est à quoi nous nous sommes engagés en tant qu'étudiants en médecine. Toutefois, je suis perplexe qu'il s'agit d'un consentement éclairé à notre engagement à devenir médecin. Je suis d'avis que c'est fort débattable et d'avis que cette façon de former les médecins de demain portent deux côtés à la médaille.

Moi, ma personnalité, mon bagage d'expériences, et mes intérêts arrivons le lundi matin devant ce précepteur assigné. Un précepteur qui a un horaire chargé, des habitudes de travail bien ancrées, et une personnalité forgée. Certains se veulent accueillants et d'autres plus refermés. Visiblement l'approche de chacun varie. Une surprise à chaque lundi matin. Presqu'une pige au sort. Dans les normes non écrites de l'externat à la médecine, on s'attend de moi que je me moule à ce précepteur. On s'attend de moi que je crée une connexion avec cette personne

“Tous les étudiants en médecine doivent à un certain degré jouer un rôle d'acteur: pourtant nous ne sommes pas inscrits à l'école de théâtre.”

que je connais à peine. Trop souvent la triste réalité est la suivante: réellement ce précepteur ne tient pas particulièrement à ma présence. Ensemble, nous venons des champions du small talk. Tristement, je ralentis le flot du travail de ce médecin occupé bien qu'au fond c'est ce qu'il faut pour mon apprentissage au sein du monde de la médecine. Il s'agit d'une connexion temporaire, éphémère et souvent superficielle. Du mieux que je peux, je tente de rester honnête à ma personnalité. À chaque lundi j'espère que grâce à ma personnalité sociale mon caractère se mariera bien.

Au fond, je suis choyée. Étant sociale et dotée de bonnes capacités de communication interpersonnelle je ne m'en tire pas si mal. Souvent la connexion avec ce précepteur y est. Assurément mon apprentissage s'en veut bénéficier. Toutefois, aussi peu significatif que cela peut paraître, il n'en reste pas moins que quotidiennement je me dépersonnalise, parfois peu, parfois beaucoup, jouant l'intéressée, la curieuse, simplement pour établir cette connexion. Je veux et dois gagner la confiance de ce précepteur. L'autre réalité est que je sais que je ne suis pas seule. Tous les étudiants en médecine doivent à un certain degré jouer un rôle d'acteur: pourtant nous ne sommes pas inscrits à l'école de théâtre. J'ai de l'empathie pour mes collègues qui de nature sont gênés, plutôt introvertis. Nous sommes constamment observés et évalués. Mon évaluation sera-t-elle bonne ou excellente? Nous voulons bien paraître aux yeux de ce précepteur. Ce précepteur qui parfois, peut-être même souvent, nous estime peu. Je ne suis qu'une étudiante au passage après tout. Je le sais et mes collègues tout autant. Tous, nous faisons de notre mieux pour rester authentique tout en agissant de sorte à favoriser notre apprentissage et la perception qu'aura de

“Après réflexions, je suis convaincue que je n'ai pas signé un consentement éclairé à cet effet.”

nous ce précepteur. Plus nous sommes souriants, plus nous sommes curieux, plus nous recevrons en retour. Meilleures seront nos évaluations.

Je trouve cette approche épuisante. Oui, une connexion est effectuée, mais certes insatisfaisante. Les racines de cette connexion professionnelle sont à la surface, fragiles. C'est une connexion plus souvent qu'autrement impersonnelle: Du small talk et opération séduction 101. Néanmoins, ces interactions font parties de la nature de notre formation. Je reconnais qu'elles sont par ailleurs nécessaires et essentielles.

Après réflexions, je suis convaincue que je n'ai pas signé un consentement éclairé à cet effet. Aucun médecin précepteur ne m'a expliqué les risques et bénéfices de cette approche à l'enseignement sur mon bien-être étudiant et sur ma personne. Pourtant, les médecins reconnaissent très bien l'importance d'un consentement éclairé. Cette approche fait partie d'un curriculum caché bien. Un portrait de notre formation que je teins négativement, peut-être, mais ce fut notre réalité, à moi et mes collègues, lors de ces derniers mois d'externat. Bref, je songe. Les facultés de médecine ne devrait-elle être plus transparente quant à la nature des relations auxquelles nous serons exposées durant notre externat et à l'impact que peuvent avoir ces dernières? ■

Why I stay involved in the community outside of medicine and why I think you should too

Lucas King

University of Saskatchewan, Class of 2022

PRIOR TO ENTERING medical school in 2018 I'd been told – what felt like 100 times – that medical school would be extremely difficult and I'd need to make sacrifices to my family life and involvement in the community in order to do well. While I knew it was going to be a challenge (and it absolutely has been), I decided I was not going to completely give up my past life. I was going to do my best to stay involved with the Saskatchewan Weightlifting Association (SWA) community that had become like a second family to me, as I have for all but nine months of the past ten years.

The only time that I have not been an active athlete, coach, volunteer, or Board member of the SWA over the past ten years was during the 2015-2016 school year when I was in my first year of Chiropractic school at the Canadian Memorial Chiropractic College (CMCC). Similar to my experience with medical school, prior to entering I was told that

“I hadn't realized the impact yet, but by letting my past go and completely forsaking my friends and community I had set myself up for failure.”

I would need to make sacrifices and that most of my time would be dedicated to studying. Hearing this repeatedly, I decided in order to succeed I would need to give up competing and volunteering in the Weightlifting community completely.

With this major time commitment out of the way, I was able to throw myself into my studies and I felt like I had all the time in the world now that I no longer had to worry about training and I had at least one weekend per month extra that I had always dedicated to volunteering at competitions. For the first few months, I felt great and I was accomplishing so much, but over time I began to lose my focus and drive. I began to tire more easily, and while I still felt like the same person on the inside I was beginning to change. I remember the first big moment my self-concept was challenged when a few classmates of mine were playing around in the hallways walking on their hands. I made a comment about how I love walking on my hands and had been good at it prior to coming to CMCC. I suggested that maybe I should give it a try. But I clearly remember one of my classmates stopping me by saying, “No, that's probably not a good idea”. Ouch. My self-concept of who I was and how my life had revolved around fitness, health, and sport for the past 10+ years was being challenged and it didn't feel good. Thankfully, I heeded their advice and didn't try to walk on my hands, because I hadn't exercised at all in six months at that point. But I did go home and think long and hard about who I was, who I wanted to be, and where my life was headed.

Over the span of six months I'd gone from being heavily involved in several

organizations and actively engaging in a sport that I loved to nothing but studying and what I'd call “recovering from studying”. I hadn't realized the impact yet, but by letting my past go and completely forsaking my friends and community I had set myself up for failure. Physically, I suffered, mentally I was even worse, and to top it off my relationship with my spouse and son was struggling. Thankfully, at the end of the school year I decided I wanted to pursue medicine, so I dropped out and came back to Saskatchewan.

It took me a long time to get back to feeling like myself after this experience and the biggest thing that brought me back was rejoining to the SWA and getting involved in the Weightlifting community again. Over the next few years, I became even more involved and while I've reduced my time commitment from before entering medical school I've continued to be involved during medical school as an athlete, official, and currently as Vice-President of the Board. While it feels like a lot at times, I strongly believe my involvement within the SWA, and the other organizations I'm a part of, is not a burden. This time spent outside of my medical school bubble is what keeps me whole and energized. I don't know about you, but I don't get out of bed in the morning because I want to sit in the library and study for twelve hours. I get out of bed because I want to make a difference in the world and I get to do just that when I volunteer. That's why I volunteer in my community, and that's why I think you should too. ■

CFMS Awards 2019

CFMS - MD Financial Management 2019 Leadership Award Winners



Alex Wong

University of Alberta

Alex is an MD/MBA student at the University of Alberta passionate about health equity and innovation. He has been involved with the CFMS for the past three years through the Committee on Health Policy, and is currently co-leading the Rapid Response Team. Alex is also heavily involved within his medical school, co-founding the MD AIDE initiative to provide support for Indigenous and lower-income students interested in pursuing medicine. He also started the Choosing Wisely Initiative at the UofA to encourage student awareness of resource stewardship issues, and has been involved in numerous quality improvement projects to improve patient care and cost savings. Within his local community, Alex volunteers with the MBA student consulting group Net Impact, supporting a local firm to incorporate diversity and equity targets into their organizational practices and policies.



Achieng Tago

University of Manitoba

I am a third year medical student from the University of Manitoba. I have always had a passion for global health and advocacy and these were my main drivers when it came to choosing a career in medicine. Throughout medical school I have had the opportunity to pursue these passions and discover a new love for med-ed and physician leadership through my work with UGME and Doctors Manitoba. I have been involved with the CFMS as a Global Health Advocate and as a CFMS Representative. My three years in medicine have shown me just how strong the medical student voice can be and my favorite part of medical school has been using this voice to help effect real change through advocacy. My favorite part of the CFMS is seeing evidence of the power of this voice; I always leave each General Meeting feeling inspired by all of the amazing goals that medical students can achieve.



Meera Shah

Western University

Meera is a second-year medical student who believes leadership is pursuing something that internally resonates with you, hoping it effects change. She is motivated to improve opportunities for individuals of low SES through her involvement with Schulich's Admissions Committee and design of an initiative promoting higher education in low SES schools. She is from London and attending Schulich has allowed her to build upon her community involvement with skills from medical school. She is part of a group initiating a student-run medical clinic, leading health education outreach and prevention for marginalized populations. She cares for her community through her research and work with the local health unit, studying infections in drug users, in particular the opioid epidemic, which has impacted London significantly. Her interest in global health brings her to the Western GHL role, where she also joined the CFMS delegation to Slovenia. She has only just begun and is excited to do more!



Tommy Hana

University of Toronto

Tommy Hana is a second-year medical student at the University of Toronto, and completed his undergraduate studies in Life Sciences at Queen's University as a Loran Scholar. Tommy has a passion for equity and uses his privilege as a medical student to engage in community informed advocacy efforts around intersectional approaches to medical education, ethical engagement in global health work, and equitable approaches to housing and healthcare for Toronto's homeless community. Tommy has worked as a clinic support worker for Doctors of the World UK, a Universal Health Coverage Consultant for KPMG, and a Gender, Equity, and Human Rights intern for the World Health Organization. Tommy's research ranges from international policy frameworks on LGBTQI+ health, maternal mortality in India, mHealth enabled adolescent contraception programs in Tanzania, and publicly funded transition related surgery programs. As a consultant, Tommy coordinates the WHO Interdepartmental Working Group on the Health of Sexual and Gender Minorities, and is working to develop the first ever WHO programme on LGBTQI+ health.



Julie De Meulemeester

McGill University

Julie De Meulemeester is a second-year medical student at McGill University. As the Senior Vice-President of Global Health of the McGill Medical Students' Society (MSS), she is responsible for the student-led global health portfolio and spearheads interdisciplinary projects and initiatives to encourage student engagement in community and global health. In particular, she is one of the co-directors of the Community Health and Social Medicine (CHASM) Incubator, which helps McGill students create partnerships with community organizations and launch projects that address the social determinants of health of local populations. She is also a student representative on the Faculty of Medicine's Social Accountability, Primary Health and Health Advocacy curriculum committee. Last summer, as a 2018 Pulitzer Center on Crisis Reporting Student Fellow, she travelled to Iqaluit and Pangnirtung to report on the federal and territorial programs and policies that perpetuate Nunavut's food insecurity crisis.

CFMS - MD Financial Management 2019 Leadership Award Winners (continued)



Akshay Rajaram

Queen's University

Akshay Rajaram is in his fourth year at Queen's University beginning his residency in Family Medicine in July 2019. Prior to his medical training, he worked for a children's mental health agency overseeing clinical and performance measurement systems. He has keen interests in informatics and advanced analytics and the intersection of these areas with medical education, public policy, and the social determinants of health. Recognizing the importance of these experiences, he launched the QI Practical Experience Program and revamped the Leadership and Enhancement Development initiative. These programs equip future cohorts of medical students with the attitudes, knowledge, and skills to enact and manage change in our healthcare system. Outside of medicine, Akshay is passionate about judo and drawing on his experiences as a provincial and national competitor to train the next generation of athletes. He is a nationally certified coach and looks forward to teaching and training during residency.



Matthew Downer

Memorial University of Newfoundland

Matthew Downer is a second-year medical student at Memorial University of Newfoundland (MUN) passionate about rehabilitation medicine and global health. Through his BSc. (Hons) in Neuroscience at MUN, a Fulbright Canada Killam Fellowship and the start of his M.D., Matthew has published multiple papers in clinical rehabilitation. He also founded the Opioid Awareness and Support Team (OAST), an interest group devoted to raising awareness and understanding of the Opioids Crisis in Newfoundland and Labrador (NL). As an extension of this work, Matthew is conducting research on opioid perceptions in primary care in NL and was recognized this year by the Canadian Society of Addiction Medicine. Matthew is also the Global Health Advocate (Sr.) in the MUN Global Health Interest Group and previously sat on the CFMS Opioid Task Force. Next year, Matthew is taking leave from MUN Medicine to study epidemiology and global health at the University of Oxford as Newfoundland's 2019 Rhodes Scholar.



Tina Guo

University of Calgary

Tina is a third-year MD student at the University of Calgary. For three years, she has served as Founder and Co-Executive Director of the Students Against Domestic Abuse Association, the first student-run initiative of its kind in Canada, and a member of the Calgary Domestic Violence Collective. In her tenure, she has organized three annual Road to Resilience Conferences, attended by over 210 students and faculty members, to educate the campus community about the complexities and misconceptions surrounding domestic abuse and dating violence, as well as fundraisers for the Calgary Women's Emergency Shelter and YWCA Calgary. Furthermore, as Vice-President Finance of the Student Run Clinic, Tina has supervised student clinicians in delivering accessible healthcare at local homeless shelters and the local refugee clinic. Tina has also joined 35 medical student delegates to lobby MLAs to augment support for organ donation and establish a designated youth mental health and addictions fund.



Jessica Froehlich

University of Saskatchewan

Born and raised in Moose Jaw, Jessica is a first-year medical student at the University of Saskatchewan. She believes good physicians should not only be committed to their patients, but to their communities as well. This has fuelled her passions for expanding initiatives around health equity and socioeconomic determinants. She is a part of multiple student groups and has helped organize educational sessions regarding topics such as rural health access, HIV awareness, and human trafficking. She is also on the executive committees for three student-led conferences surrounding global health and health policy topics. Her interest in the intersection of advocacy and policy led to her involvement with her medical schools Provincial Day of Action and the CFMS Day of Action. Jessica is also a part of the University of Saskatchewan's Global Health Certificate program, Making the Links, which involves course-based learning, volunteering at an inner-city health clinic, a six-week Northern Saskatchewan Practicum, and a six-week international practicum. In the future, Jessica hopes to pursue a practice in family medicine among the prairie communities that raised her.



Natasha Larivee

Dalhousie University

Natasha, a third year medical student at Dalhousie Medicine New Brunswick completed her Bachelor's degree in Medicinal Chemistry UNB (2014) and her Masters degree in Epidemiology and Biostatistics (2015) at McGill University. She has also completed an internship with the Institute of Health and Social Policy on the health needs of refugees in Canada. Natasha has served as the President for the Best Buddies Chapters (UNB and Montreal); Best Buddies is an organization dedicated to creating friendships and leadership development for people with intellectual and developmental disabilities. She was awarded the prestigious national James Raymond Cowling Scholarship (2014) as a result of the significant impact she had on this organization. Her interests in medicine include policy development, women's health and the health of vulnerable populations. During her time at DAL, her most notable contributions have involved her creation of the sexual health outreach (SHOUT) education program for youth. She developed, advocated for and launched the SHOUT program in Saint John, NB, based off its counterpart in Halifax. The program continues today, offering education to hundreds of high school students yearly. Natasha received the Dalhousie IMPACT award (2017), for achieving an elite level of involvement in the community.

CFMS - MD Financial Management 2019 Leadership Award Winners (continued)



Mathieu Dorion

Université de Sherbrooke

Mathieu is a 2nd year medical student at the University of Sherbrooke, Moncton NB campus. He is the VP of external affairs for his student body, the Coordinator of events for the Medicine interest group as well as the President of the student volunteering group in Moncton. He is an active member of the Atlantic Task Force and works with the FMEQ to standardise clerkship rights and experiences throughout Quebec. He is currently working on the implementation of a volunteering platform across his home region and has fundraised to assure the creation of a palliative centre in his hometown. In addition, he works as a hockey referee and volunteers in local and Hometown schools to serve breakfast or coach sports teams.



Philip Edgcumbe

University of British Columbia

Dr. Philip Edgcumbe (PhD) is a Canadian scientist, biomedical engineer, medical innovator and doctor-in-training (MDPhD). In 2017, Philip led a team that developed an XPRIZE global crowdsourcing competition to end Alzheimer's. His team raised \$25 million USD to run the Alzheimer's XPRIZE competition and the Alzheimer's XPRIZE was selected as the top priority XPRIZE for launch in 2019. Philip is striving to positively impact the health of a billion people. He has invented, patented and licensed a medical device. He is currently the Innovator-in-Residence for the Canadian Medical Association Innovation Lab. In 2014 Philip was the recipient of the Outstanding Young Scientist award at the MICCAI conference. In 2016 he spent the summer in Silicon Valley at Singularity University. In 2017 he received the Canadian Medical Hall of Fame Award. Philip is a Singularity University Canada Faculty member and he speaks internationally about the topic of Disruptive Technology and the Future of Health Care.



Niharika Shahi

Northern Ontario School of Medicine

Niharika is a fourth-year medical student at the Northern Ontario School of Medicine (NOSM). Prior to beginning her journey at NOSM, she completed her Honours Bachelor of Science in Biology at Lakehead University in Thunder Bay. Niharika believes that proper training of future healthcare professionals plays a big role in addressing the healthcare needs of marginalized populations. As the Chair of Northern & Rural Medical Student Engagement, on Ontario Medical Students Association's (OMSA) Northern Ontario & Rural Medicine (NORM) Committee, Niharika has acknowledged the social, economic, and geographical barriers to Northern medical students' engagement in provincial and national initiatives. She has been working to facilitate engagement of all Ontario medical students in province- and nation-wide initiatives. As the Outreach Director of Altitude Healthcare Mentoring Program, Niharika has also facilitated mentorship relations between medical students and undergraduate students, who come from backgrounds that are traditionally underrepresented in Canada's healthcare workforce.



Noah Lewis

University of Ottawa

Noah Lewis is a fourth year medical student at the University of Ottawa. Noah and his classmate Derek Lanoue developed the management, Leadership, Innovation & Finance Education mLIFE curriculum, which is taught to all four years of study at Ottawa. The fully accredited curriculum is delivered exclusively by physician and provides students with a foundation in topics on personal finance, practice management, medical innovation, and health care economics. Noah is leading a mLIFE curriculum research group, and is in the final stages of developing a medical collaboration initiative with local MBA, MHA, and computer design programs. Additionally, Noah has taken other leadership roles in the capacity as Executive Vice-President of his student council, an accreditation committee representative, school hockey team captain, and mentor for the CHEO Buddies pediatric cancer program, which has been his most meaningful. Noah will be headed to Western University for Internal Medicine this July.



Marc Levin

McMaster University

Marc is a second year medical student at McMaster University. He is intrinsically passionate about leadership and innovating through effective collaboration. Marc enjoys leadership roles on a multitude of clinical and education phone apps, aiming to improve patient care and ease of care. Additionally, he has lead his classmates and colleagues in a variety of initiatives ranging from suicide intervention workshops to American Sign Language classes. Marc is personally interested in researching ways to improve operating room inefficiencies through the implementation of technology and strong teamwork. Marc believes that the best way to lead is leading by example and his all-time favourite leader is Nelson Mandela. He is very honoured and grateful to receive this award and wishes a congratulations to all other medical students receiving the award!

CFMS - MD Financial Management Travel Award Winners (Spring General Meeting 2019)

Atlantic Regional Winner



Aaron Rainnie
Memorial University of Newfoundland

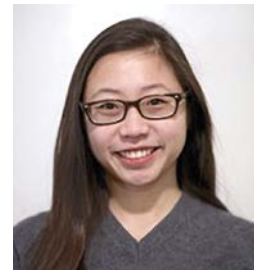
Quebec/Ontario Winners



Sachin Pasricha
Queen's University



Hilary Pang
University of Toronto

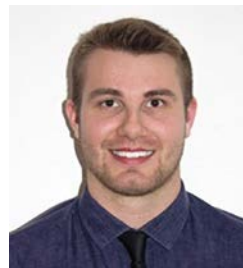


Kimberly Wong
McGill University

Western Regional Winners



Henry Li
University of Manitoba



Nicolas Gibson
University of Alberta

Wildcard Winners



Jamie Gillies
University of Manitoba



Helen Teklemariam
University of Manitoba

CFMS - MD Financial Management Travel Award Winners (Annual General Meeting 2019)



Vinyas Harish
University of Toronto



Alexa McEwan
University of
Saskatchewan



John Liu
University of British
Columbia



Sidra Sarfaraz
Dalhousie University



Robin Glicksman
University of Toronto



Lua Samimi
Dalhousie University



Matin Kerachian
McGill University

CFMS - MD Financial Management Travel Award Winners (National Day of Action 2019)

**Tharshika
Thangarasa**
University of Ottawa

David Lee
University of Toronto

Kendra Raffael
University of Alberta

Jessica Froehlich
University of Saskatchewan

Terra Morel
University of Alberta

Chantal Phillips
University of Toronto

**Miranda
McDermott**
University of Toronto

Dr. Philip Hébert: The Art of Medicine

Connor Brenna
University of Toronto, Class of 2021



DR. PHILIP HÉBERT, A MEMBER OF THE 1984 University of Toronto medical class, is a Professor Emeritus in the Department of Family and Community Medicine. In 2008, he received the William Marsden Award in Medical Ethics from the CMA. In 2011, the College of Family Physicians of Canada named him Ontario's Family Physician of the Year. From 1989 to 2010, he was on full-time medical staff at Sunnybrook Health Sciences Centre where he also acted as a bioethics consultant and chaired the Research Ethics Board. He is the author of several books, including *Doing Right: A practical guide to ethics for medical trainees and physicians*, which is now in its 4th edition (co-authored by Dr. Wayne Rosen). Our interview took place in Dr. Hébert's home in Toronto, in a front room lined, appropriately, with countless books.

In your body of work, you have written extensively about the “Art of Medicine”. What does this term mean to you?

The “Art of Medicine” refers to almost anything that is non-scientific in medical care – precisely what it means depends on who you read. For me, it means the idea of incorporating human values, empathy, and identification with your patients into your medical work. So, the “Art of Medicine” is learning how to tailor what seems to be a very straightforward scientific approach to patient care (which is incredibly important: science transformed and revolutionized medicine, making real care possible and providing effective options for patients). And I think the “Art of Medicine” is knowing how to apply that to individual patients – because it is one thing to have a population-based or evidence-based approach to medicine and to know what’s right for patients as a whole (how to ‘best’ treat lung cancer, or childhood leukemia, for example) but another thing to apply it to this particular patient. How you are going to take this general knowledge and apply it to *this* particular patient is the “Art of Medicine”.

The “Art of Medicine” is also talked about in many other ways, such as how you relate to and understand individual patients through narrative medicine, or other media like paintings or poetry. It is about understanding the world from a patient’s perspective.

The concept of the “Art of Medicine” seems accessible, but it is simultaneously so abstract. Could you share a practical example of where it is either successfully applied or regrettably forgone, to give our readership a clearer idea of how it can be tangibly embodied in clinical practice?

One of the earliest cases I had when I was a clerk – way back in the 80s when ethics wasn’t part of learning medicine. One of my patients was very ill with esophageal cancer that had metastasized into his chest area. I discuss this case

in one of my books. The surgeon said, “you’ve got to take it out, the only way to deal with this is to have surgery and if you don’t have surgery you will die horribly.” And he probably would die horribly as he wasn’t palliated properly. The surgeon recommended surgery and the patient really didn’t understand what he was consenting to, or realize how bad things could be post-operatively. It was very difficult because we didn’t incorporate into the decision-making process the patient’s values and what was important for him – or what was important for him to avoid. He ended up having an awful post-operative course. They couldn’t get all the cancer because it was wrapped around his heart, but he also ended up in renal failure, became septic, had a stroke, and ultimately couldn’t see. He went blind, which was terrible for him because he was a reader and a lover of books. I think that if we had understood better his own particular worldview and way of being in the world, we would have had a different approach to how we discussed consent with him and better prepared him for the ordeals he was to face. Rather than saying “you’re better off having surgery than not”, we could have discussed the very real and possible implications of having the surgery. That, for me, was an early case of someone in my career for whom I felt that we could have – should have – done better.

It was a very tragic case, but everyday we see patients and we need to incorporate their values into the decision-making process. Sometimes it’s when you are trying to get a patient to go along with your examination, or talking with them about taking medication. For example, in patients who are psychotic and don’t want to take medications – or who agree to take them when they are well but when unwell refuse to take them – how do you convince these patients to take medications? It’s not as simple as saying “you’ve got to do this”. In the old days of paternalistic medicine, if the doctor’s orders were to do X and Y, you did X and Y and you didn’t question it. Nowadays, there are different choices to be made, like

whether to have treatment or not to have treatment, and that choice really depends on a competent patient’s values. There’s still room for paternalism, I think, especially when patients are incapable or there is a question of their capacity, but when patients are capable the best way to navigate choices in treatment is to know what the patient’s values and preferences are. Part of the “Art of Medicine” is knowing how to incorporate and work with those values.

I think another practical part of the “Art of Medicine” is making the right diagnosis by considering all the clues a patient may offer. You’re not going to make the right diagnosis unless you’ve taken a proper comprehensive history and done an appropriate physical examination. These skills require the practice of truly listening to patients, giving them time to express their concerns, and carefully observing them.

How did you first come to be interested in these aspects of clinical medicine which seem to transcend the empirical or technological?

I studied philosophy for a number of years before I went into medical school, and that sort of made me generally interested in the topic, but it wasn’t until I was in medical school and looking after patients like the patient with esophageal cancer that I became interested in ethics. I was also reading several books at the time, too, which made me very aware of the distance between what medicine could be and what it was. I read a book called *The Long Dying of Baby Andrew* about a terribly sick neonate, written from the perspective of his two parents, and how physicians had no way of incorporating the family’s wishes into the decision-making processes and felt impelled by the technological imperative to do everything possible. They wanted to do what was right or what was best for the patient, but, looking at it in a narrow kind of way, they were unable to do so. It was an eye-opening book for me.

I also read a powerful book by Sissela

Bok called *Lying*, about the use of truth-telling, non-truth-telling, and deception in medicine. I will mention a third book, *Is There No Place on Earth for Me?* It tells the true story of a patient, Sylvia Frumkin, who has schizophrenia. She has recurrent psychotic episodes and is re-admitted time and again to various hospitals. There is one anti-psychotic medication that helps her – when she takes it and when it is prescribed for her. Unfortunately, one problem is that staff don't pay close attention to what medications she's on, they don't pay attention to what has helped her in the past, and what doesn't help her. It reminded me that, while medicine can be harmful to patients, we can also harm them by too readily accepting a non-autonomous refusal of treatment. I think the "Art of Medicine" is learning how to balance these principles, learning how you're going to respect patient autonomy and also maximize patient welfare at the same time. It can be difficult to achieve this balance, and to find out just what the right thing to do is. Seen in this way the "Art of Medicine" is something that is learned by years of practice.

Contemporary medical students hear the term empathy a lot in descriptions of patient-centered care. What is the relationship between empathy and "good" medicine? How has this changed, if it has changed at all, since the inception of our profession?

Lewis Thomas once said that there were two effective things in the bag his father, a physician, carried: morphine and magic (the magic of patient relations). This magic has been transformed into science, and in the doctor's bag there's not just morphine but also many other powerful instruments and ways to keep people alive.

Empathic appreciation of patients has always been a part of the doctor's task – having 'feelers' out for what the patient's emotions are, and what their reactions to their situations are – what patients are prepared for and prepared to hear. This is

central to understanding the patient's perspective, what life is like for that patient, what it's like to be in that patient's shoes. So, empathy is at the core of good medicine. It's more important now more than ever because there are so many choices available to patients and physicians. What has changed is the importance of considering the patient's perspective.

What can the modern medical student do to prepare for their practice in an era in which the "Art of Medicine" seems to be increasingly recognized as dominant theme in the role of the physician?

I think, first, just having interest in the area. Second, there are certainly lots of efforts going on in medicine to improve this aspect of medical care. I think just reading any good literature is helpful. There's a wonderful book called *Cutting for Stone* by Abraham Verghese, and it's about empathy in a physician's practice in contemporary Ethiopia. It was quite a powerful book. It's useful just reading such books, seeing thoughtful movies to get a sense of how emotions work for patients and how they interfere with, or bolster, their decision making.

There are also lots of courses available that one can take as supplements to a more strictly medical curriculum and that are starting to become part of medical training. Medicine is such a difficult enterprise to learn, generally, and there's so much you have to master and understand to be a good doctor. It's very hard sometimes to find room in a crowded medical curriculum for other things, such as the humanities, that seem not to be directed towards a particular medical end but do enable a trainee to be a better doctor.

Do you have any ideas around what types of interventions medical schools in the 21st century can introduce into their curricula to better train their students in the "Art of Medicine"?

There have been several universities that use reflective exercises for their students, so students are encouraged to write up a case they've encountered during their training and look at the human side of medicine, trying to understand the patient's perspective (which might be very different from the medical one, or might enrich the scientific perspective). I think that can be a very useful thing, although practically-speaking it's not always easy to find people to teach such sessions and to mark these types of papers.

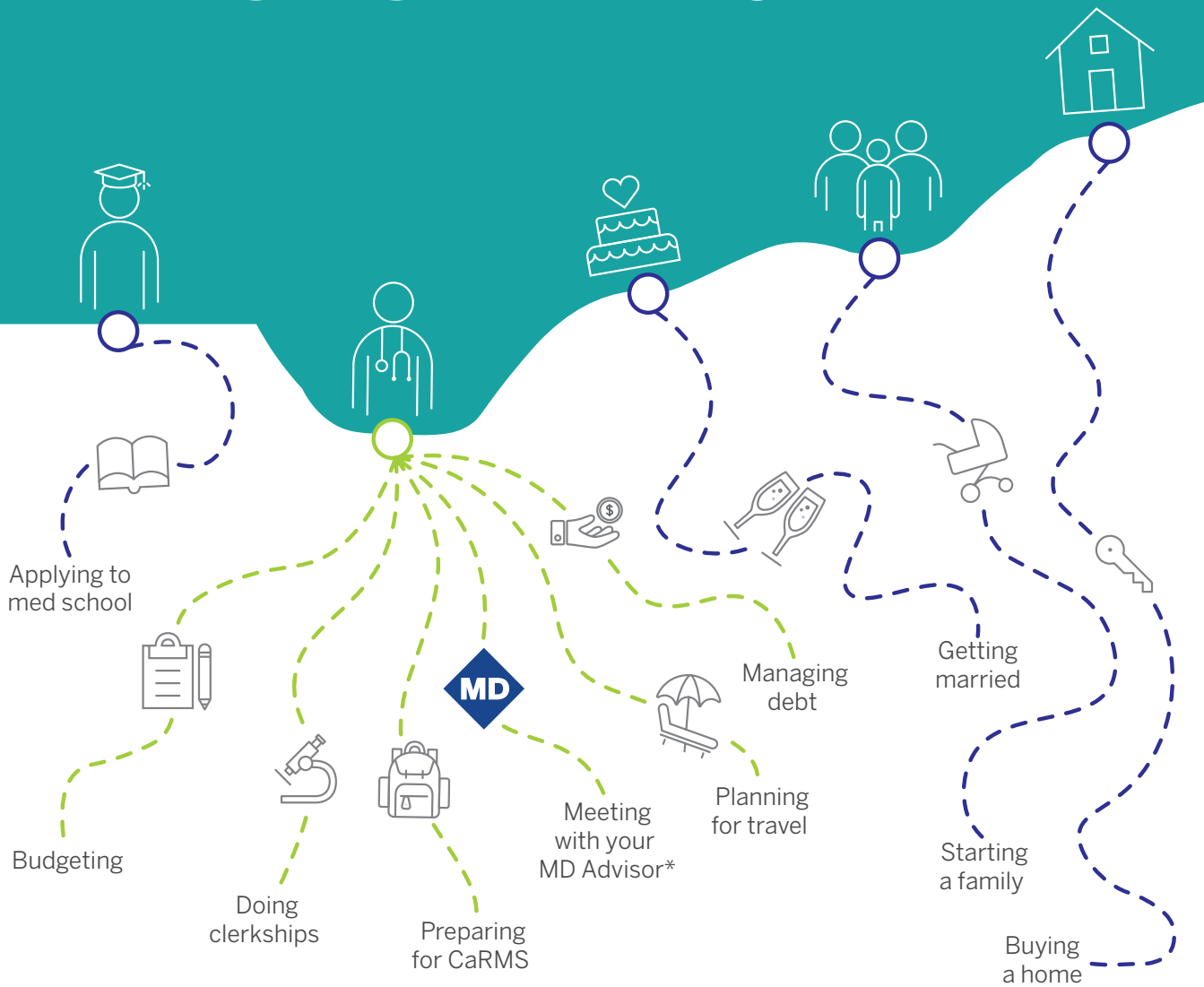
This new learning could include a course in the humanities, which might involve efforts such as studying poetry, watching a movie such as *The Farewell*, examining great literature like *Cutting for Stone*, or considering aspects of the history of medicine. We have an ethics curriculum – which we didn't have when I was a student – which I think is a very helpful direction, but I think we could do more at the University of Toronto.

Is there any other advice you would like to offer to this generation of medical students?

It is very important for students to be aware that there are many resources that are out there to aid them in becoming artful practitioners of medicine. For example, there are a huge number of authors – such as Timothy Quill, Oliver Sacks, Atul Gawande, Paul Kalanathi – and books that I would recommend. To pick two: *The Art of Medicine* (about, and by, the Toronto internist, Herbert Ho Ping Kong) and *Upstream Medicine*. This last book looks at the upstream social causes of the health and illness of patients – a very helpful perspective that is now a regular feature in the *New England Journal of Medicine*. ■

If you enjoyed this interview, we strongly recommend you read Dr. Hébert's latest book "Doing Right: A practical guide to ethics for medical trainees and physicians" (4th edition, co-authored by Dr. Wayne Rosen) published in July 2019.

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Gradually and then suddenly

Michael Pratte

University of Ottawa, Class of 2022

ALTHOUGH BY THE FOURTH time it tastes of ash, it's the second that is the hardest, the second that is the most tragic, and the second that I will reminisce fondly about on forlorn autumn mornings as I die. It is the second because just before that moment, at the very first, you've not yet realized you've lost something so terribly dear. If you're sly, you can still fool yourself into a lazy Thursday morning's rhubarb pie. And by the third, it has ebbed away, horrifyingly fast, and you can no longer lie to yourself that you've not succumbed to the saccharine wisps of nostalgia. But by the second time, so soon after the first, your brain has just caught on. The chemicals have traveled their untold odysseys and died upon their noble hill, and the taste has changed just enough for you to recognize that it has gone forever.

I was first told I was dying as the chilled world of winter was moving in: a time of warm soups and vanishing summer aspirations. The color around me started to bleed and fade, and after there was discussion of survival curves and metastases I nodded slowly at the pronouncement of nine months. I wasn't scared of cancer. Yet what they don't tell you about this disease, what I did grow to fear, is its absolute and unrelenting cruelty. The catch of knowing how much time you have left is that this time is no longer your own. Those nine months were salesmen's numbers – a Special Price

Today So Long As – a cost afforded only, I soon learned, by injecting venom into my veins. In November, my daughter will be defending her thesis on which seven years have taught me more of its strengths and weaknesses than any reviewer may ever know. With her sure success, she will expect pie. And so, in my vanity, I indulged in nine months.

When time is not your own, life begins to feel different. It does not change, I have come to realize, but rather you change in a way that seems, to misquote Hemingway, very slowly and then all at once. There are things, viewed through my loaned time's watermark, that I have learned to live without. But beyond the reaches of hiking, wine festivals, and Abba, cancer has taken from me that which I hold most dear. Every Thursday at dawn, my mom would come home from long days and long nights and bake pie with me: a sacrifice, I realized eventually, for she was exhausted. Each time, she would wait anxiously for my reaction. Always delicious, without fail. In the short few days between her diagnosis and her death, I would arrive to her room with my clumsy attempts at treats and then it was I who was waiting anxiously for her appraisal. She was the type of woman who would tell me when my rhubarb pie tasted like grass, and I loved her for it. It was the small things, she said, the dashes and pinches, that made a dish worth cherishing. When she passed, in her boxes of precious things not a single cooking book

could be found, and upon that realization I remember missing her so much that my heart almost burst.

Amongst the many blessings and shortcomings in my life, I suppose I can count myself lucky that we are able, still, to eat as a family every night. When I serve the food, I must watch them carefully to know how to react upon my first bite. It was subtle at first: I remember the metallic taste on my tongue walking out of my first session. Yesterday, my husband mentioned that he thought I had dropped the lid off the saltshaker into the risotto. I am trying to hide this last thing from them, but not well. If they were to find out, I have no doubt they'd stop their culinary appraisals and dinnerside comments and when that happens I will be on my deathbed.

It is August now, and I have been on borrowed time for seven months. I am progressing excellently under treatment and the salesmen might pity me enough to add some months to their loan. What exactly is so excellent about this progression, however, is a medical mystery science perhaps may never solve. I must tell you, I am not scared that I now have terrible headaches that lay me down for hours on end, nor that my spine has become bent and brittle like fine wafer. But I am scared that, in three months, Julia will try my rhubarb pie in her celebration and I will look on, truly anxious, not already knowing how she will react. ■

White coat/ My friend, the wolf

Moira Haggarty Edwards

Northern Ontario School of Medicine, PGY1 Family Medicine

White coat

White coat. Stethoscope. Pagers. Orders.
That's me. MD.
No. No. There must be more...

As an internist, my brain! That solves!
As a surgeon, my hands! That do!
As a pediatrician, my voice! That soothes!
Such skill! Such particular skill!

Or so it seems.

Take off the white coat,
Take off the MD XYZ,
Take off the stethoscope.
Take away the brains, the hands and the
voice.

What then? What when...

The patient's problem cannot be
solved?

The patient's tumour cannot be
removed?

The patient's fear cannot be
soothed?

Well, then,

I've still got

My mind, for Wondering.

My gut, for Guiding.

My touch, for Calming.

My soul, for Searching.

My spirit, for Stirring.

My heart, for Reaching.

My feet for Rising.

But even so,

These will not make me a physician,
These particular, expert parts.

No.

There is no sum of degrees.

For, I am whole.

Wholly human. ■



A student doctor with her bag, travelling by foot to a home visit

My friend, the wolf

Los in the woods. Darkness was falling.
My snowshoes got heavier with each step.
Would I make it out?

First, I heard his cry.
He howled for his pack.
Declaring his hurt? His hunger?

So I walked on.
My friend, the wolf. Curious, but careful.
Something flashed, and I stopped.
Then, my gaze met his,
And I saw it.

So I walked on.
He followed me. Or was I following him?
What did he need? Healing? Warmth?
I did not know.

So I walked on.
And he inched closer.
Neither of us fearing,
Both of us nearing.

Sleep called my name.
My eyes fluttered like snow falling.
I shivered into sleep, hoping morning
would come.

It came.
I woke.
Around me was a pack: little ones, big
ones, wolves.
All together.

Now in the light, I could find my way.
As I shied, I looked back, and saw his
gaze, tracking me, guarding me.
At one point, I stopped hearing his steps,
but I could still feel his gaze.

I know he is still there.
I sometimes hear him bolt through the
woods.
And when darkness falls, I hear him howl.
Proclaiming his allegiance, his pride, his
sanctuary.

With me for always, my friend, my
guardian,
the Wolf. ■



Barcode

Emma Spence
Queen's University, Class of 2021

0

I HAVE 100 TRILLION CELLS, 600 MUSCLES, 206 BONES, 22 ORGANS INTERNALLY; I HAVE A SECOND X CHROMOSOME THAT KEEPS THE FIRST ONE COMPANY; I COULD BE REDUCED TO THESE PARTS ALL TOO EASILY; BUT THERE IS SO MUCH MORE THAT COMPRISES THE PACKAGE LABELED “ME.” •• A PATIENT HAS A SYMPTOM PROFILE AND A LIST OF DIAGNOSES;

HIS NAME IS SELDOM USED BUT HE’S WELL KNOWN AS “MR. X DISEASE”;

THERE WERE TWISTS, TURNS AND TROUGHS ALONG HIS MEDICAL ROAD;

BUT COME THE TIME OF DISCHARGE HE MAY ONLY BE A CHART NUMBER AND BILLING CODE. •• MEDICAL LEARNERS OFTEN

EXPRESS A WISH TO BE KNOWN NOT AS A NUMBER BUT A NAME; SO WHY DON’T THESE LEARNERS EXPRESS THAT WISH FOR PATIENTS JUST THE SAME?; SYMPATHETIC TO THIS CAUSE, TRAINEES CAN USE THEIR VOICE; TO MAKE THESE

NUANCED HABITS NOT THE STANDARD BUT A CHOICE. •• IT WAS

NEARING MIDNIGHT ON MY EMERGENCY MED CLERKSHIP ROTATION; WHEN I TOOK PART IN MY FIRST RESUSCITATION SITUATION; ROLLING IN THE PARAMEDICS REPORTED “A COMMUNITY CARDIAC ARREST FOUND DOWN”; AS THE REST OF THE ER BUZZ BEGAN TO DROWN. I UNDERSTOOD THE ODDS BUT STILL FELT STUNNED AS IT SANK IN; WHEN, AFTER AN EPHEMERAL 30 MINUTES, OUR TEAM REVIEWED AND DECLARED HIM. •• I RECALL

EVERY VISUAL DETAIL AND EVERY THOUGHT THAT PASSED THROUGH MY HEAD; IN THE DAYS TO FOLLOW THE SCENE WOULD REPLAY START TO

FINISH OVER AND OVER AGAIN; BUT LOOKING BACK WHAT EQUALLY STANDS OUT TO ME WAS MY RESIDENT GUIDING ME ASIDE AND EXTENDING SUCH HUMANITY;

HE REVIEWED, HE DEBRIEFED, HE TALKED ABOUT EMOTION; I CANNOT EXPRESS THE DIFFERENCE THIS MADE CONTRASTING THE COMMOTION; ONLY THEN I NOTICED MY HANDS AS THEY WERE SHAKING; WHILE MY MIND COULD NOT FORM THOUGHTS, MY BODY

SHOWED ME MY HEART WAS ACHING. •• I UNDERSTOOD THIS WAS A HUMAN MOMENT IN THE OFTEN CONCRETE WORLD OF MEDICINE;

TO MY RESIDENT I WAS A PERSON, NOT A STUDENT IDENTIFICATION PIN; I PASSED ON THIS COMPASSION WHEN SPILLING TO MY LIPS CAME MY ONE

LAST QUESTION...“WHAT WAS THE PATIENT’S NAME?” ••

LEARNERS FEEL SUPPORTED, ENCOURAGED, AND PART OF THE TEAM WHEN THOSE AROUND THEM COMMUNICATE AND CONNECT IN A WAY THEY MEAN; THIS MAKES US STUDENTS POTENTIALLY THE BEST SYMPATHETIC ADVOCATES; TO HAVE PATIENTS CALLED BY NAME, TO KNOW WHAT THEY VALUE, TO ASK “HOW ARE YOUR KIDS?” •• WE’RE MORE THAN STUDENT IDs, OUR PATIENTS ARE MORE THAN A DISEASE; THE VALUE IS FOUND IN WHO YOU ARE OR WHO I AM; SO

THIS BARCODE IS WORTH MORE, THAN JUST A QUICK SCAN.

2

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Telescopes

Meghan Kerr

University of Toronto, Class of 2021

He sat in half darkness
Shoulders, hips, and knees
Sharp as the wings of a folded bat
Tucked beneath hospital gown
His hair and beard, overgrown moss
On a face weathered and beaten
As an old tree is weathered
By the relentless passage of time
Where do you live? I ask
Third tree from the left, he replies
In the woods, in Toronto,
Where there is no one but he
And the voices that follow
That whisper and roar
Soothe and torment
In the recesses of
His fragile mind
He stirs beneath his gown
Turning his gaze to meet mine
Twin telescopes,
Cool as frosted glass
Transporting to a reality
So far from my own
Falling into step beside him,
Through the woods, in Toronto,
One, two,
Third tree from the left. ■



▲ Introversion

Photography

Melissa Phuong

University of Ottawa, Class of 2023



▲ Blood from a stone

Photography

Melissa Phuong

University of Ottawa, Class of 2023

Photos taken at the 2019 Canadian Tulip Festival (Ottawa, ON)

Discharged ▶

Surgical sutures on canvas

Flora Eunji Jung
University of Toronto, Class of 2021



◀ Creation

Surgical sutures on canvas

Flora Eunji Jung
University of Toronto, Class of 2021



◀ Untitled

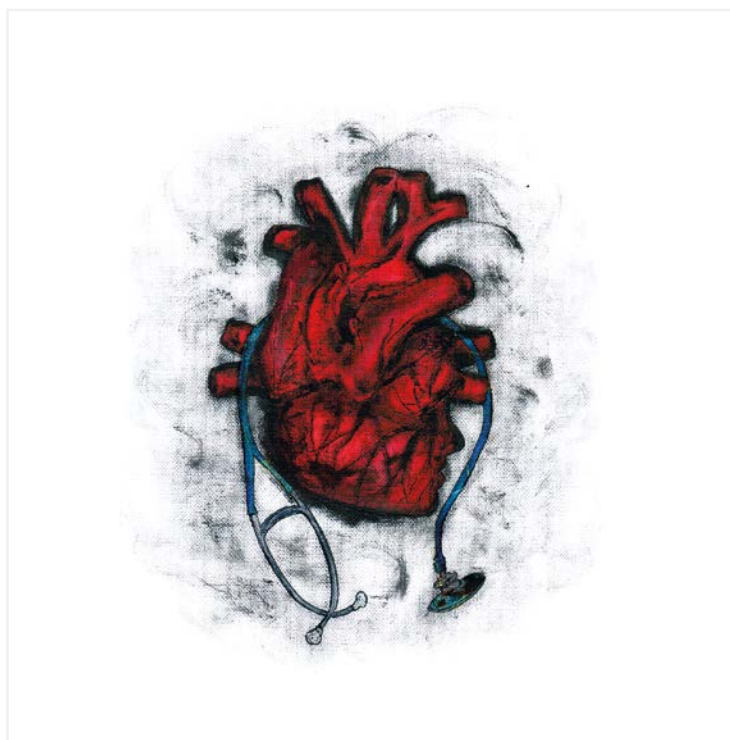
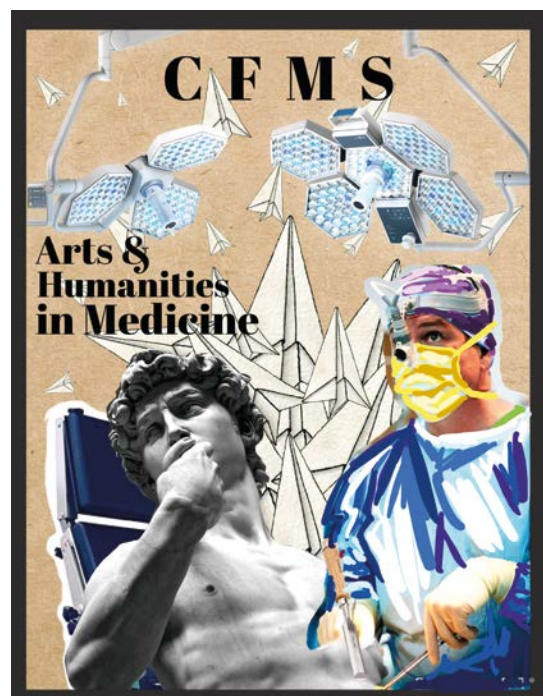
Painted in acrylic, and edited with Pixlr and Powerpoint

Emily Macphail
University of Calgary,
Class of 2021

Artist//Anatomist ▶

Adobe Photoshop and Bazaart, 2020

Maria Raveendran
University of Toronto, Class of 2022



▲ Face in the heart

Painted with acrylic on a canvas medium, and digitally stylized

Parinita Verma
Memorial University, PGY1 Family Medicine

Ish Mishra
Memorial University, Class of 2023



◀ Flood

Watercolour and coloured pencil on paper, 2019

Kay Wu
McMaster University,
Class of 2022



Overthinking ▲

Watercolour on paper, 2016

Kay Wu
McMaster University, Class of 2022

▼ Silence

Watercolour and coloured pencil on paper, 2017

Kay Wu
McMaster University, Class of 2022





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OF CANADA



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DU CANADA



◀ Nadya Woodbridge
May 7th, 2019
Parents Tatyana Danylyshyn (CFMS Representative to the CMA Committee on Ethics, 2017-2019) and her partner

Evelyn Marie Coombs ▶
March 29th, 2019
Parents Robin Clouston (CFMS President, 2012-2013) and her partner Ryan Coombs



◀ Mira
August 11th, 2019
Parents Tavis Apramian (CFMS VP Education, 2017-2018) and his partner Avital Sternin





Nebras Warsi (CFMS VP Education, 2015-2016) and his partner Farina married on June 27th, 2019 in Essex, England.



Irfan Kherani (CFMS VP Education, 2014-2015) and his partner Natasha married in 2019, in Ottawa.



Han Yan (CFMS Director of Student Affairs, 2016-2017) married her partner Keegan Guidolin on August 31st, 2019.



Henry Li (CFMS Western Regional Director, 2019-2020) and his partner Elizabeth Ng married on June 21st, 2019 in Niverville, Manitoba.



Marie-Pier Bastrash (CFMS VP Student Affairs, 2015-2016) and her partner Jonathan Collins married in January 2019 in Montreal, Quebec (pictured with their Goldendoodle, Margot).



Seven CFMS Presidents and our invaluable General Manager were reunited at the 2019 CMA General Council/Health Summit in Toronto, 2019. From left to right: Victor Do (2019-2020), Stephanie Smith (2018-2019), Henry Annan (2017-2018), Rosemary Conliffe (CFMS General Manager), Franco Rizzuti (2016-2017), Anthea Lafreniere (2015-2016), Bryce Durafourt (2014-2015), and Andre Bernard (2005-2006).



Connor Brenna (CFMS Annual Review Editor, 2018-2020) and Victoria Januszkiewicz (CFMS VP Communications, 2018-2019) with the CFMS 2019 Annual Review they co-edited together.



Annual General Meeting 2019



Spring General Meeting 2019



Day of Action 2019



Day of Action 2019

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EXECUTIVE



Victor Do
President
president@cfms.org



Dr. Stephanie Smith
Past President
president@cfms.org



Adel Arezki
VP Communications
communications@
cfms.org



Anson Lee
VP Finance
finance@cfms.org



Rishi Sharma
Director of Education
education@cfms.org



Helen Teklemariam
Director of Government
Affairs
govtaffairs@cfms.org



Achieng Tago
Director of Global
Health
globalhealth@cfms.org



Sarah Zahabi
Director of Student
Affairs
studentaffairs@cfms.org



Devon Mitchell
Western Regional
Director
western@cfms.org



Henry Li
Western Regional
Director
western@cfms.org



Felipe Fajardo
Ontario Regional
Director
ontario@cfms.org



Avrilynn Ding
Ontario Regional
Director
ontario@cfms.org



Corinne Céclyre-Chartrand
Québec Regional Director
quebec@cfms.org



Clara Long
Atlantic Regional
Director
atlantic@cfms.org



Rosemary Conliffe
General Manager
office@cfms.org

NATIONAL OFFICERS

Hayley Hill	Wellness	wellness@cfms.org
Jonathan Seveck	Services	nos@cfms.org
Alexandra Cohen	Education	noe@cfms.org
Lara Witt	Political Advocacy	nopa@cfms.org
Hilary Pang	Health Policy	nohp@cfms.org
Jack Luo	Information Technology (Sr.)	it@cfms.org
Jason Yao	Information Technology (Sr.)	it@cfms.org
Vivian Tan	Information Technology (Jr.)	it@cfms.org
Claudia Meloche	Blood Drive Chair	blood@cfms.org
Lia Huo	Research (Sr.)	nor@cfms.org
Eagan Peters	Research (Jr.)	nor@cfms.org
Dr. Henry Annan	Alumni Liason	alumni@cfms.org

NATIONAL OFFICERS OF GLOBAL HEALTH

Ushma Purohit	Partnerships (NOP)	nop@cfms.org
Charlotte Coleman	Exchange (Outgoing)	exchanges.outgoing@gmail.com
Emre Islam	Exchange (Incoming)	exchanges.incoming@gmail.com
Farnaz Javadian	Global Health Education (NOGHE)	noghe@cfms.org
Tracy Pham	Reproductive and Sexual Health (NORSH)	norsh@cfms.org
Alex Wong	Human Rights and Peace (NORP)	norp@cfms.org
Yotakahron Jonathan	Indigenous Health (NOIH)	noih@cfms.org

MEDICAL SOCIETY PRESIDENTS

Zach Sagorin	UBC	ubcreps@cfms.org
Taylor Heinzlmeir	UofA	ualbertareps@cfms.org
Steven Lu	UofC	ucalgaryreps@cfms.org
Tayyaba Bhatti	UofS	usaskatchewanreps@cfms.org
Jaymie Dubs	UofM	umanitobareps@cfms.org
Jai Mashru	NOSM	nosmreps@cfms.org
Jessica Garabond	UWO	uworeps@cfms.org
Kate Uhlman	McMaster	mcmasterreps@cfms.org
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MEDICAL SOCIETY PRESIDENTS (CONTINUED)

Danny Jomaa	Queen's	queensreps@cfms.org
Céline Sayed	UofO	uottawareps@cfms.org
Rami Habib	McGill	mcgillreps@cfms.org
Sophie Bourque	L'UdeS	sherbrookereps@cfms.org
Freddy Lee	Dal	dalhousiereps@cfms.org
Aaron Rainnie	MUN	memorialreps@cfms.org

CFMS REPRESENTATIVES

Devon Mitchell	UBC Sr.	ubcreps@cfms.org
Reem Aziz	UBC Jr.	ubcreps@cfms.org
Julie Le	UofA Sr.	ualbertareps@cfms.org
Terra Morel	UofA Jr.	ualbertareps@cfms.org
Rory Killam	UofC Sr.	ucalgaryreps@cfms.org
Hilton Chan	UofC Jr.	ucalgaryreps@cfms.org
Daisy Ko	UofS Sr.	usaskatchewanreps@cfms.org
Shaylin Pillay	UofS Jr.	usaskatchewanreps@cfms.org
Fatemeh Bakhtiari	UofM Sr.	umanitobareps@cfms.org
Dara Hallock	UofM Jr.	umanitobareps@cfms.org
Zachary Turgeon	NOSM Sr.	nosmreps@cfms.org
Chelsea Rehak-Stoddart	NOSM Jr.	nosmreps@cfms.org
Jielin Lu	UWO Sr.	uworeps@cfms.org
Angela Fan	UWO Jr.	uworeps@cfms.org
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Francis Lao	McMaster Jr.	mcmasterreps@cfms.org
David Lee	UofT Sr.	utorontoreps@cfms.org
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Carter McInnis	Queen's Sr.	queensreps@cfms.org
Angie Saloman	Queen's Jr.	queensreps@cfms.org
Mehr Jain	UofO Sr.	uottawareps@cfms.org
Alexandra Finstad	UofO Jr.	uottawareps@cfms.org
Blaise Frenette	McGill	mcgillreps@cfms.org
Marie Vigneau	L'UdeS	sherbrookereps@cfms.org
Clara Long	Dal	dalhousiereps@cfms.org
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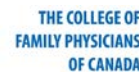
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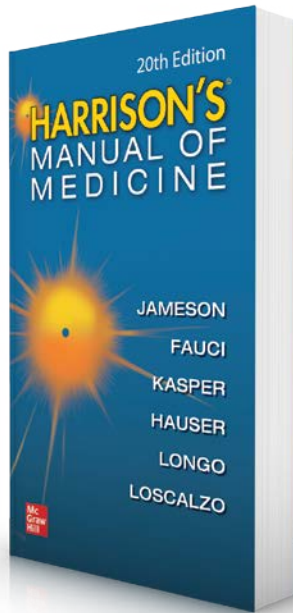
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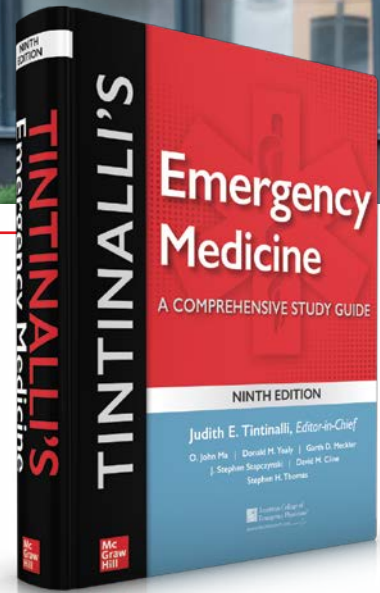


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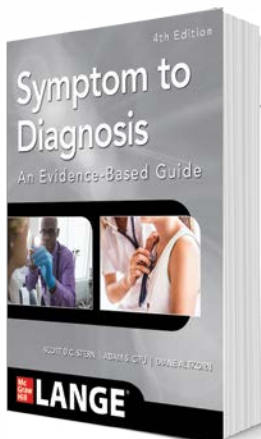
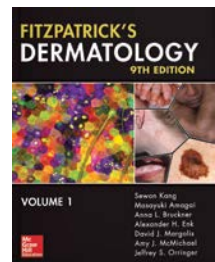
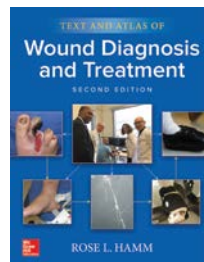
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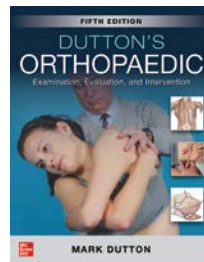
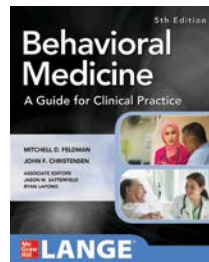
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