Healthier societies

Sarah Chibane
Medical student
Canada’s first faculty of medicine began with a core belief – that knowledge and compassion can eradicate suffering and disease. Two centuries later, that belief remains the same, while everything around us has dramatically changed.

An explosion of scientific advances – from genomics and epigenetics to big data, high-resolution imaging and nanotechnologies – now illuminates the mechanisms of countless diseases. What was formerly the stuff of science fiction has become routine.

Today, the promise of better health for millions – young and old, in Canada and across the globe – is greater than at any time in history. And yet...

The world struggles to deliver humane, cost-effective care to aging and chronically ill populations. Cancer strikes one in two individuals. Lethal pandemics criss-cross the planet, and antibiotic-resistant infections threaten the simplest of procedures. Meanwhile, social and economic disparities remain stubbornly entrenched, making access to care and health outcomes woefully unequal, even in the richest countries.
McGill’s Faculty of Medicine has a bold vision to reshape teaching, research and health care, to take on the biggest health challenges, and to overcome them.
A renewed Faculty of Medicine will build on our past and all we have become across the health sciences.

Expand and share our expertise in medicine, nursing, physical and occupational therapy, and communication sciences and disorders.
Break new ground in the biomedical sciences, genomics and computational medicine.

Revitalize our facilities for new models of teaching, discovery and innovation, to improve the health of the communities we serve.
These are our strengths

Our alumni include Nobel Prize winners and astronauts, alongside pioneers in oncology, stem cells, neuroscience and nursing. Multilingual and culturally diverse, the Faculty of Medicine is preparing future graduates to meet health challenges by collaborating across professions, disciplines, countries and continents. Our research strengths – from cancer and infectious diseases to population health and genomic medicine – enable us to target the biggest problems and to train the best to resolve them.

The Faculty has been at the forefront of myriad discoveries throughout its history. The introduction of bedside teaching, we were there. The founding of “stress” research, we were there. The discovery of stem cells, we were there. The elucidation of the brain, we were there. The harnessing of antiretroviral 3TC to treat HIV, we were there. The mapping of the human genome, we were there.

And this was just the beginning.

Today, the world faces challenges and opportunities as monumental as those that shaped public health in the last century. Once again, we are ready to lead.

With the scholarship to train the best in interprofessional and interdisciplinary teams.

With a world-renowned cancer centre that attracts leading scientists and collaborations.

With one of the world’s largest concentrations of experts in infectious and immune-mediated diseases.

With a new School of Population and Global Health to improve health outcomes and erase inequities.

With the leadership in genomic medicine to develop personalized treatments.

With the foresight to share data to accelerate discovery.

With a hospital network caring for one of the largest, most diverse populations in North America.

With the intellectual strength of thousands to make a meaningful, sustainable difference.

Since its inception, the McGill Faculty of Medicine has attracted brilliant educators, researchers and students in medicine and across the health sciences. We have amazing potential – in this city and with our partners worldwide – to continue improving health on a global scale. We have the science and the expertise. And we have the vision and determination to do it.
This is our vision

With your support, a healthier future is within our reach.

The Faculty of Medicine aspires to train brilliant, compassionate and curious minds, encourage innovative thinking, translate research into cures and help create sustainable health care systems. Guided by this vision, we are committed to:

Training future-ready health professionals and scientists
We will create innovative learning opportunities and spaces worthy of our ambitions. We will revitalize the McIntyre Medical Sciences Building and break new ground to create an ultra-modern hub that promotes interprofessional and interdisciplinary health education, research and student life. And we will set new standards for educational excellence at our new Institute of Health Sciences Education.

Breaking down walls to discover and innovate
We will lead a new era of discovery focused on humanity’s most daunting health challenges by:

› Tackling cancer with our partners as part of a new, bold McGill Cancer vision, working with nationwide networks, and creating a McGill Cancer Institute
› Overcoming antibiotic resistance and defeating infectious and immune-mediated diseases with the McGill Interdisciplinary Initiative in Infection and Immunity (MI4) discovery team
› Creating a powerhouse in genomic medicine to target disease with personalized treatments
› Pioneering regenerative medicine to cure “from within”
› Charting new, bold frontiers in mental illness
› Driving clinical innovation across the McGill hospital network
› Championing “open science” to accelerate discovery in the neurosciences

Helping to heal communities locally and globally
We will partner here and around the world through a new McGill School of Population and Global Health to better understand and identify the major drivers of disease, target health inequities, and improve health and vitality for our aging populations.

We will continue listening to and collaborating with Canada’s Indigenous communities to better meet their needs. And we will work passionately to better understand and overcome the mental health crisis among today’s youth.
Medicine to fight infection and human immune threats. Made by seeing the incurable become treatable.

Made by McGill.

Dr. Don Sheppard, Director of the McGill Interdisciplinary Initiative in Infection and Immunity (MI4). Saw a new treatment era emerge in San Francisco at the advent of antiretroviral drugs to combat HIV.
Training future-ready health professionals and scientists

At the heart of the Faculty’s mission is training the next generation of expert health professionals and scientists – those with the talents, curiosity and resolve to excel in health care, discovery and policy. To accomplish this, we will:

Transform teaching, learning and the student experience

As Canada’s foremost faculty of medicine, we will continue leading by investing in our students, in our strengths and in a learning environment that fosters the very best outcomes.

Your support will enable us to create:

› New scholarships, fellowships and awards to attract the world’s best young minds
› Innovative learning programs at the intersection of professions and disciplines
› Targeted student wellness initiatives to realize the full potential of all our students
› Modernized classrooms and laboratories across our health sciences facilities
› New and exciting partnership opportunities, locally and worldwide

A new Centre for Interprofessional Health Education, among the first of its kind, will help train future physicians, nurses, physical, occupational and speech therapists, and other health professionals how to best work together. In addition to the above, your support will enable us to establish:

› Canada’s first interprofessional fellows program
› New research in interprofessional / interdisciplinary education
› Chairs and professorships in digital health
Revitalize and create new space to house our ambitions

**Phase I: The McIntyre Medical Sciences Building** - An icon in our city for more than half a century, the McIntyre has served as the incubator for tens of thousands of health professionals and scientists. But now it’s time for an upgrade.

Maintaining our reputation as a world-class Faculty requires not only exceptional people and programs, but also sophisticated space and infrastructure.

Your visionary support will help us to build:

- Modern classroom configurations, not only for large group teaching but also small group and interprofessional/interdisciplinary learning, equipped with advanced education technology
- Common areas that bring students together in thought-provoking communities
- Revitalized amphitheatres that optimize knowledge-sharing and learning
- Open, modern spaces for Faculty, University and public gatherings

**Phase II: A major hub** to usher in the next era of health sciences education and discovery. The facility we envision will integrate multiple biomedical departments to provide new opportunities that explore the intersections between disciplines and professions, and to engage with new technologies. It will serve as a living laboratory for new models of discovery, teaching and innovation, and, ultimately, better care, treatments and cures.

Champion education excellence in the health sciences

Also a first of its kind in Canada, the new **McGill Institute of Health Sciences Education** builds on the Faculty’s renown for educational scholarship dedicated to the health professions. It brings together clinicians, educators, researchers and students from across disciplines and professions to create strong, organic links between research and scholarship, clinical practice, teaching and curriculum implementation and policy development.

At the core of the Institute is the belief that better health sciences education leads to better patient care.

Your support of the Institute will create:

- Scholarships to support faculty members in health sciences education research
- Graduate fellowships for students enrolled in the newly created Master’s and PhD programs in medical and health sciences education
- Postdoctoral fellowships for fellows undertaking their research training at the Institute
- Research seed funding for Institute researchers from across the University and the hospital network
- Travel funds to allow dissemination of research and bilateral exchange for faculty and students between McGill and its global academic partners
Increasingly targeted therapies for cancer.
Made by understanding the genetic basis of disease.

Made by McGill.

Dr. Logan Walsh, Rosalind Goodman Chair in Lung Cancer Research. Leading genetics investigator working with the Lung Cancer Network to double the number of survivors in the next decade.
Breaking down walls to discover and innovate

Cancer. Infectious diseases such as tuberculosis, HIV and Ebola. Chronic and immune diseases such as arthritis and Crohn’s. These are among the gravest threats to human health and prosperity.

McGill is home to leading basic science and clinical researchers targeting some of our biggest health challenges. And they are passionate about defeating them. Here’s how:

Lead the next wave of cancer discovery

Canada’s biggest killer, cancer is responsible for 30% of all deaths. Building on the strengths of the Goodman Cancer Research Centre and their vision to “collaborate to cure,” we are ready to lead the next wave of cancer discoveries and new precision cancer therapies.

Your support will enable us to:

› Unite behind a single, bold McGill Cancer vision
› Develop innovative technologies to detect and treat cancer early
› Enhance patient-centric research to better understand cancer initiation, resistance and metastases
› Accelerate the translation of research to the clinic
› Improve precision medicine strategies and quality of life for patients
› Build and partner in national and global networks targeting the deadliest cancers
› Enhance big-data expertise and cutting-edge technology platforms
› Provide outstanding training for tomorrow’s cancer scientists and physicians

Your support will also help build a leading collaborative, interdisciplinary and entrepreneurial research ecosystem with a reimagined McGill Cancer Institute. This would empower us to recruit and train future cancer leaders from multiple disciplines, offer leading graduate programs and degrees and launch the future of cancer research here at McGill.

Pioneer medicine for the post-antibiotic world

The McGill Interdisciplinary Initiative in Infection and Immunity (MI4) brings together more than 250 researchers - one of the world’s greatest concentrations of infection and immunity expertise - to battle global pandemics and the spectre of drug-resistant bugs.

Your investment will enable MI4 to:

› Recruit still more leading research talent
› Support transformative interdisciplinary projects
› Build discovery platforms in genomics, imaging, AI and big data
› Deliver answers that save lives and reduce suffering
› Make an immediate impact both at home and around the world
Create a powerhouse in genomic medicine

In the last 10 years, scientists have made extraordinary strides in sequencing the human genome – the genetic “bible” that describes every trait we inherit from our parents. This new knowledge promises to usher in a host of new drug therapies targeting everything from cancer to chronic pain. Under the leadership of our Canada Excellence Research Chair in Genomic Medicine, we are building a North American powerhouse in personalized treatments for countless conditions.

Your support will help us to:

› Harness the genome to better predict drug responses and improve our understanding of disease
› Build an infrastructure to support hospital-based genomics research, including: ethics and governance, data warehousing, bioinformatics, DNA biobanking and genomics technologies
› Improve clinical care through genomics-enabled medicine

Today, powerful computers crunch vast databases to generate fresh insights. With the new McGill Initiative in Computational Medicine (MiCM), we aim to lead a new wave here as well.

Your investment will help us to:

› Establish the MiCM as one of the world’s foremost centres in computational medicine
› Attract international experts in computational medicine
› Recruit top research personnel
› Provide fellowships to graduate students
› Support collaborations at the intersection of big data and health

Open new frontiers in our understanding of the brain

At The Neuro, we have led the world in deepening our understanding of the brain in all its complexity. This has opened doors to potentially revolutionary treatments for Parkinson’s disease, autism, dementia, schizophrenia and depression. Since its founding in 2013, the Ludmer Centre for Neuroinformatics and Mental Health has emerged as a world leader in big-data brain research. We are now poised to harness new breakthroughs in genetics, brain imaging, neuroinformatics and epigenetics to transform how the world treats mental illnesses.

Your investment will help us:

› Recruit and retain more top brain scientists
› Support outstanding graduate students
› Enhance our research infrastructure
› Fund innovative cross-disciplinary partnerships

Cure disease from within through regenerative medicine

Imagine a treatment that frees a diabetic child from daily insulin injections, enables a grandmother weakened by heart failure to regain her independence, or helps a soldier disfigured by injury to regain self-confidence. The new and exciting field of regenerative medicine makes all of this possible. And McGill plans to take the lead with a world-class McGill Regenerative Medicine Network.

Your support will enable the Network to:

› Build cutting-edge scientific infrastructure
› Recruit stellar talent
› Create training programs and support for graduate students
› Forge international research partnerships

Drive innovation across the McGill health network

Today’s urgent health challenges demand creative solutions – precision drug therapies, wearables that inspire healthier living, field-ready rapid diagnostics, and low-cost, high-quality health care delivery. McGill innovators are meeting the challenge with our entrepreneurial students and with world-leading expertise, from the basic sciences to bioengineering, clinical research and health policy.

Your visionary support will help us:

› Expand the McGill Clinical Innovation Competition
› Support our international Clinical Innovation Conference
› Build on the Steinberg Centre for Simulation and Interactive Learning programming
› Launch new innovation prizes and seed funds
› Create mentoring and training opportunities
› Develop new partnerships with McGill’s Desautels Faculty of Management for innovation in health
Health sciences education on the cutting edge.
Made for students from all paths.
Made by McGill.

Joannie Rochette, medical student and Canadian Olympic figure skating bronze medalist.
Helping to heal communities locally and globally

McGill’s Faculty of Medicine was created to meet a pressing need – better health care for the people of Montreal. Today, the communities we serve extend far beyond municipal borders. Global public health challenges demand a breadth of vision and a multiplicity of partners our founders could never have imagined.

Meeting these challenges is a core aspiration of the Campaign for Our Third Century, and here is how we will achieve it:

Enhancing the McGill School of Population and Global Health

McGill’s newest School brings together global strengths and builds on more than 200 projects and partnerships in 50 countries. Under its flagship Global Health Program, the McGill School of Population and Global Health unites epidemiology and biostatistics, health and social policy, medical ethics, and occupational and environmental health. It brings together physicians, nurses, scientists, and physical and occupational therapists with social workers, economists and policy experts. It is a learning and doing hub where undergraduate to postdoctoral students from multiple fields can join real-world projects to improve countless lives.

Your visionary investment will help:

› Launch the inaugural School of Population and Global Health vision and strategy
› Forge still more new local, national and international partnerships
› Attract and retain additional population and global health leaders
› Support students and create new cross-disciplinary training programs
› Build spaces and infrastructure to ramp up collaboration, research and learning

Revitalizing our aging populations

Many developed countries are facing an unprecedented and alarming trend: their populations are steadily aging and in declining health. In partnership with The Neuro and other institutions, we are conducting new fundamental research into neurodegenerative diseases, and exploring strategies for building and maintaining brain health.

Building on our strong geriatrics program and ongoing work at the McGill Research Centre for Studies in Aging, we are partnering with the Douglas Mental Health University Institute and the McGill Centre of Excellence on Longevity at the Réseau Universitaire Intégré de Santé to begin clinical research into best practices in care. We will collaborate with caregivers and communities in workshops at our Steinberg Centre for Simulation and Interactive Learning, and we will explore new technologies to help the elderly lead longer, more fulfilled and empowered lives.

Your investment will help us to:

› Recruit and retain more experts in aging
› Build outreach programs for the elderly, their families and neighbours
› Create innovative research partnerships in technology and aging
› Support graduate and postdoctoral students across the health professions who are driven to tackle diseases of the aging
Improving health in Canada’s Indigenous communities

The health disparities between Indigenous peoples and other Canadians are enormous, urgent and unjustified. McGill’s Faculty of Medicine has a long history of providing much-needed services to Indigenous communities in Quebec. These services have deepened into true partnerships. Increasingly, teaching and learning flow both ways, to enrich patient and health care alike. Together with our teaching hospitals, RUIS McGill is working to improve access to culturally safe health care across 63% of Quebec’s land mass. We are also training health care professionals in Indigenous regions, including the Cree territory and Nunavik in the far north.

Your inspirational investment will help us to:

› Expand the McGill Indigenous Health Professions Program – a novel, interdisciplinary partnership to grow the number of Indigenous health care professionals
› Honour the MI4 pledge to eliminate tuberculosis among Canada’s Indigenous communities
› Build new partnerships with Indigenous health organizations
› Integrate Indigenous health into undergraduate and graduate nurse training
› Launch new research into Indigenous health

Healing the crisis in youth mental health

Up to 75% of mental health problems manifest themselves before the age of 25, with a surge during the transition from childhood. Poor mental health is the number one health issue facing young people, and delayed or inadequate care can create a downward spiral that devastates lives. Our vision: to create a Centre of Youth Mental Health and Innovation to integrate knowledge, pioneer new discoveries and rescue countless youth from a lifetime of darkness.

Your support will enable us to:

› Recruit global experts in youth mental health
› Launch collaborative, cross-disciplinary research projects
› Build community partnerships that translate discoveries into action
A better quality of life for children with disabilities.
Made by research that removes barriers.
Made by McGill.

Dr. Annette Majnemer
BSc(OT)'80, MSc'85, PhD'90
Vice-Dean (Education) at the Faculty of Medicine and Professor at the School of Physical & Occupational Therapy. Advocate for patient-oriented research focused on what children can do, rather than what they cannot.
The Faculty of Medicine.
A healthier future, made with compassion, curiosity and determination.