

MEDICINE

FOCUS

2016/2017



HONEY, THEY SHRUNK THE THERAPEUTICS

+ SOCIAL MEDIA AND THE HEALTH CARE PROFESSIONAL: WHAT'S NOT TO LIKE?



A PASTIME AWAY FROM PATIENTS, PILLS, POTIONS

craniopharyngioma brain tumour first diagnosed when she was six left Anita Raj, candidate of the Medicine Class of 2017, with a precocious understanding of the endocrine system and a desire to become a doctor—an inspiration that came from seeing how her doctors treated her as she "entered a world of scariness." Now, in her clinical rotations—at some of the same hospitals

she frequented as a child—Raj notices herself following up with patients to make sure they understand their condition, just like she remembers neurosurgeon Jean-Pierre Farmer, BSc, MDCM'83, and pediatrician Preetha Krishnamoorthy, MDCM'96, doing for her. "Some of that rubbed off on me."

Raj's artistic passion, origami, can also be traced back to her childhood, when her physical ability to play was diminished. She performs intricate folds based on designs from around the world and recently had one of her own designs published in the bi-annual publication of the prestigious British Origami Society. The two passions sometimes overlap: Raj finds that working out folds helps her listen more intently in class. (Philip Fine, title courtesy of Osler)

MEDICINE FOCUS 2016-2017

EDITOR

Anne Chudobiak anne.chudobiak@mcgill.ca

COPY EDITOR

Jason Clement

ADVISORY BOARD

Diana Colby Mercedes Delacroix VP-Dean David Eidelman, MDCM'79 Anita Gagnon, PhD'95 Joseph Hanaway, BA, MDCM'60 Mark Hapanowicz Joanne Marie Kojtila Joanne Leebosh Dr. Mara Ludwig Arnav Manchanda Sarah Marshall, BSc(PT)'84, MSc'06 Marc Pell, MSc'93, PhD'97 Manl i Que Monica Slanik, BSc, BSc(OT)'96 Barry Weldon

CONTRIBUTORS

Sara Baron-Goodman Jason Clement Russ Cooper, MSc(OT)'16 Lindsay Delima Philip Fine Jennifer He Annette Mahon Ian McGillis Michelle Pucci **Juliet Waters**

DESIGN

Lisa Kisiel Communications and External Relations

Medicine Focus University Advancement Faculty of Medicine McGill University 1010 Sherbrooke St. West, Suite 1210 Montreal, Quebec, Canada H3A 2R7

www.mcgill.ca/medicine/alumni

Facebook: McGill Faculty of Medicine Instagram: McGillMed LinkedIn: McGill Faculty of Medicine Twitter: @McGillMedAlumni

Circulation: 24,000

CONTENTS

16 Social media and the health care

professional: What's not to like?

time to accomplish their mission.

To tweet, or not to tweet—for some.

FEATURES





that is the question. By Sara Baron-Goodman and Anne Chudobiak 24 The future of medicine is very small COVER STORY Once inside the human body, the bacteria have less than an hour to get to their destination before they die, which is still enough

IN EVERY ISSUE

By Michelle Pucci

- You tell us Your letters
- 3 From the Dean On the horizon at the Faculty
- **Breakthroughs and discoveries** Celebrating our researchers
- The lookout News in brief
- 30 A way of life A tradition of excellence



YOU TELL US

PLUS ÇA CHANGE

Congratulations to the creators of the Faces at McGill Medicine (FAMM) project and thanks for sharing it via {the online edition of} *Medicine Focus* ("MDCM students launch Faces at McGill Medicine," Dec. 22, 2015).

My classmates and I are currently reflecting on our near 50 years of practice, contributing our mini-bios and tales to a Class newsletter. I suspect we had more humble academic beginnings and probably a less enriched student life through med school than the current generation. In spite of these concerns (or because of them?), those who survived accomplished a great deal.

That said, selection processes, curriculum advances and attention to life balance have all vastly improved from the good old days and should equate to stellar careers for the new graduates. Makes one proud to have attended McGill.

Dave Elcombe, BSc, MDCM'67



Find Faces at McGill Medicine on Facebook. Pictured: med student Florence Laplante-Lamarche.



BY THE QUART

Thanks for including my thoughts about Rockhead's ("Top 10 student haunts of all time," Dec. 22, 2015, online edition). Our other favourite joint was Café André, just south of the Roddick gates. Our gang often studied there but it was mostly for consuming beer—in the QUART bottle, served by our friendly Gordie. He would go to Florida for the winter and beguile us with his stories. Doug Bell and Johnny Martin were part of that gang. Those were happy days!

Colin Forbes, BSc, MDCM'55

ERRATUM

In the Fall 2015 issue of Medicine Focus, we mentioned that David O'Hashi, BSc, MDCM'61, had named a student bursary for his parents, Kanekichi and Shizue. Their last name should have read Ohashi. With apologies to Dr. O'Hashi.

FROM THE DEAN

A VISION FOR THE FUTURE

e were the first faculty of medicine in Canada. But, as the stories in this issue show, 'medicine' no longer fully encapsulates what we do. The Faculty is home to: medicine; nursing; physical therapy; occupational therapy; and communication sciences and disorders. It also offers an extensive range of basic science and clinical research programs.

I am humbled by the excellence in our Faculty. Our students are our greatest inspiration because of the new perspectives they bring and the way they challenge us to continuously improve. We are fortunate to attract the best, and we continue to work hard to offer the same in return.

The 2016-17 academic year marks the last year of the rollout of our new MDCM program and we are confident we are on track to shape the physicians of the future. While we continue to perfect the new curriculum, we know the concerted efforts of all involved and the input from our students will result in a program that will better serve the needs of patients, which is our ultimate goal.

In January 2016, we appointed Annette Majnemer, BSc(OT)'80, MSc'85, PhD'90, as inaugural Vice-Dean, Education, to oversee all the Faculty's programs. Among her first mandates is to develop a strategic plan that will align our efforts to offer an outstanding interprofessional and interdisciplinary learning experience. Today, health care is best provided in teams. We can no longer work or teach in isolation. We will keep you informed as this plan evolves.

More immediately, we are looking for a new home for the Ingram School of Nursing. Pressing needs include a dedicated space for both research and simulation. Research in particular has long been a strength of this School and we are working hard to bring this to the fore.

Another project, also on the shorter horizon, is the School of Population and Global Health, which will build on the success of our Epidemiology, Biostatistics and Occupational Health department, as well as of McGill Global Health Programs.

Plans are also underway for an Institute for Computational Biology and Medicine aimed at offering the highest quality education in health informatics and related fields.

Add to these exciting projects one more: it is our responsibility to promote diversity in the Faculty, to reflect the many communities we serve. There are groups that are currently underrepresented. With the support of a Health Professional Training Project Manager, Jessica Barudin, MSc Applied (PT)'15, we are developing a five-year action plan to increase the number of Indigenous students at the Faculty.

Recently, the University invited all members of its community to submit an 'expression of interest' for the now almost empty Royal Victoria Hospital. These premises were vacated in 2015 following the historic move to the new McGill University Health Centre Glen site. We submitted a proposal that synthesizes our vision for the future —a McGill University Health Sciences Faculty or Campus. While the competition is stiff and the site may be allocated to other uses, our proposal represents what we believe is the way forward.

In closing, I will take this opportunity to share some good news regarding the steps we are taking to address the accreditation status of our MDCM program. Last February, the Committee on the Accreditation of Canadian Medical Schools officially approved our action plan, which represents another milestone successfully crossed in our timeline. We have much to accomplish, but we look forward to reporting our progress in the year ahead.

Everything we do, our breakthroughs and achievements, is a direct outcome of the contributions of our alumni and friends. With your inspiration and support, we will continue to excel. On behalf of all of our students, researchers, faculty and staff, thank you, sincerely.

David Eidelman, MDCM'79 Vice-Principal (Health Affairs) Dean, Faculty of Medicine McGill University



BACK TO SCHOOL... FOR THE IMMUNE **SYSTEM**

hen spring arrives, millions of Canadians begin their annual ritual of sneezing and wheezing due to seasonal allergies. A McGill research team led by Dr. Christine McCusker is bringing them hope with a potential vaccine that nudges the immune response away from developing allergies.

The findings have major clinical implications since allergies and asthma are lifelong conditions that often start in childhood and for which there is presently no cure. "Our study, for the first time, offers a potential way of preventing allergies by using a molecule that redirects the immune response away from the allergic response," says McCusker, Associate Professor in McGill's Department of Pediatrics, allergist at the Montreal Children's Hospital and researcher at the Research Institute of the McGill University Health Centre. "This discovery is very promising since the molecule we developed can be administered by a drop into the nose as a spray." (MUHC staff)

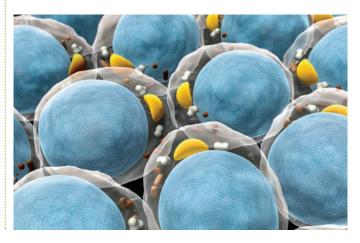
THE POWER OF METABOLISM

eyond dealing with the disease itself, cancer patients undergoing chemotherapy are burdened with side effects. Now, in a study published in the journal Cell Reports, researchers have uncovered a potential mechanism to make cancer cells more sensitive to chemotherapy.

"If by changing the metabolism of cancer cells we could make them more sensitive to drug treatment, we may need to use less drugs and therefore limit the side effects," says Dr. Julie St-Pierre, Associate Professor in McGill's Department of Biochemistry and a member of the Rosalind and Morris Goodman Cancer Research Centre (GCRC), who co-led the study with McGill colleague and fellow GCRC researcher, Dr. Vincent Giguère, Professor in the departments of Biochemistry, Medicine and Oncology.

The concept of modulating cellular metabolism to sensitize cancer cells to existing chemotherapy drugs represents a novel way to think about cancer treatment. Before arriving at this discovery, the researchers, working with Dr. Guillaume Bourque at the McGill University and Génome Québec Innovation Centre, were searching for new ways to change the metabolism of cancer cells in order to lessen their growth rates. During the course of this investigation, they discovered that one of the drugs that they were using was changing one component of metabolism—the target of cancer drugs like methotrexate—which is essential for the division of cancer cells. They then combined the two drugs and realized that the metabolic drug was enhancing the action of methotrexate, rendering it more effective at slowing cancer cell growth than when used on its own.

"Our discovery has the potential to impact patients undergoing chemotherapy treatment with methotrexate," notes St-Pierre. "And it may open up the use of methotrexate for other cancer types as well." (Jason Clement)





THE BATTLE AGAINST

TURNOVER

urses faced with abusive managers are more likely to quit. But a recent study published in the Journal of Advanced Nursing by researchers from McGill University and Université du Québec à Trois-Rivières finds that the opposite is also true—transformational leadership—a style of management in which employees are encouraged to work towards a collective goal within a supportive milieu, is linked to nurses' well-being, and has positive impacts on job retention.

"With the supply of nurses in Canada in decline, we need to improve how we manage our workforce," says Dr. Mélanie Lavoie-Tremblay, Associate Professor at the Ingram School of Nursing. "Paying close attention to the leadership practices of nurse managers could go a long way in improving patient care and increasing the retention rate among our new nurses."

In fall 2013, she helped devise an anonymous online survey asking participants—541 registered nurses with less than five years' nursing experience—to report on the effect of management styles.

"We found that while transformational leadership should be promoted, it is essential to spread the word that abusive leadership creates working conditions that could be detrimental to nursing practice in the profession," says Lavoie-Tremblay. "Managers should use the results to provide training for nurse managers focusing on transformational leadership practices and the dangers of abusive leadership." (McGill Newsroom)

SOUL MUSIC

Hans Christian Andersen once wrote, "Where words fail, music speaks."

or Dr. Stephanie Blain-Moraes of the School of Physical & Occupational Therapy (SPOT), this couldn't echo more truthfully. Her Biomusic technology uses sound to help people with profound multiple disabilities (PMD) convey their emotions regardless of their communicational capacities.

Biomusic uses electrodes to record physiological signals from the autonomic nervous system that indicate responses to environmental, emotional and mental stimuli. Using a unique algorithm, these responses are translated into musical elements—heartbeat becomes drumbeat; respiration, phrasing; and sweat, pitch.

The goal is to add a communicative dimension to help people with PMD improve their 'personhood,' the quality of interaction with others and how they are perceived.

According to Blain-Moraes, the current trend in augmented and alternative communication (AAC) is to give clients options (such as tablet-based applications) that enable them to say as much as possible. But for things such as emotional state and quality of life, you can't put an icon into an AAC device. "When we have to place words on top of an internal state, music fills much of that void," she says.

As part of SPOT, Blain-Moraes' focus is on improving Biomusic's applications in rehabilitation. Yet, the larger societal possibilities are still worth considering.

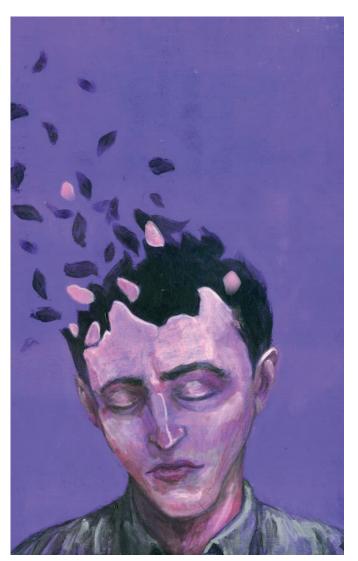
"Imagine someone could hear your text message or email and intuitively understand what emotional state you were in when you sent it," she says. "It's a realm of communication currently being neglected that's needed to form strong interpersonal connections." (Russ Cooper, MSc(OT)'16)



PROTEIN CLUE TO EARLY ALZHEIMER'S

lzheimer's disease can take decades to declare itself. In the "silent" early stages, it is common for those afflicted, consciously or not, to employ compensation mechanisms (repetition, reminder notes, mnemonics) that mask the problem. As a result, it is difficult to get a proper diagnosis at the beginning of the disease's progression, when Alzheimer's drugs have the best chances of being effective. There are also few opportunities to study the onset of the disease in humans.

In a study published in the journal Cerebral Cortex, researchers have made an important breakthrough in identifying the protein responsible for initial memory loss.



Detecting subtle memory loss

To conduct the study, researchers in the labs of Dr. Claudio Cuello, Professor in McGill's Department of Pharmacology and Therapeutics, and of Dr. Yogita Chudasama, now at the National Institutes of Health, used transgenic rats whose brains more closely resemble the human brain than those of traditional transgenic mice models.

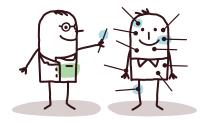
"We thought that a sophisticated cognitive test that prevented such compensation could allow us to better detect subtle memory loss at the very early stages of the disease," says Edward Wilson, MSc, a PhD candidate in Cuello's lab and lead author on the paper. "This could lead us to the early cellular changes underlying the disease."

When the team tested Alzheimer rats—a rat model developed by Cuello's lab—it was immediately obvious that they were impaired. Unlike their healthy counterparts, they made many errors and couldn't learn the task. They were also slower to make decisions and to collect rewards.

Cellular signaling impairment

To investigate these defects further, the researchers delved into the hippocampus, where they found that the Alzheimer rats showed impairment in cellular signaling needed to build new memories and to keep old ones intact. Messages were prevented from reaching the nucleus, which controls protein expression. They found that the protein CRTC1 had an impairment moving from the cytoplasm to the cell nucleus in neurons. The outcome of such impairment was a loss of gene expression required for memory.

"These results indicate that novel drugs facilitating the expression and function of the CRTC1 protein should ameliorate the negative consequences of its failure in cognitive mechanisms in the early Alzheimer's pathology," says Cuello. "Such a strategy could offer a potential therapeutic target for treating early phases of Alzheimer's disease." (Jason Clement)



ANCIENT PRACTICE FINDS

NEW VOICE

ocal disorders caused by overuse affect one in 10 adults at some point over their lifetime and typically require a surgical treatment to be resolved, which can result in scarring. The stakes are perhaps highest for those—such as teachers, politicians and singers—whose work depends on their voice.

A study published in the journal *Laryngoscope* and led by researchers from McGill, the University of Hong Kong and the University of Pittsburgh is the first to explore the possibility of using acupuncture rather than surgery to treat voice disorders.

"The results of the study indicate that acupuncture has short-term anti-inflammatory effects on patients with vocal nodules," says the study's co-author Dr. Nicole Li-Jessen, Assistant Professor in the School of Communication Sciences and Disorders at McGill. (Jason Clement)

QUEST FOR NEXT-GEN ANTIBIOTICS GETS

3D BOOST

aking clear pictures of megaenzymes isn't easy. But it's definitely worth it. These proteins, which play an active role in creating many common antibiotics, are in constant motion, with sections that flip around acrobatically to carry out necessary tasks. For the first time, researchers have been able to take a series of 3D images of a large section from one of these medicine-synthesizing enzymes in action. The McGill team believes that the images they have generated will not only bring scientists closer to understanding how many antibiotics are made, but could, with further research, lead to the development of much-needed next-generation antibiotics. "This is the most complete view we've ever had of these enzymes," says Dr. Martin Schmeing, BSc, Assistant Professor, Department of Biochemistry. (McGill Newsroom)

MYTH OF A

HIGH WALK SCORE

anadians who live in densely populated areas where stores, schools and other services are close by do not walk as much as they should. These are the findings of new research, published in *BMJ Open*, by a team at the Research Institute of the McGill University Health Centre.

"We have walkable neighbourhoods in many towns and cities in Canada, but they have to actually be used to help us reduce our risks of developing chronic conditions like type 2 diabetes," says study senior author, Kaberi Dasgupta, MDCM' 93, MSc'99, Associate Professor in McGill's Department of Medicine. "It is a little bit like having a treadmill in our basement. The treadmill is a great tool for keeping fit, as long as it is used."

"Contrary to our expectations, our study showed that although people living in more walkable neighbourhoods report more utilitarian walking, they are not more active overall compared to people living in less walkable neighbourhoods," explains study first author, Samantha Hajna, a PhD candidate in the Department of Epidemiology, Biostatistics and Occupational Health at McGill. "Their total number of daily steps remains below the recommended 10,000 steps a day. This is different from studies in Belgium, Czech Republic or Japan, where living in more walkable neighbourhoods is associated with walking more overall." (MUHC staff)

BLACK MEDICAL STUDENTS:

NEW ASSOCIATION

FILLS GAP



ounded in September 2015, the McGill Black Medical Students' Association (MBMSA) was an idea whose time had clearly come. Membership, as of February 2016, stands at 23, with members' backgrounds ranging from Quebec and Ontario to Nigeria, Senegal, Rwanda, Benin, Haiti and Trinidad.

Ivan Serwadda, founder and president of the association, is the son of Ugandan immigrants. He grew up in South Africa, obtaining a BEng in Electrical and Computer Engineering before following his parents to Saskatchewan, where he completed a BSc in Biochemistry. On entering the MDCM program at McGill in 2014, he became aware of a disparity between black representation in the Canadian population and in the Faculty of Medicine. He also sensed a lack of cohesion

in the local black community. "Talking to black students, something that came up was the lack of positive black role models around us, and how it's our duty to be mentors for black people younger than us."

The MBMSA mission statement cites four tenets: social interaction, networking, outreach and advocacy. The four goals, while distinct, overlap in various ways. At regular potluck events, members mingle with people from other campus groups and from the city at large. They also forge connections with black alumni around the world, encourage the creation of scholarships, and establish buddy programs and shadowing opportunities. Serwadda is especially proud of their efforts in innercity schools, including a Children's Day event organized in conjunction with the Black Students' Network of McGill.

"We gave presentations on how to get into medical school, and gave young kids the opportunity to play hands-on with some of the equipment we have."

The advocacy branch of the association's activities focuses on health and social issues affecting the African and Afro-Caribbean communities. One of the most notable events was a lanuary 2015 panel discussion on mental health, attended by 200 individuals. "Black people are often misunderstood in the media, and subject to micro-aggressions in society, so it was great that people felt able to stand up and speak about their issues from a personal perspective," Serwadda says. "It was a real confirmation for me that the association is doing something meaningful and appreciated." (Ian McGillis)

COMFORT AND CARE

FOR WOMEN IN NEFD

n 2015, when Chez Doris, a daytime shelter for women in difficulty, suddenly found itself without a doctor, newly appointed executive director and McGill alumna Marina Boulos-Winton turned to the McGill Faculty of Medicine. "Not having a doctor compromises the health of our clientele. Some do not have Medicare cards, and have mobility and/or addiction issues, making it difficult for them to navigate the medical system elsewhere." An announcement went out in the McGill Family Medicine Newsletter, and caught the attention of Geneviève Brooks Legault, BA, MDCM'08.

Brooks Legault, who works at the CLSC Dorval-Lachine-LaSalle and the Westside Medical Clinic in N.D.G., was happy to step in for the one day a week it takes to do referrals and build a relationship with clients. "The medicine is fascinating. The challenges that come with clienteles that have obstacles on multiple levels make the work interesting. These women have been through so much. I'm in awe of their strength."

She's not the Faculty's only link with Chez Doris. Among others is a team from the Ingram School of Nursing, which has been active there since September 2015. As part of an independent study, students lead activities on topics chosen by the women the shelter serves, says Françoise Filion, a faculty lecturer who teaches community health. One recent activity, a series of workshops on diabetes and nutrition, featured a game to reinforce learning as well as a test run of a diabetes-friendly recipe. The project is funded by the students through bake sales and sponsorships.

All of these efforts combine towards establishing and sustaining the bonds that are so essential to caring for women in crisis and on the margins. "Trust is a big thing," says Brooks Legault, when asked about the major stumbling blocks. "There are also tremendous logistical challenges, from resources to social assistance, that need to be faced and that need to become everyone's problem." (Juliet Waters)





MED SCHOOL

hen Mary Koziol's grandfather was a medical student in Edinburgh, there were no dissections in anatomy class, only prosections; and there was certainly nothing like S(t)imulation ~ Sex, People & Ideas.

It was Koziol's grandfather who first encouraged her to write, pointing out the number of doctors who pen novels and essays. But the idea for a play about human sexuality was planted at a lecture on narrative medicine organized by McGill Programs in Whole Person Care. The talk stressed the importance of learning how to hear patients' stories. "Sexuality makes doctors as well as patients uncomfortable," says Koziol, President of the Medicine Class of 2018. "So patients often don't get asked the kind of questions they need to be asked to get the right information."

The material for the play was drawn from workshops Koziol organized in the fall of 2015, and ultimately brought together the talents of eight actors and nine writers. Presented in March 2016, during the first leg of the inaugural McGill-Harvard Medical Student Exchange, the play also featured a talkback session after the show. Asked whether her grandfather, now 98, has read the play, Koziol says, "Actually yes," explaining, though, that he has been very "selective" in his response to it. Despite having encouraged her to write, he himself is "a man of few words." (Juliet Waters)



GET 'EM STARTED YOUNG

eeing the difference McGill alumni make isn't hard for Dr. Linda Polka and her Infant Speech Perception lab.

Since starting at McGill in 1989, Polka, Professor in the School of Communication Sciences and Disorders, estimates she's welcomed one or two graduates a week to participate in research, which equals upwards of 2,000 alumni and their children.

The sheer number of contributions has been invaluable for the lab in understanding a baby's ability to perceive language.

"Parents are naturally curious about their child's development," says Polka. "That's part of what brings them in, but I can see they want to continue to have a connection with the University."

The lab receives many repeat volunteers partly due, Polka believes, to their practice of presenting each little research participant with a faux 'McGill University Infant Scientist' degree. It's a small gesture to thank participants that's truly made a positive impression over the years.

"Parents are obviously very proud to have a McGill degree. Many will say, 'We hope we see another one of these in the family.' I joke with them that they have to still go through Admissions," she says. "Regardless, I can see they're looking to McGill as a place where they'd like their children to continue."

If there are current McGill students or parents thereof who have participated in the lab's research in years past, Polka encourages them to get in touch (whether or not they still have their Infant Scientist degrees). "I would just love to see students come by for a little reunion," she says. "That would be really cool."

Any alumni wanting to contribute in the future can email Polka at lpolka@mcgill.ca or spdevlab@gmail.com. (Russ Cooper, MSc(OT)'16)

MENTORSHIP MATTERS

the Nurse Peer Mentorship Program (NPMP) is changing the way Ingram School of Nursing students confront obstacles.

The NPMP was developed in 2014 after Lia Sanzone, BScN'89, MSc(A)'95, faculty lecturer and academic advisor, identified a gap in mental health support for students within the School. Finding that difficulties functioning in certain clinical settings and overall stress were detrimental to the academic success of many freshmen and sophomores, Sanzone recruited upper-year students to provide coaching. By fall, 42 mentor-mentee dyads were established.

Currently, the NPMP is building on its momentum after a very positive first year. It has added workshops (such as active listening and stress management), received much-needed funding from Health Canada and increased the number of dyads to 90—with 10 recently graduated alumni among the mentors.

"These alumni are transitioning from an academic phase to the clinical world," says Sanzone. "They're in a position to be great support to someone going through what they've recently experienced."

It's an initiative unique to McGill that's beginning to get noticed. In 2015, Sanzone presented the concept in Spain and at the McGill Golden Share conference on health care professional retention, where it was well received. She's also acted as consultant to the Universidade de Brasília, where there is interest in starting a similar program.

The NPMP is different from the Osler Fellows Program offered in McGill's undergraduate medical curriculum in that the mentors are primarily students rather than professionals. According to Sanzone, the School is considering establishing a Nightingale Fellowship, which would more closely resemble the Osler program.

Through all mentoring programs present and future, Sanzone hopes to build a sense of giving back that will permeate nursing culture. "If you experienced positive mentoring as a student, we hope it becomes a natural aspiration when you become a professional to be there for your fellow colleague and ultimately provide better care," she says.

Any alumni interested in becoming a mentor can contact Sanzone at lia.sanzone@mcgill.ca. (Russ Cooper, MSc(OT)'16)



Thanks to alumna Lia Sanzone, Ingram School of Nursing students now have their own mentorship program. Pictured: the School's inaugural professionalism and pinning ceremony, October, 2015.

SMOKE SIGNALS

A CASE STUDY IN GLOBAL HEALTH



or many of us, wood-burning stoves evoke a cozy nostalgia. They are also one of the top five contributors to global mortality and disease rates, and the single largest environmental health risk factor, says Dr. Jill Baumgartner, Assistant Professor, Institute for Health and Social Policy and Department of Epidemiology, Biostatistics and Occupational Health at McGill.

Almost half the world's population—3 billion people—cook with traditional wood-burning stoves. Exposure to wood smoke has been associated with cardiovascular and respiratory diseases, as well as cancer. At greatest risk are women and children, who spend the most time around these devices.

Baumgartner's interdisciplinary research team works with the Chinese government in the Tibetan Plateau to introduce prototype stoves using more efficient, less polluting biomass pellets. These prototypes have an added advantage: heat that goes out of the chimney is reused to heat water, "so they meet multiple energy needs at the same time." The initial results are promising. "People are using them—and consistently," says Baumgartner. (Juliet Waters)

BEAT THE BLUES, LET THERE BE LIGHT!

r. Nancy Low, MSc'02, a psychiatrist in the Mood Disorders Program at the McGill University Health Centre, and the Clinical Director of McGill University's Mental Health Service, is excited about an initiative the Students' Society of McGill University (SSMU) is undertaking. As part of a wellness program, the SSMU has invested in several dozen light boxes ("Happy Lights"), which students can borrow to try at home for a couple of weeks. A light box isn't some kind of modern study lamp—it's a proven therapy to prevent and treat seasonal affective disorder (SAD). "If used properly, a light box will give someone a very good idea within one or two weeks if it's effective in treating their SAD," says Low. (Bloomberg Manulife Prize)





hen Linda Jussaume, BScN'81, became Program Director of Surgery at North York General Hospital in 2010, the hospital was "just about on target, or above" in wait times for surgery. Two years later, it led the province for cancer surgery wait times.

The secret? Teamwork and collaboration.

Jussaume, who also has an MBA, says that working together with physicians' offices and focusing on the collection and reporting of transparent, high-quality data were the pivotal factors in their success.

From the outset, she kept an open mind regarding commonly raised issues, like the need for more operating room time. There was a tendency to assume that was the cause of delays, says Jussaume. But working with North York's wait time analyst turned up another possible cause: data input. A concerted education initiative was put in place to help determine the stumbling blocks and make it easier to get the data right. (Juliet Waters)

ROOTS RUN DEEP

heir families' relationship with McGill began in the distant past, the 1890s, and thanks to their substantial donation, a special connection will remain well into the future.

You could say that the Kellett and Patrick family trees have lots of McGill foliage. Nancy Kellett (née Patrick, BA'70, MLS'73), her grandfather, father, mother and three sisters, all graduated from McGill. John Kellett (BCom'68) and his brother Anthony also earned McGill degrees, while one of the couple's sons, Alastair, is a fourthgeneration alumnus.

The family and McGill names are so entwined that even the University's mythical icon, the martlet, earned a place on the family crest when John's mother Elaine Kellett-Bowman was made a dame in 1987. There is also a family-named place at Wilson Hall: the Wendy Patrick Room, named after Nancy's sister who passed away in 1989.

Yet another McGill connection: Nancy worked at the McGill Faculty of Medicine Library in the '70s.

For Nancy, there was no question that her father, John Patrick, BA'42, MDCM'43, would expect his daughters to fill out only one university application. "He would have died of shock if any of us expressed interest in going to another university." She says ather would talk about McGill with anyone Her husband interiects:

her father would talk about McGill with anyone. Her husband interjects:

"That's why we got along so well."

COURTESY OF NANCY KELLET

John and Nancy met at a McGill party, at John's fraternity. He had left England to study at McGill for a more nuts-and-bolts approach to marketing and business. He had a job waiting for him in the UK, but love kept him in Montreal, where the couple married and lived until 1978, when John's career in finance took them to Toronto.

Ironically, their success in Toronto has allowed them to give back to Montreal. In 2015, the couple made a generous donation to the Rosalind and Morris Goodman Cancer Research Centre (GCRC).

For John and Nancy, McGill was an obvious recipient; the Faculty of Medicine also holds an important place for them, since Nancy's father and grandfather were both physicians; and cancer has touched their family, with both John and his brother having been treated for the disease.

The couple recently toured the GCRC and were taken by how Mount Royal's splendour spills into the modern setting. They're heartened that this gift not only makes a lasting contribution to cancer research but that it will further the reputation of the University that shares so much history with their family. (Philip Fine)

A SPOONFUL OF ARTS AND HUMANITIES

group at the McGill Faculty of Medicine has been exploring medicine's artistic side and coming up with novel activities in the process.

Jiameng Xu formed McGill Humanities and Arts in Medicine (McHAM) with Rajam Raghunathan in 2014. Both medical students at the time, they were interested in literature and inspired by people like the late author and neurologist Oliver Sacks. They also wanted to capitalize on the diverse interests of their fellow students, whose backgrounds included philosophy, anthropology and even spoken word.

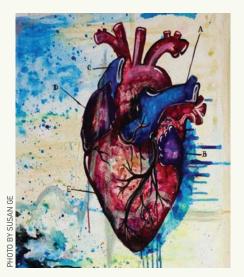
Xu, now a PhD student in Rehabilitation Science at the McGill School of Physical & Occupational Therapy, who plans to resume her MDCM studies when she completes her degree next year, says being exposed to medicine's narratives helps her to better understand patients and not miss out on "the bigger picture."

The group, which counts more than 60 mostly undergraduate medical students, has organized several activities, notably Journeys Through Health, an exhibit held at the Glen site of the McGill University Health Centre in spring 2016. Works tackled such themes as aplastic anemia, mental illness and patient boredom.

McHAM recently instituted a lending library of books, curated by Professor Rick Fraser, BSc, MDCM'76; welcomed an anthropologist who spoke about how bacteria in the gut can be said to form communities; and launched the Little Oslers Reading Club for students. As their first book, the Little Oslers tackled When Breath Becomes Air by Paul Kalanithi, a neurosurgeon-turned-patient.

Xu also wants to correlate activities with the core curriculum. One idea, she says, is to hold a life drawing class that would dovetail with one of the muscle groups being studied.

Exposure to the arts is not the ultimate goal for Xu. Instead, it is a springboard to an eventual medical practice informed by other disciplines: "I want to become a better physician." (Philip Fine)



THE MAMAS AND THE PAPAS

n November 2015, visual artist Fabe Core announced the launch of Art for Wellness, a sale of his paintings to raise funds for the Medical Students Wellness Committee of McGill University. As the parent of a medical student, Core is part of a trend: Increasingly, McGill Med parents are finding a way to play an active role in the Faculty community. With this comes a new tradition: information evenings for current parents, where they can mingle with one

another and learn more-from faculty, administration and student leaders—about the challenges their children are facing, particularly in regards to navigating the path to residency. "It gives us a sense of how we can support them," says one parent. The formula is proving popular. One recent evening was even attended by a couple who had made the trip to Montreal all the way from Abitibi-Témiscamingue.







THAT IS HOW LONG IT TAKES ON AVERAGE FOR HEALTH RESEARCH FINDINGS TO BE ADOPTED INTO WIDESPREAD CLINICAL PRACTICE, COMMON WISDOM HAS IT.

or Dr. Susan Rvachew, a speech pathologist specializing in developmental disorders and a professor at McGill's School of Communication Sciences and Disorders, social media allows her a wider—and faster—reach than traditional modes of publication.

Whereas in a three-year period she was able to publish eight papers in academic journals, she published 43 posts on her blog.

"It's very reinforcing," she says, "because you put the blog post up and within minutes you start to see the hits coming."

Although her blog primarily attracts many of the same types of readers as her articles—students, academics and professionals—there is one important difference: parents are much more likely to tune in, seeking information about their children's disorders.

"I feel like providing this access to information is part of my responsibility as a researcher," says Rvachew, who, under the handle @ProfRvach, tweets on a variety of themes, including advocacy for children with disabilities.

Across campus, at the Ingram School of Nursing, Justine Behan, a student in the global health stream of the directentry MSc program, also uses Twitter for advocacy.

Social media can be a way for nurses to speak up for themselves and their patients, and to share information with the nursing community around the world, she says.

It can also be an important tool in the promotion of global health, she adds, citing the 2014 Ebola outbreak in West Africa, when social media was used to share information and save lives. Health care workers and the affected population alike used Twitter to uncover outbreak patterns, which helped predict areas in need of treatment and reduce transmission rates.

There can, however, be a downside to social media, Behan acknowledges. In a crisis, it can be used for fearmongering and the spread of false information. "It is not always possible to verify sources in an emergency situation."

Eugene Bereza, BA, MDCM'88, Director, Centre for Applied Ethics at the McGill University Health Centre, and Associate Professor of Family Medicine and Biomedical Ethics, McGill Faculty of Medicine, agrees that the use of social media and digital communications by health care professionals can be a double-edged sword.

On the one hand, "social media vastly improves access to information for patients," he says. Having the facility to answer patients' questions and concerns via messaging makes it easier than ever to transmit short answers in a timely fashion.

On the other, "patients may build up resentment if response by health care professionals is perceived as too slow," says Bereza. Furthermore, the impersonality of social media interactions makes it easy for certain things to get lost in communication.

"A health care professional may unintentionally transmit information that is decontextualized and therefore not really meaningful to the patient; and could even be harmful if patients misinterpret the significance," he says. This could be potentially dangerous, he explains, for example in the case of a depressed teenager who sends a message at 2 a.m. to a social worker with a cry for help that is not received and responded to right away.

Some health care professionals prefer to keep a low profile on social media or avoid it altogether. Strategies include pseudonyms, separate personal and professional accounts, and passive rather than active use. On Facebook, I look at other people's pictures, says one MDCM alumnus, but I don't add my own.



DURING THE 2014 EBOLA OUTBREAK IN WEST AFRICA, SOCIAL MEDIA WAS USED TO SHARE INFORMATION AND SAVE LIVES."

Chauncey Fitzsimmons, B PHYS THER' 69, BSc(PT)'79, turned to Facebook after retirement to reconnect with classmates as she prepares to organize their 50th anniversary reunion in 2019. "I wouldn't say I have been wildly successful at hooking up with my classmates this way. But I have kept in touch with three so far." She has found emailing and word-of-mouth to be more effective.

Fellow School of Physical & Occupational Therapy alumna, Monica Slanik, BSc, BSc(OT)'96, has been doing her part to build the School's online communities. "It's a way for students and alumni to stay current with our news and events," says Slanik, whose responsibilities as Academic Associate include Instagram, Facebook, LinkedIn and YouTube.

Slanik gives workshops on social media, where she encourages faculty and staff to pay attention to how social media is being used by others in their fields. You don't have to use it, but you should know how it is being used, is her advice.

This message is echoed by Pat Rich, medical writer and editor and longtime observer of the health care social media scene in Canada. During his 14 years at the Canadian Medical Association (CMA), he helped develop social media guidelines for Canadian doctors.

"You ignore it at your peril," Rich says of social media. "You need to be aware of it even if you're not going to use it personally."

There are, however, many good reasons, both altruistic and "more pragmatic," to use it, as he goes on to explain.

Some Canadian peer leaders argue that health care professionals have an obligation to be active on social media, "because that's where the patients are," and there is a need to balance out the information that is available.

From a career-enhancing perspective, social media can facilitate networking and information gathering.

"If you're a med student or a nurse, it is a great way to connect with people whose names you may have only seen in textbooks."

Secure networking sites for health care professionals are another emerging tool. "In Canada, there is something called The Rounds. Globally, one of the biggest is called Sermo. It allows doctors to be anonymous."

Add to that the fact social media can be an efficient way for busy health care professionals to stay up to date both on research and other news. Rich knows of at least one prominent Canadian doctor with a strong online presence who "gets all his peer-reviewed information through Twitter rather than waiting for the journals to come through on his desk."

It is important, of course, to take precautions. "Social media is the last place you want to be talking about an individual patient," Rich says.



In spite of the potential benefits, a 2013 CMA survey found that less than 10% of Canadian physicians were using Twitter for either professional or professional and personal purposes. (McGill's Dean of Medicine, @VPDeanEidelman, on Twitter since 2015, is part of this vanguard.) The obstacles to using tools such as Twitter and LinkedIn? "Time and a lack of perceived value," says Rich, who finds, though, that those who do use social media effectively fit it into their workflow in such a way as to actually save them time.

A word of warning from Rich: Although examples abound of nurses using social media successfully, it can be slightly thornier for them to navigate, perhaps because they are subject to different regulatory frameworks. "There is a Saskatchewan nurse who was disciplined," he says, referring to the recent case of a nurse accused of professional misconduct after commenting on social media about her grandfather's end-of-life care.

Who makes best use of the form? "Emergency medicine residents are probably the leaders. Urologists, for some reason, are incredibly social media savvy. Same with nephrologists."

Nationally, there are also certain institutions that have caught Rich's attention, notably Michael Garron Hospital (formerly Toronto East General Hospital). "They've put social media policies into place and even taught frontline admin how to use it." Because there is a "how to use it."



"UROLOGISTS, FOR SOME REASON, ARE INCREDIBLY SOCIAL MEDIA SAVVY."

A Facebook profile for personal, Twitter for information gathering and networking, YouTube for promoting public health, these are some of the lessons that health sciences students should be learning, according to Rich. "It's just another facet of professionalism."

Pros and cons aside, Rich's numberone social media tip for all health care professionals, especially new graduates seeking employment, is to Google yourself every few months to monitor your digital footprint. It may surprise you, for example, to discover that there is someone else with your name working in your field—and unwittingly influencing your reputation.

Then, if you'd like to go further, he recommends lurking, especially on Twitter. "You don't have to jump into the conversation," he says. "Just dip your toe in."

Beyond that, he recommends using the same professional demeanour you would in any face-to-face interactions.

"Social media is a valid academic and research tool," he concludes.

The challenge is putting it to good effect.

Find the McGill Faculty of Medicine on Facebook, LinkedIn, Instagram (McGill Med) and Twitter (@McGillMedAlumni), and watch for the new, exclusive McGill hub on 10K Coffees. Prefer to keep in contact via email? Make sure we have your correct address, by dropping a line to alumni.medicine@mcgill.ca

RICH'S NO. 1 TIP? GOOGLE YOURSELF EVERY FEW MONTHS.



TWEETING FOR A GOOD CAUSE



"Hopefully, we can beat the previous years' classes," said Pedram Mossallanejad, President of the Medicine Class of 2016, at the February 2016 launch of their Senior Class Gift campaign in support of the Strategic Planning and Community Involvement Committee. The SPCI provides resources for undergraduate medical students and groups seeking to engage in community-based initiatives. There is a long tradition of such campaigns at McGill Med. What is novel is the use of crowdfunding and social media. At press time, the Class had raised an impressive \$4,740 on Seeds of Change, a Facebook- and Twitter-friendly crowdfunding platform for McGill students. This amount is being helped along by Alice Chan-Yip, MDCM'62, who has pledged a matching gift of up to \$5,000. Thank you to Dr. Chan-Yip and congratulations to the Medicine Class of 2016 on this achievement.



HOW I USE SOCIAL MEDIA

Reproductive Endocrinology and Infertility Specialist Marjorie Dixon, BSc, MDCM'97, whose groundbreaking IVF work has been featured in TIME, shares how (and why) she fits Twitter and Facebook into her busy schedule.

1. WHAT SOCIAL MEDIA ACCOUNTS DO YOU USE AND HOW FREQUENTLY?

Facebook and Twitter. I use them several times a week, depending. But if I see an exciting bit of news or something significant happens in my field, I may write about several things in a day.

2. WHAT FUNCTION DO YOUR SOCIAL MEDIA PROFILES HAVE FOR YOU PROFESSIONALLY VERSUS PERSONALLY?

Both are used professionally. Anyone who needs me privately knows how to get to me!

3. WHAT ARE THE PROS OF CONNECTING ON SOCIAL MEDIA IN YOUR FIELD? THE CONS?

Pros: I am kept apprised of the most current news in my field through my feeds and it allows me to be very well informed (about the medical literature, new breakthroughs, worldwide events).

I no longer have to wait for journals to get published every month (though I still do read these hard copies—I look forward to them coming in the mail and thumbing through; old habits die hard).

I get current, to-the-minute info and then share it with followers.

The con is that my professional life is very busy, so this communicating happens in spits and spurts, depending on what extra commitments I might have in a week. It can be inconsistent.

Nowadays, I am on Twitter most often; it is very efficient and my posts can be brief.

4. WHAT ROLE DOES ADVOCACY (FOR PATIENTS OR FOR CAUSES) PLAY IN SOCIAL MEDIA IN THE MEDICAL FIELD?

It plays a huge role. I take my role as an advocate for all things women's health very seriously. Knowledge is power and I realize that I am an educator of the masses through my social media feeds. When one trains medically, you end up wearing many hats: educator, scholar, advocate, manager, employer, professional, expert...

Social media allows me to maximize that multitask. Patients can follow and know that the information that I am giving them is selected, triaged and reliable. But patients aren't the only ones who benefit: [There are also] trainees, nurses, lay people interested in fertility, [etc.] It brings everyone together in one forum and gives me a broad audience and a huge voice in my community.

I am not certain that I had a true appreciation for the reach that I would have when this relationship with social media began. I now see that it has served a critical dual purpose: not just keeping my followers informed, but social media is also a critical part of growing my knowledge base in my own field. I can feed my passion for what's new in women's health every single day!

Dixon is co-founder, First Steps Fertility; CEO & Medical Director, Anova Fertility & Reproductive Health; and Assistant Professor in the Department of Obstetrics and Gynecology at the University of Toronto. She can be seen as a guest expert on lifestyle TV show, Cityline.

Find Dixon on Twitter (@DrMarjorieDixon) and Facebook (Dr. Marjorie Dixon).





A McGILL MOMENT

ellness activities are an important aspect of the new MDCM curriculum, explains Jennifer He, a candidate of the Medicine Class of 2018, who snapped this pic, of then Med-1 student Brian Tran, during a group cross-fit training session at the Currie Gym. These activities "are organized by students, for students," says He, and are part of a wider Faculty effort, supported by alumni and friends, to promote wellness and resilience for undergraduate medical students and resident doctors. Initiatives include a lending library of wellness books, awards for students and residents who show leadership on this issue, and strategies to improve access to healthful food on-site in the training hospitals. Students also receive more career counselling, as well as more information on the matching process than any generation before them.

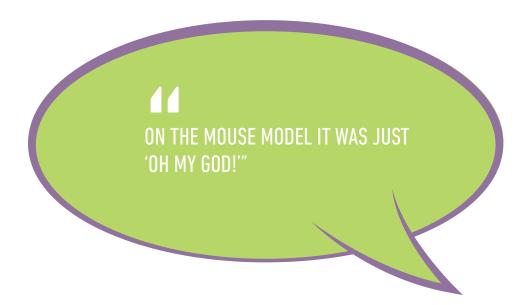
THE FUTURE OF MEDICINE IS VERY SMALL

/ by MICHELLE PUCCI /



YOU'RE ILL. YOU VISIT A DOCTOR WHO EXAMINES YOU, DIAGNOSES YOU WITH A ONCE DEADLY CANCER, IMMEDIATELY OFFERS SOME NON-INVASIVE TREATMENT, AND SENDS YOU HOME WITH A GOOD PROGNOSIS, RELATIVELY FREE OF PAIN AND SIDE EFFECTS.

It's a scene straight out of Star Trek, but it might not be too far from reality.



he concept is an old humanbeing dream, to have access to such treatment," says Dr. Té Vuong, Associate Professor and Co-chair of McGill Radiation Oncology and Director of the Segal Cancer Centre's Radiation Oncology facility at the Jewish General Hospital.

Vuong is one of several McGill cancer researchers working on a drug delivery system using nanotechnology to make cancer treatment more effective. The key: a strain of bacteria, originally isolated from water collected from the Pettaquamscutt Estuary in Rhode Island.

Smaller than a red blood cell, these bacteria are being engineered to carry drugs into the core of tumours, or act as radiosensitizers by targeting oxygendeprived cells and making them more sensitive to radiation.

At the helm of this project is Sylvain Martel, MEng, PhD, Director of École Polytechnique's NanoRobotics Laboratory. A two-time McGill Engineering alumnus, his search for collaborators "to fill out the picture" led to his alma mater, where cancer research has long been a strength.

The interdisciplinary, interuniversity team is "not in the business of developing new drugs," Martel explains.

Not drugs, but a drug delivery system

The "Rhode Island" bacteria are named magnetotactic for their magnetic properties. Put them inside a special platform developed by the NanoRobotics Laboratory, and the nanoparticles become supermagnetized. From there, they can navigate the bloodstream, with some guidance, and eventually make their way toward the tumour.

The bacteria are microaerophilic, surviving in environments where oxygen levels are 0.5%—far lower than the oxygen levels normally found in blood. Low oxygen levels, known as hypoxia, are found in solid tumours, and the lack of oxygen reduces the efficiency of radiation therapy. For the bacteria, though, these low levels can be an advantage.

When there's no signal from the magnetic field, the bacteria use oxygen sensors to find the area with proper oxygen levels in order to survive.

Under the right conditions, left at room temperature, these bacteria grow, making them cheap to reproduce.

Once inside the human body, the bacteria have less than an hour to get to their destination before they die, which is still enough time for them to accomplish their mission.

The goal is to get drugs or radiosensitizers into the core of the tumour, instead of trying to siege from the outside using chemotherapy or radiation.

A cancer biologist and an oncologist walk into a lab...

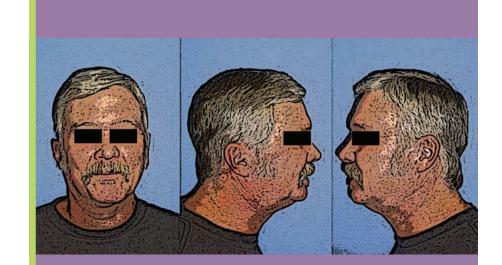
"The project is very novel in the fact that we're getting a whole big team of rather prominent people working together," says Dr. Nicole Beauchemin, Professor, Rosalind and Morris Goodman Cancer Research Centre, departments of Biochemistry, Medicine and Oncology, McGill University.

Beauchemin, a cancer biologist who specializes in developing tumours in mice, says that using Vuong's expertise as a colon and rectal cancer oncologist, the team was able to develop a model for the treatment of rectal cancer.

"On the mouse model it was just 'Oh my god," says Beauchemin, who describes this interdisciplinary collaboration as one of the most satisfying experiences she has ever had as a scientist.

Learning to speak "engineer"

With specialists coming from various fields, researchers need to overcome communication challenges. Having biologists, surgeons and oncologists speaking different disciplinary "languages" can limit collaboration and growth, says Gerald Batist, MDCM'77, Director, Segal Cancer Centre, Jewish General Hospital; Director of the McGill Centre for Translational Research in Cancer; and Professor of Oncology, McGill. Throw in engineers and you add a whole other layer of difficulty.



MICROSCOPIC PRECISION

"Most people who have thought about microsurgery a little bit think of it as operating with a microscope," says microsurgeon Rudy Buntic, MDCM'90. "There's much more to it than that."

With microsurgery, it is possible to minimize scarring, nerve damage and muscle disfigurement. Although microsurgery is more complex than other methods, it's also less expensive and requires less healing time.

During surgery, Buntic can reattach blood vessels and nerves in the case of amputations, or he can use small parts of donor tissue in the back to replace lost tissue.

The Buncke Clinic in San Francisco, where Buntic practices, pioneered the technique of using small parts of the latissimus muscle, which avoids changing the shape and function of the backs of patients.

In breast reconstruction following a mastectomy, Buntic uses the fat of the abdomen to rebuild. In one case, he was able to replant a severed tongue, the first reported case of a successful tongue replantation.

"When you look at it with a naked eye, it looks almost impossible to repair," Buntic says about the injuries he treats. Using today's microscopes, magnification and instruments, Buntic can reattach very small blood vessels.

When a California industrial worker (pictured above) had his hair caught in machinery on the job, his entire scalp was pulled off, including his ear and eyebrows. Buntic was able to replant the man's scalp, which was retrieved from the machine, using microsurgery.

"All of it survived," Buntic says. The man now has hair growing back. "It's very hard to tell that he's had the injury originally."

In the past years, microsurgery has been innovating by using nerves from cadavers to graft nerve defects. Traditionally, nerve grafts have come from other parts of the patient's body, sacrificing feeling in the donor sites.

"One of the things people who see it for the first time are surprised at is how complicated it is," he says. "But that complexity has become routine because we're practiced at it." (Michelle Pucci)

"In any field, it's really the future, being able to see things from different perspectives," he says. "It's limited by language."

Beauchemin says the interdisciplinary experience on this project has been positive for the students involved. It is an opportunity for them to learn how to explain the science behind their work in a way that the majority of people will understand—an important task of a medical education.

Particles that point to cancer

The first steps to better cancer treatment starts with identifying the disease.

Over at the McGill University and Génome Québec Innovation Centre, Dr. David Juncker and his team are investigating cancer diagnostics and screening technologies in the Micro & Nano Bioengineering Lab.

One tool is a filtration technique to isolate cells that could be linked to cancer, based on size, but also based on molecular features. The initial work was done at the McGill Nanotools Microfab, a facility dedicated to developing micro- and nanotechnologies, says Juncker, a Canada Research Chair in Micro- and Nanobioengineering and Professor in Biomedical Engineering at McGill.



The microfabricated filters are engineered to catch circulating tumour cells, which could signal whether cancer has spread.

"The next step is to go to the clinic and try this setup with patient samples," Juncker says.

Juncker's lab is also developing microfluidics and microarrays, both of which are techniques using "lab-on-a-chip" technologies that function like mini-laboratories, testing samples for particles that could point to cancer.

"What you need is to have technologies that are user-friendly and economically viable and also provide actionable information in the end," Juncker says. "There's still a big gap there."

The goal is to use biomarker signatures with the new technologies in diagnostics for cancer patients. Using blood samples and microarrays—chips with dots that measure proteins—Juncker and his team are looking to identify breast cancer biomarkers, which are molecules released by tumours. These molecules are signs that cancer is present in the body.

The first cancer biomarker was discovered at McGill half a century ago, by Phil Gold, BSc, MDCM'61, MSc'61, PhD'65, and Samuel Freedman, BSc, MDCM'53, DipIntMed'58, DSc, and is still used widely today.

"What we are trying to do is make more markers so we can have a much more comprehensive idea," Juncker says. "Like a fingerprint, you have many different parameters, so that fingerprint identifies something unique."

Meanwhile, Dr. Joseph Matt Kinsella, Assistant Professor of Bioengineering at McGill, is using materials like bismuth to create nanoparticle compounds to track tumours and improve screening. The bismuth compounds act as a dye to appear in CT scans and x-rays. When combined with a peptide, a compound of amino acids, the nanoparticles can be labelled to target and bind with tumours, providing a new method for diagnosis.

If Kinsella's team proves these materials can be used to avoid things like biopsies, the cancer screening process can be sped up, saving much of the clinical work

From dorm to bloodstream

"I've been doing this for a long time," says Thomas Chang, BSc, MDCM'61, PhD'65.

Chang was an undergraduate at McGill when he invented the first artificial cell. His work, begun in his Douglas Hall dorm room, eventually led to the creation of McGill's Artificial Cells & Organs Research Centre.

"I told my classmate and professor, 'I'm trying to make artificial cells,' and they started laughing at me, saying, 'You must be nuts.'

"The cells can be micro- or nano-sized, or soluble nanobiotechnological complexes made of a nano-thick synthetic

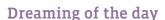
membrane, encapsulating any biological material, from haemoglobin to adsorbents," Chang explains.

With artificial cells, Chang has developed haemoperfusion techniques using activated charcoal, among other materials. The cylinder-shaped devices fit in the grip of a hand and can be fixed to the inside of an arm to remove toxins from blood by filtering it through artificial cells containing charcoal. The process—in use around the world—is faster and more effective than larger artificial kidney machines, he says.

Now Chang is working towards developing artificial cells that can be used in the place of blood.

Existing blood substitutes aren't approved for use in North America, because there is a 3% chance of heart attack, but artificial blood cells are being used for patients with chronic anemia in South Africa, to eliminate the risk of transmitting HIV through contaminated blood.

New research by Chang will show that artificial blood cells are more effective than donor blood, after bioengineering the cells to contain equal if not more concentrations of blood-specific enzymes, eliminating the risk of cardiac side effects. Another advantage of this technology: it costs less than screening donor blood for viruses.



"This project has a very special meaning to our whole team," Vuong says about the collaboration with Martel. Everyone realizes that this is the kind of treatment from which they could one day benefit.

"I've had breast cancer, so I've had systemic chemotherapy, and I know what it does," Beauchemin says.

Innovations in breast cancer surgery, from mastectomies to lumpectomies, have changed the outcomes for breast cancer patients significantly, says Batist. There are limits, however. Vuong cites colon and rectal cancer as an example. Even if patients don't need a colostomy, and the bowel and sphincter are reconnected, quality of life is affected post-operation. Many patients, instead of going one to three times to the bathroom, might go five to ten times a day.

"We need to do something better," says Vuong.

One nanometre at a time, we are.



I'VE HAD BREAST CANCER, SO I'VE HAD SYSTEMIC CHEMOTHERAPY, AND I KNOW WHAT IT DOES."



THE SCALE OF THINGS

"It's rare to have fields of science defined by scale," says Dr. David Juncker, Professor in Biomedical Engineering at McGill University, but what differentiates micro- and nanotechnology is all a matter of size.

Working on a microscale is the equivalent of using a strand of hair that has been separated 1,000 times. Nanoscale is dividing that further by 1,000.

Microtechnology is the scale of cells, measured in microns, and was made possible with the invention of the microscope and the discovery of cells in the 17th century. Nanotechnology is the scale of molecules, measured in nanometres, at which point substances adopt new properties and new potential applications.

"When you shrink materials down to the nanoscale, you're getting away from the bulk properties that you would normally find," says Dr. Joseph Matt Kinsella, Assistant Professor in the Department of Bioengineering at McGill. "You're starting to create this emergent class of new materials of properties that depend upon things like quantum mechanics, much more so than macroscopic counterparts."

Nanotechnology can be used for different imaging technologies, delivering drugs or sensitizing radiation therapy, says Kinsella, only because these are all dependent on material properties that exist on the nanoscale.

According to Juncker, microtechnology research in Switzerland is advanced because of its history of watchmaking, but examples of historical nanotechnologies stretch back to stained glass.

"We are probably the best example of nanotechnology," says Juncker, referring to cells, nuclei and DNA. "It's kind of fascinating." (Michelle Pucci)

CALLING THE SHOTS



KAREN M. BECKERMANN, MSC(A)'90

/ by ANNETTE MAHON /



The job: Associate Director, Vaccine Preventable Diseases, for Toronto Public Health, since March 2015.

Responsibilities: Managing the immunization program of the largest public health unit in Canada.

Clientele: Groups, ranging from all Torontonians (during the H1N1 flu pandemic in 2009) to newly arrived Syrian refugees (right now).

On refugees: "Because refugees will be living here, the idea is to assist their entry into the health care system in a way that gives them the long-term access they need. We are trying to avoid a piecemeal or 'special services' approach."

Principles to live by: Beckermann asserts the ideals of population health—focusing on the needs of groups of people rather than individuals—and considers it her true calling. "When I first started in public health, I thought nurses could make a profound difference with skill-building and raising awareness, like bringing attention to smoking and then offering smoking cessation groups or counselling. I've learned that without policy and a supportive environment, we aren't making it easy for people to be healthy."

In concrete terms: As a bona fide public health advocate, Beckermann acknowledges the critical value of addressing all determinants of health, including access to adequate housing, employment and education.

The long reach of Wilson Hall: "The McGill model helped me to think about clients as communities and how I can work to optimize the health of those communities. The entire community is healthier when health is equally distributed among the population. When I take this concept and apply it in my daily work, it helps me make good decisions."

CV in a snapshot: A first job in in-patient psychiatry; service with the Canadian Embassy in Germany and as a nurse in Morocco; and many roles overseeing health promotion and performance at a policy level.

Why nurses rock: "We advocate for our clients, we advocate for healthy policies, we teach clients and we work with partners to create healthy environments. In essence, nurses make a huge difference in enabling people to maximize their health."

What success looks like: "I remember somebody saying, 'In public health, when we do our job well, you don't know we're here.' I couldn't agree more."

Last word: "I love that in nursing, I can use what I learned at McGill in ways that make a difference for so many."

ON THE "SPOT"

IN BOGOTA

/ by LINDSAY DELIMA /

hen preparing for international placement, it is difficult to imagine what kind of expectations one should have as an occupational therapy (OT) student. Before my trip to Bogota, Colombia, I read as much as I could about the health care system and the sociocultural context and history. However, when I began my placement, I realized that no amount of reading could have prepared me for the difficult realities that many citizens with physical, cognitive or psychiatric disabilities face in Bogota, particularly when they lack resources that we often take for granted in Canada.

This fieldwork placement was truly a unique experience. My first day at the non-governmental organization (NGO) will always stick out in my mind; my partner and I were shown around the "Kids' House," which served children with physical and cognitive disabilities. As we were trying to understand the many complicated diagnoses while

taking in the state of the house, we were all of a sudden asked to take over. This put us on the spot, since in Canada we were used to observing the facilities and OTs for a few days, and pulling the clients' files in order to understand their therapy progression and what kinds of skills they needed to build. Instead, we had to act fast and plan a fun OT activity within five minutes.

The NGO catered to the needs of a diverse clientele group: children with physical and cognitive disabilities, young adults with intellectual disabilities, live-in adults with physical disabilities, and live-in adults with cognitive and intellectual disabilities. I chose to focus my work on the latter two houses with live-in adults, and it was an incredible experience. Some clients, due to lack of resources to prevent or delay medical complications, had developed disabilities to an extent we would not often see in Canada. I was able to get to know these clients—their stories, their adversities, their strengths—and they truly humbled me. They always had a smile on their face-they were genuinely rich in happiness.

The opportunity to study abroad in Bogota through McGill University was an incredibly rewarding and enriching experience that allowed me to build creative communication skills (when Spanish was not working!), clinical reasoning skills (in a challenging environment with low resources), and collaborative problem-solving skills (with my partner when on-site guidance was not available). I am fortunate to have had the opportunity to complete this international fieldwork placement and I look forward to incorporating these valuable skills upon my return to Canada.

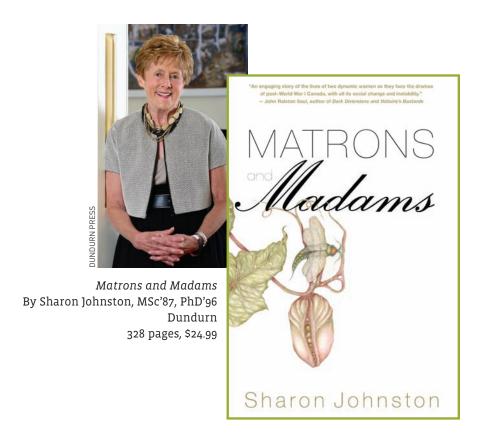
The author was a recipient of the SPOT Global Health Travel Award, which was established in 2015 with philanthropic contributions from the School of Physical & Occupational Therapy (SPOT) Alma Mater Fund and McGill Global Health Programs.



FAMILY NURSING STORY

SPARKS BESTSELLER

/ by IAN MCGILLIS /



hen you think of the Great War and its aftermath, you don't generally think of southern Alberta. But that, you suspect, is part of Sharon Johnston's point with her debut novel. War's reverberations reach far, and last long.

The first instalment in a projected trilogy, Matrons and Madams was inspired by an episode from the author's family past: her grandmother was once "lady superintendent" of the Galt Hospital in Lethbridge. From that starting point, Johnston, a double alumna of McGill's School of Physical & Occupational Therapy, weaves the story of two young widows—Clara, from England, who starts the province's first venereal disease clinic, and Lily, from Nova Scotia, who ends up running a brothel. You can draw your own lines connecting the two establishments. Lethbridge, in those immediate post-war years, was still very much a frontier town, with the uneasy mix of propriety and anarchy that will be familiar from novels like Guy Vanderhaeghe's The Englishman's Boy

and films like Robert Altman's *McCabe & Mrs. Miller*. The added element of shell-shocked veterans casts a further layer of melancholy and tragedy over the scene, and Johnston does a fine job of placing the reader in the middle of a rich and delicately balanced milieu. Clara and Lily, for their part, aren't as different from each other as they might first appear—both are dealing in their own ways with grief, and both find their roles by fulfilling specific social needs. It would have been easy to elevate one and denigrate the other, but to her great credit Johnston resists that, giving us fully rounded portraits free from judgement.

Matrons and Madams is a vivid and emotionally affecting work. Johnston—wife of Governor General (and former McGill Principal) David Johnston—has uncovered a time and place underrepresented in our national fiction. If the two follow-ups are comparable, we'll have a Canadian equivalent to Pat Barker's Regeneration Trilogy.



OUTBOUND TO MONTREAL

FOR US, MGH IS THE MONTREAL GENERAL. FOR THEM, IT IS MASS GEN.

hey are six students from Harvard Medical School (HMS) who visited McGill and Montreal over four days in March 2016 as part of the inaugural McGill-Harvard exchange.

That's how many I could fit in my minivan, says Jeffery Semaan, MDCM'89, driver, sponsor and mastermind behind the initiative.

"It's something I've always wanted to do. I wanted to have American students see what medicine is like in Canada."

With many students leaping at the chance, Semaan ultimately had to rank their applications on a first-come, first-served basis.

"We had a course on health care systems around the world and there was a segment on Canada. I wanted to learn more," says Joe Tung, a first-year HMS student and exchange participant.

The exchange, which will be annual, was also an opportunity to make new friends and network. "Medicine is a small community, even globally," Tung points out. Two in his group had already befriended a McGill Medicine student at a recent conference.

"I wanted students from two different countries, two great universities and two different delivery systems to spend some time together," adds Semaan, an internist in private practice and Assistant Clinical Professor at HMS. After a day of touring the McGill Faculty of Medicine—with stops at the Osler Library, the Dean's office and the Maude Abbott Medical Museum—Semaan parted ways with the HMS students, who went off to meet the McGill student hosts who would put them up for the rest of the stay.

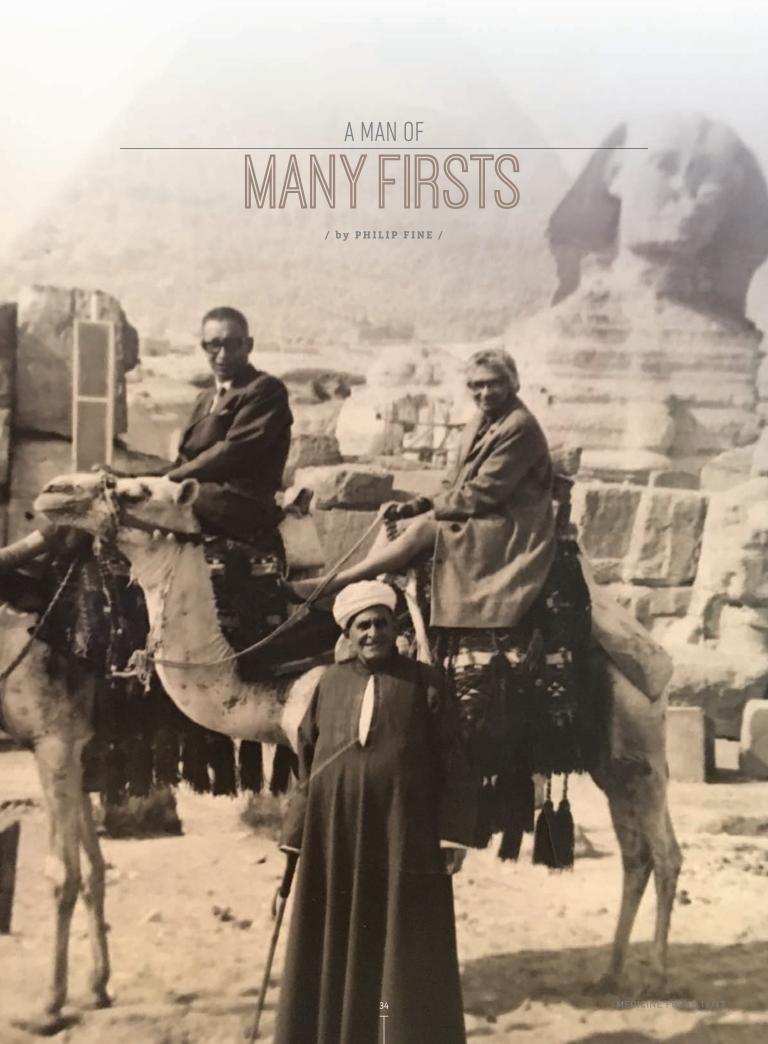
This, Semaan hoped, would be the Americans' chance to discover some of the "joie de vivre" that he had so enjoyed during his days in Montreal.

As for him, he headed off for a mini reunion with class-mates who had made the journey from Toronto, Detroit and North Bay.

"I told them, come to Montreal. It's my birthday," he says with a smile.

A contingent of McGill students also visited Harvard in spring 2016.

The Harvard group wishes to recognize the contributions of Chris Lyons, Osler Librarian; Rick Fraser, BSc, MDCM'76, Director of the Maude Abbott Medical Museum; VP-Dean David Eidelman, MDCM'79; and Antonia Maioni, Associate Vice-Principal (Research and International Relations) and incoming Dean of the Faculty of Arts, who spoke on the differences between the American and Canadian health care systems.





Melville, with daughter, Enid (Melville-Wright, BA, MDCM'59), in 1949. It has been suggested that Melville-Wright may have been the first black woman to graduate from McGill's undergraduate medical program. She was one of only two female graduates for her year.

enneth Melville, BSc'26, MDCM'26, MSc'31, (1902–1975) attained a level of success that many would have thought impossible for a black man of his time and place.

Born and raised in Kingston, Jamaica, Melville, who came to Montreal in the early 1920s, is remembered as the first black medical student at McGill University. He graduated at the top of his class, earning the Holmes Gold Medal for his year, as well as the Hills Prize in Pharmacology and, in 1930, won a postdoctoral fellowship at the prestigious Pasteur Institute in Paris.

In 1953, he became the first (and only) black Chair of McGill's Department of Pharmacology & Therapeutics—and the first person from a developing country to hold a Chair at McGill.

Throughout his career Melville served as a mentor to students from the developing world, a leader in Montreal's West Indian community and an advocate for civil rights. An internationally respected pharmacologist, he was among the first to show that adrenaline is not a sympathetic neurotransmitter.

His grandson Chris Wright says few black people then were simply judged on talent alone. "It's a testament to Canada at that time," says Wright, who muses on whether his grandfather would have had as much opportunity in that era had he settled elsewhere.

Over a period spanning almost half a century, Melville published extensively, primarily on the physiology of stress responses. He trained foreign graduate students, helped

Left: Melville, pictured top left, in Cairo, with wife, Gladys, earned recognition from both *Ebony* and *Jet* magazines for his accomplishments. In 1957, the *Baltimore Afro-American* newspaper referred to him as "the most outstanding figure" in a piece on Montreal.

Nigeria develop its domestic medical program, and was a founding member of the International Union of Basic and Clinical Pharmacology.

The media also sought out his expertise on the dangers of certain recreational drugs.

During the late 1930s, he chaired a defence committee for Fred Christie, a Jamaican-born resident of Verdun, Quebec, who was refused service at a tavern in the Montreal Forum prior to a boxing match because he was black. In 1960, Melville was arrested with seven other physicians attending a medical congress in Atlantic City after protesting when the cafeteria refused to serve them because they were black.

Although he worked primarily in research, Melville also ran a limited family practice. Wright remembers his grandfather each Christmas going around to the homes of all his patients, most of them fellow immigrants from the West Indies.

Two generations of physicians followed: Melville's daughter, Enid Melville-Wright, BA, MDCM'59, who was a psychiatrist, and her son, the aforementioned Chris Wright, currently Chief Medical Officer at Pronutria Biosciences in Cambridge, Massachusetts.

Melville's memory lives on at McGill through the Melville Fellowship in Pharmacology, a prize awarded for the best poster presentations on Pharmacology Research Day.

With special thanks to Chris and Alexsandra Wright, to Joseph Hanaway, BA, MDCM'60, and to the Medicine Class of 1955 for inspiring this story.

WHAT

LOOKS LIKE

/ by ANNETTE MAHON /

nly four out of 110 students in the Medicine Class of 1954 went into family practice, remembered Barry King, MDCM'54, during his 60th anniversary Homecoming celebration.

How things have changed!

The McGill Department of Family Medicine, founded in 1976, has become the largest in the Faculty, with over 200 residents caring for 100,000 patients across Quebec.

"We're a hidden jewel at McGill," says Howard Bergman, BSc, MDCM'69, Professor and Chair of Family Medicine.

It was an uphill struggle for the Department's first leaders to gain a foothold in the hierarchy of medical specialties.

"There's been a phenomenal development in primary care. Today, it is recognized as the foundation of a sustainable health care system worldwide," says Bergman.

The past several years have witnessed unparalleled growth, with medical graduates choosing family medicine residencies in record numbers. Just shy of 40% of McGill students opted for family medicine residencies in 2015—a figure that has more than tripled within the past eight years. And 100% of the available McGill family medicine residency positions were filled in 2016, addressing the urgent need for more family doctors for patients.

The Department is also making significant advances on the research front. Its accredited MSc and forthcoming accredited PhD programs have close to 50 graduate, doctoral and post-doctoral students, compared with none 10 years ago, and its growing global health program extends to Latin America, Africa and Asia, as well as Indigenous health in Canada.

McGill currently boasts 20 PhD and clinician-scientist professors in Family Medicine and is developing a Distance and Blended Learning program targeting practising family physicians from all over the world. "Clinician-scientists are powerful instruments in developing new knowledge for both academic and clinical disciplines," says Bergman.

In addition to hosting a Homecoming gala and international symposium in May 2016 in celebration of its 40th anniversary, a global network of graduates and teachers called "Friends of McGill Family Medicine" is being launched to help guide the Department's future.

"I thought I could, I thought I could," is a fitting chant for the dedicated faculty, clinicians, staff and students who have elevated the Department of Family Medicine to its rightful place at the peak of health care. They knew they could do it. And they did.



THE MOVING HISTORY OF

PHYSIOTHERAPY

/ by RUSS COOPER, MSc(OT)'16 /

"IF WE UNDERSTAND HOW PHYSIOTHERAPY HAS DEVELOPED AT MCGILL AND IN CANADA, WE CAN USE THESE LESSONS TO IMPROVE THE REHABILITATION PRACTICES OF THE FUTURE."



Rick Fraser, MDCM'76, with part of the Maude Abbott cardiovascular collection.

he wise words above from PhD student Marcos Rodrigues, MSc(PT)'16, are the overarching tenet of an exhibition of antiquated physiotherapy (PT) devices he is helping to prepare for the Maude Abbott Medical Museum.

The exhibition, co-curated with museum director Rick Fraser, MDCM'76, will consist of nine or 10 historical pieces from the McGill School of Physical & Occupational Therapy (SPOT).

The devices had been hidden from view for years in the basement of Hosmer House, where, during efforts to prepare the building for renovations, Sarah Marshall, BSc(PT)'84, MSc'06, Director's Academic Associate, SPOT, and Luisa De Marte, Course Technician, Occupational Therapy Programs, stumbled upon them. Sensing the educational value, they contacted Fraser who agreed the items were of value. Marshall brought in Rodrigues, whom she knew to be interested in the story of SPOT—and the rest, as they say, is history.

Each exhibition piece will be outfitted with complete descriptions and explanations of its place in PT history. Rodrigues also hopes to accompany each piece with a scannable square barcode linking to testimonials from professionals who once used these devices. "In a way, it can be a live interaction with a bit of the past," he says.

Rodrigues' current research is investigating the central nervous system mechanisms and physiological principles of upper extremity motor control performance in stroke patients and how these principles can be translated into rehabilitation practice. While this exhibition is not a formal part of his research, Rodrigues says his participation will help him understand how PT practices have evolved and where the practice is headed.

"One of the ideas is to bring the undergrads here so they can be aware of this history," says Rodrigues, adding that this will be a great way to help raise awareness of the history of SPOT, which dates back to 1943 and evolved into the first Canadian BSc program in Physical and Occupational Therapy in 1954. "I think curating this exhibition will help me mature and be more aware of where I want to take my own practice."

It's a good fit for the Maude Abbott Museum, one of the best historical collections of anatomical, pathological and other medical materials in North America, featuring more than 3,500 items dating as far back as 1823. In 2014, CNN named it one of the world's top 10 weirdest medical museums.

Visits to the museum are generally by appointment only. Fraser echoes Rodrigues' reasoning behind why people should visit. "Partly to see what was, partly to see how it is now, and partly to see what it could be."

The Maude Abbott Medical Museum is located in room 2/38E in the Strathcona Anatomy Building, 3640 University St., Montreal. Individuals or groups wishing to visit the museum may contact Dr. Richard Fraser at richard.fraser@mcgill.ca. An excellent Homecoming activity!

A HOMECOMING PRIMER

FOR YOUNG ALUMNI

"I'M NOT SURE THAT MY CONTEMPORARIES REALIZE THAT THIS TRADITION EXISTS," MENTIONED A RECENT GRADUATE OVER HOMECOMING WEEKEND IN OCTOBER 2015. "I WOULD HAVE LIKED TO HAVE LEARNED MORE ABOUT IT AS A STUDENT."

edicine Focus took this request to heart and offers the following as an explanation of how Homecoming works to those who have not yet experienced it first-hand, using Homecoming 2015 as an example.

IT BEGINS WITH ALUMNI VOLUNTEERS

Homecoming takes place every year in the fall, but planning starts much earlier, with some class representatives getting the call out to classmates a year or two in advance to ensure a good turnout.

A CHANCE TO MARK MILESTONE ANNIVERSARIES

All graduates are welcome to every Homecoming but class reunions tend to be based on five-year milestones, with particular attention paid to 25th and 50th anniversaries.

Medicine classes have a longstanding tradition of organizing a class gift around each reunion. Homecoming is also an opportunity to reflect back on these gifts.

At his Jubilee reunion, Marvin Wexler, BSc, MDCM'65, MSc—who has been Class Representative for the Medicine Class of 1965 since graduation—updated his classmates on their collective giving. Overall, they had contributed more than \$500,000 to the Alma Mater Fund. Since 2000, they had sent eight students on rotations in Uganda, Rwanda, Haiti and elsewhere.

DIFFERENT PROGRAMS HAVE DIFFERENT TRADITIONS

To mention just some of the activities that are held most years:

- Dean's Open House at 3605 de la Montagne (graduates of the MDCM program)
- Wine and cheese (SPOT)
- Afternoon tea (Ingram School of Nursing)

One favourite tradition of our MDCM alumni is the CME seminar led by the 25th anniversary class. In 2015, Janet Ritchie, MDCM'90, received a standing ovation for her presentation, "Living Healthily with Multiple Sclerosis."

"I've been team physician to the Alouettes for 21 years now and the Montreal Canadiens for 14," said Vincent Lacroix, BSc, MDCM'90, during his talk on ethics, medicine and elite sport. Lacroix, who in his work with the Canadiens is following in the footsteps of McGillians Donald Kinnear, BSc, MDCM'52, and Dr. David Mulder, MSc, explained the interprofessional nature of sports medicine teams, which also include physiotherapists and other health care specialists. "There is even an Als ophthalmologist."

Individual classes also organize different activities each year. For example, in 2015:

- The Medicine Class of 1965 tried something new with a group discussion called "Life Lessons" over lunch at the Faculty Club.
- The Medicine Class of 1990 organized a hockey game at the McConnell Arena.
- The Nursing Class of 1970 attended a cocktail party and supper at a private home as well as a lunch at a restaurant.

For the past couple of years, a new tradition has taken hold where all graduates of all programs and schools gather together one evening for an all-school, all-year cocktail reception.

AN OPPORTUNITY TO...

SHARE MEMORIES OF STUDENT DAYS

"I was chairman of the sports committee. We had a track meet with Queen's. I encouraged everyone to participate. There was a point for participation. We had so much participation that we won outright," reminisced Max Patterson, MDCM'55.



Ada Stefanescu, MDCM'10, with Suzanne Fortier, McGill Principal and Vice-Chancellor, at one of our newest—and most popular—Homecoming traditions, an all-year, all-school cocktail party.

REFLECT ON PATHS TAKEN

"I left here with Alan Ross [MDCM'27] who led a team to Nairobi in 1964. I went for one year and stayed for 48," said Colin Forbes, BSc, MDCM'55. "We taught medicine in the villages. We were trying to get people so that children would not die of preventable disease like measles, tetanus, etc."

Said Patterson about Forbes, "He's probably done more for medicine in the undeveloped world than anyone I know."

This mantle is upheld by more recent graduates like Allan Okrainec, BSc, MDCM'00, who, post-graduation, helped establish a medical training centre in Donetsk, Ukraine, which unfortunately, has since been destroyed.



REMEMBER CLASSMATES AND MENTORS

For our Medicine alumni, a favourite Homecoming tradition is to gather around the class mosaic to tell stories about classmates and professors.

"This chap [Jim Mitchener, BSc, MDCM'55], played for the Montreal Alouettes. And the guy next to him [John W. Martin, MDCM'55, also known as Yohannes Workneh] was the personal physician to the emperor Haile Selassie I, who was a

direct descendant of the Queen of Sheba," said Patterson, who also pointed out "their" Dean, G. Lyman Duff. "Every Saturday morning, he held a pathology seminar, which was so entertaining that any McGill grad that happened to be in town attended."

REMEMBER THE GREATS

One memory that is common to many of our graduates from the '40s, '50s and '60s, across programs, is that of Dr. Wilder Penfield. "Dr. Penfield talked to us about MS," said Cecile Lee Belanger, Dip (P Th)'65.

"The very first operation I saw was Penfield operating," said

REFLECT ON HOW TIMES HAVE CHANGED

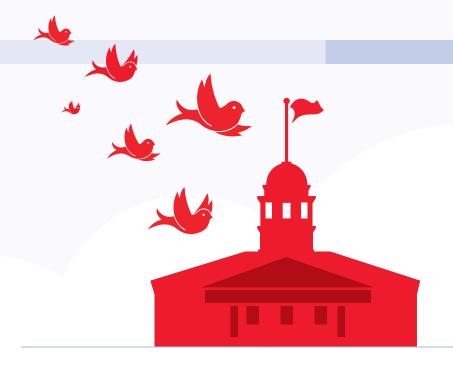
"The BSc(PT) course started in 1967. I was one of two people who did the class," said Gloria Gilbert, DIP(P TH)'66, BSc(PT)'67, adding about SPOT in the '60s: "We wore old-fashioned nurses uniforms that had eyelets."

"When I chose psychiatry, one of my thoughts was that probably more would happen in that field than any other. And I think that's true. We know a lot more about the brain and how it works," said Bernard Foster, MDCM'65.

VISIT OLD HAUNTS

Out-of-town alumni have a list of places they would like to return to, on campus and off, including:

- the Meredith Annex
- the McIntyre building
- Strathcona
- Wilson Hall
- amphitheatres
- Schwartz's
- Mount Royal



DISCOVER NEW FACILITIES

Groups from Medicine and Nursing went on tours of the Steinberg Centre for Simulation and Interactive Learning. Some groups also visited the new Glen site of the McGill University Health Centre.

LEARN HOW HEALTH SCIENCES EDUCATION IS CHANGING

At the 2015 Open House, MDCM alumni attended mini talks on a variety of subjects, including the new MDCM curriculum. "By the end of their first year, every student is required to have submitted a research proposal. In the second year, they are required to carry out the proposal. Research is codified in the curriculum in a way it never was before," Colin Chalk, MDCM'84, Director of Curricular Development at the McGill Faculty of Medicine and Associate Professor, Department of Neurology and Neurosurgery, told the audience.

A couple of alumni came to Homecoming seeking information on the new MDCM curriculum to help them in their efforts to set up new medical schools in the developing world.

"I'm the university physician for a university with 800 students. This month, they opened a new school of medicine," said Dana Witmer, MDCM'80, who lives in the Democratic Republic of Congo, where she is in charge of a pediatric department of a referral hospital.

In another talk, on Wellness & Resilience, Stella Miller, Wellness Consultant at the Faculty of Medicine's MedWell office, explained initiatives to increase access to counseling for students and residents, and to make it easier for residents to eat well in the hospitals.

CELEBRATE THE CONTRIBUTION OF FACULTY GRADUATES

The Medicine Alumni Global Awards are presented at Homecoming. The ceremony is private, but alumni and faculty are encouraged to nominate classmates the spring before the event.

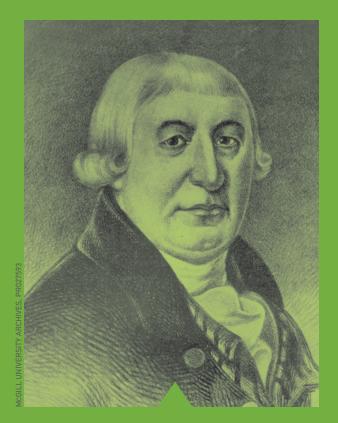
NOW THAT YOU KNOW WHAT HOMECOMING IS...

This is just one snapshot of a constantly evolving tradition. We hope that you will put your mark on Homecoming when your year comes around.

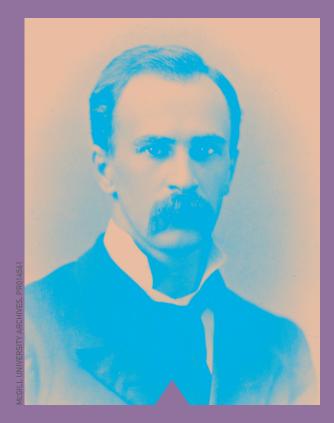
At Homecoming 2016, on Thursday, October 27 to Sunday, October 30, 2016, we welcome everyone, but celebrate milestone reunions for alumni whose class year ends in 1 or 6.

In 2017, we welcome all, with a special focus on graduates whose year ends in 2 or 7.
Save the date: Thursday, October 26 to Sunday, October 29, 2017.

For more information, please contact Advancement Associate Cynthia Liu at 514-398-6044 or cynthia.liu@mcgill.ca



MCGILL DID IT.



OSLER DID IT.



YOU CAN, TOO.

MAKE THE GIFT OF A LIFETIME.

Find out how a planned gift can do **more** to build the future of health sciences at McGill, while helping you to achieve your philanthropic vision.

Joanne Leebosh Managing Director, Development joanne.leebosh@mcgill.ca 514-398-6558

University Advancement Faculty of Medicine 1010 Sherbrooke St. West, Suite 1210 Montreal, QC H3A 2R7



Faculty of **Medicine**



University Advancement
Faculty of Medicine
McGill University
1010 Sherbrooke St. West, Suite 1210
Montreal, Quebec, Canada H3A 2R7

BACKCHAT @ McGillMedAlumni

SOCIAL MEDIA ROUNDUP



Réseau de cancérologie Rossy / Rossy Cancer Network An RCN team worked hard to get cancer patients from the elevator to the treatment room faster at St. Mary's Cancer Care Day Clinic. #puttingpatientsfirst



Emily Hodgson @ECHodgson Milton the hedgehog in his fave #McGill swag!
Submission by a medical student to an online challenge for McGill24, our first-ever day of giving.



traveling_moccs Sporting the new white coat :) #drdoods #mcgillmedicineproud Medical student Wesley Cote, of the Kitigan Zibi Anishinabeg First Nation, celebrates with his wife and children.