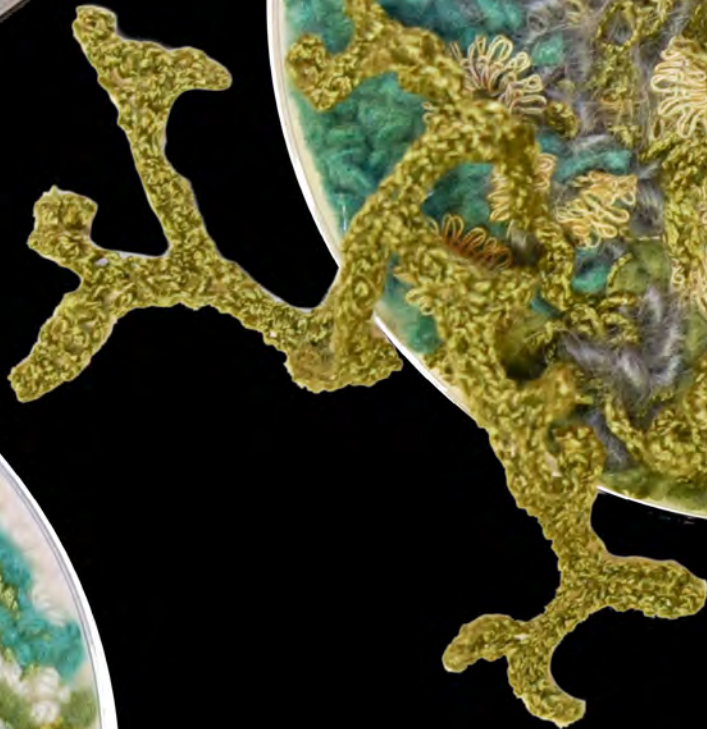
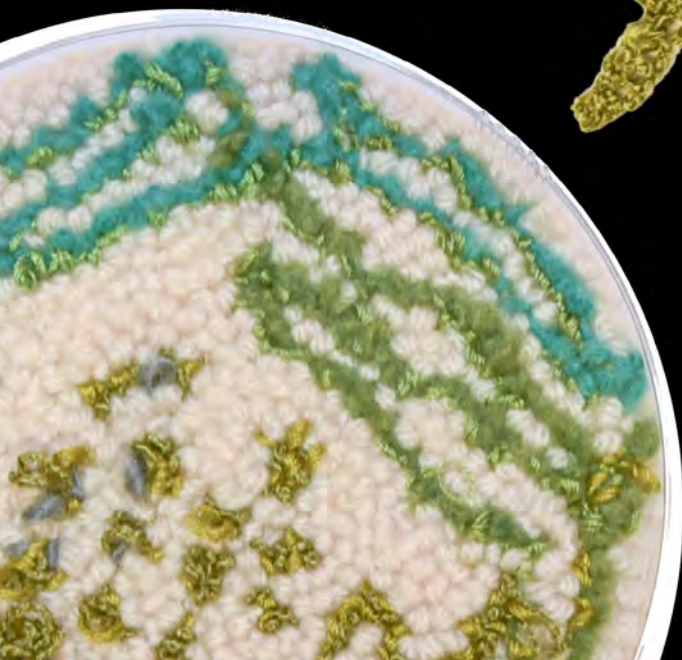
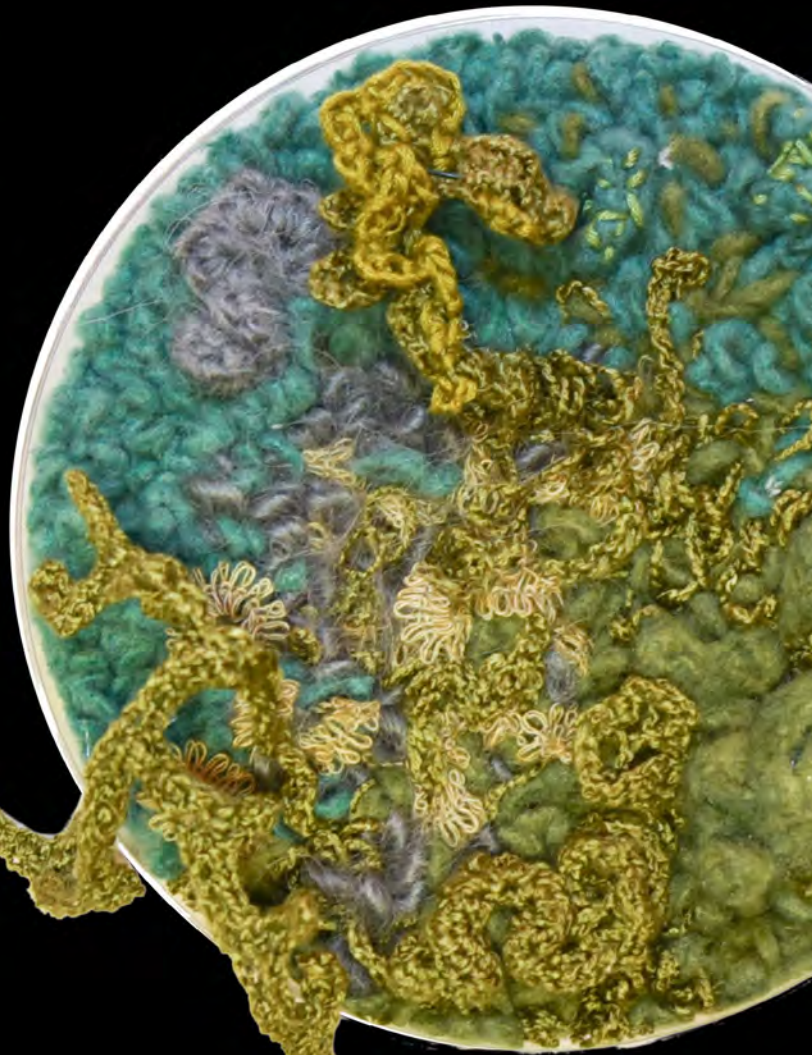


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ANNUAL REPORT

F A C U L T Y O F M E D I C I N E



MEDICINE

Cover Image

"No Longer Stranded"

By Danielle Ings

IN THIS ISSUE

DEAN'S MESSAGE

ADMINISTRATIVE OVERVIEW

WRAPPING UP *DESTINATION EXCELLENCE*

AWARDS AND HONOURS

EDUCATION UPDATES

RESEARCH AND FUNDING

SOCIAL ACCOUNTABILITY

ALUMNI PRIDE

Interested in reading more about a story or update? Visit the [bit.ly](https://bit.ly/MUNMedAR) link or scan the QR code on each page of the annual report. To access a digital copy of this annual report and past editions, visit <https://bit.ly/MUNMedAR>

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DEAN'S MESSAGE



The past year has brought about much change for Memorial University's Faculty of Medicine. This annual report highlights achievements and advancements in medical education, research and social accountability from April 1, 2023 to March 31, 2024.

On Aug. 1, I was appointed Interim Dean of Medicine and it has been an honour to work with our senior leadership, faculty, staff and learners in this new role. Our medical school is achieving great things and we recognize not just our school, but also the many individuals and teams who help us advance our goals.

Our strategic plan *Destination Excellence* was brought to a close at the end of 2023. A strategic plan refresh for 2024-2027 will be launched in summer 2024. This refresh, *Grounded in Excellence*, recognizes prior successes and provides opportunity to re-focus on new and key priority areas.

In this report, you will read about our medical education receiving national recognition by the Society of Rural Physicians of Canada, who awarded both the Keith Award and the Rural Medical Education Award to Memorial University.

Our research continues to make a difference for the province of Newfoundland and Labrador and beyond. In October we had the honour of celebrating our first Doctor of Medicine class who graduated in 1973. During our alumni reunion, many of these graduates were able to attend and, during a special event with current learners, were able to talk about the vast changes they have witnessed in the field of medicine. The Class of 1973 also announced the creation of a 50th-anniversary commemorative bursary in recognition of their milestone.

We continue to advance medical education in Atlantic Canada with the University of Prince Edward Island. While work is ongoing to develop a joint Doctor of Medicine (MD) degree, Memorial University is opening a regional campus on PEI to offer a MD degree in the fall of 2025. This will allow PEI residents more equitable access to medical doctor training sooner and further expand much-needed seats at Memorial for residents of Newfoundland and Labrador.

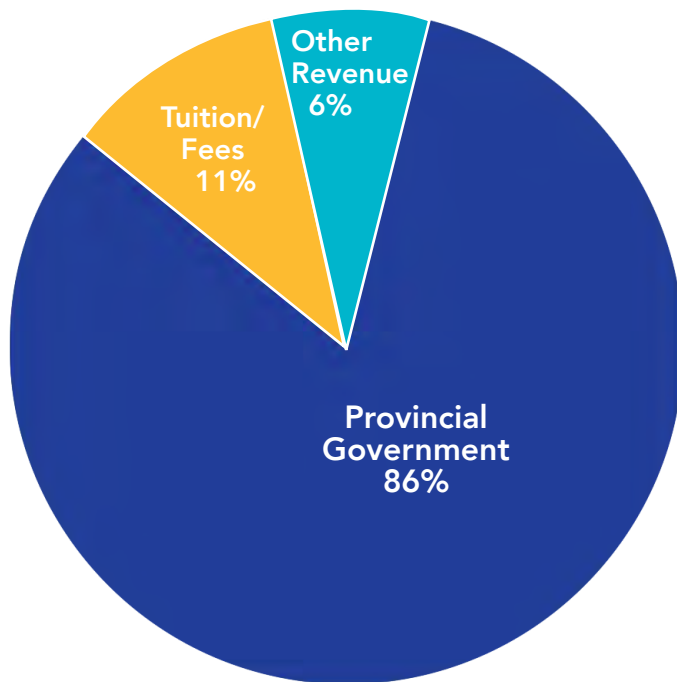
Thank you for your interest in and unwavering support of our Faculty of Medicine. The year ahead will see us continue to aim higher and advance medical education, research and social accountability.

Dr. Dolores McKeen

ADMINISTRATIVE OVERVIEW

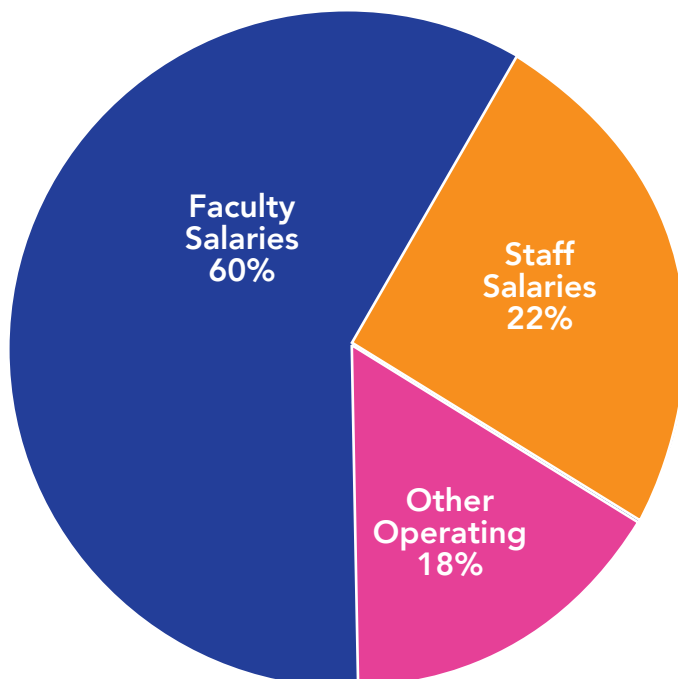
In 2023-24, the Faculty of Medicine earned \$88.6 million in operating revenues, including a \$5.1 million stabilization payment from the Department of Health and Community Services to eliminate the annual operating deficit. On March 31, 2024, the Faculty had a surplus of approximately \$1.4 million, with approximately \$1.2 million related to core operations and the remainder related to professional development funds and ancillary operations. The total surplus in the Faculty of Medicine is approximately \$2.6 million with approximately \$2.3 million related to core operations and the remainder related to professional development funds and ancillary operations.

OPERATING REVENUES



Other revenue includes:

- Fees
- Newfoundland Labrador Health Services
- Federal
- Other revenue



Other operating includes:

- External contracts/MOUs
- Utilities
- Library collection
- Operating leases
- Materials and supplies
- Professional fees
- Transfers
- Other expenses

STAFFING, FACULTY AND ADMINISTRATIVE SERVICES

FACULTY AND STAFF BREAKDOWN	
Full-time	
MUNFA Academic Staff Members ¹	80
Clinical (non-bargaining)	195
Full-time total	275
Part-time Clinical	
Part-time Stipendiary	220
Part-time Non-Stipendiary	1,161
Part-time total	1,381
Adjunct, Honorary and Emeritus Professors:	66
Non-academic Staff:	322

Part-time Faculty: primarily provide clinical education experiences for our undergraduate and postgraduate medical education learners. Through their affiliation with the Faculty of Medicine, they are also able to engage in research collaborations, access the library and participate in continuing medical education through the Office of Professional and Educational Development.

Part-time Stipendiary Faculty: receive a small annual stipend which can range from \$2,000 to \$12,000 annually to perform a specific set of academic or administrative duties.

Part-time Non-Stipendiary Faculty: receive no regular compensation, but may receive a small payment for serving as a preceptor for a medical learner or for classroom teaching as per approved rates of pay.

Part-time faculty are located throughout Newfoundland and Labrador and in New Brunswick, Prince Edward Island and in other parts of Canada, such as Nunavut. In accordance with accreditation standards, a faculty appointment is required to supervise or evaluate learners.

¹Count includes three jointly appointed faculty members whose primary appointments are in another faculty. It also includes six librarians.

STUDENT NUMBERS:

Undergraduate – Doctor of Medicine:

Class of 2024	76	Class of 2026	78
Class of 2025	81	Class of 2027	82

Graduate:

Combining the spring 2023, fall 2023 (in person) and February 2024 (in absentia) convocations, we are so proud of our graduates:

Graduate Diploma in Medicine	Clinical Epidemiology	14
Graduate Diploma in Medicine	Community Health	4
Master of Health Ethics	Health Ethics	4
Master of Public Health	Nutrition & Dietetics	2
Master of Public Health	Population & Public Health	23
Master of Science in Medicine	Applied Health Services Research	3
Master of Science in Medicine	Clinical Epidemiology	8
Master of Science in Medicine	Community Health	3
Master of Science in Medicine	Bioscience of Health & Disease	2
Master of Science in Medicine	Cardiovascular & Renal Sciences	2
Master of Science in Medicine	Human Genetics & Genomics	4
Master of Science in Medicine	Immunology & Infectious Diseases	4
Master of Science in Medicine	Neuroscience	3
Doctor of Philosophy	Medicine	5
Total		81



L to r: Eric Mensah, PhD, Graham Fraser, PhD and Gaylene Russell-McEvoy, PhD.



Radiology Residents

Postgraduate medical education residents:

Anatomical Pathology	10
Anesthesia	24
Care of the Elderly*	4
Care of Underserved Populations*	1
Child and Adolescent Psychiatry**	1
Diagnostic Radiology	20
Emergency Medicine	5
Family Medicine	76
General Internal Medicine	5
General Surgery	23
Geriatric Psychiatry	0
Internal Medicine	41
Medical Oncology	1
Nephrology	1
Neurology	9
Obstetrics and Gynecology	17
Orthopedic Surgery	11
Pediatrics	26
Psychiatry	27
Total Active Residents	302

*Discipline of Family Medicine enhanced skills program

** Discipline of Psychiatry subspecialty program

WRAPPING UP DESTINATION EXCELLENCE

Our strategic plan *Destination Excellence 2018-2023* concluded in December and was a pledge to aim higher and achieve excellence in all we do. It also outlined our commitment to integrating education, research and social accountability.

Highlights of some of the accomplishments achieved through *Destination Excellence* in its final year include:

Wellness and Well-Being Advisory Committee was renamed the Well-Being Advisory Committee and launched a new website for faculty, staff and learners. As part of our continuous commitment to understanding and supporting the needs of the Faculty of Medicine, our second well-being survey was launched in spring 2024. The primary objective of the survey is to gain insight into the culture of well-being within the faculty, how it is currently being supported and what can be done to make improvements.

The first Annual Metrics Report was published in June 2023. As part of our pledge to aim higher, the balanced score card provides a set of metrics which allow us to set benchmarks, measure success and set realistic goals.

The Equity, Diversity, Inclusion and Anti-Racism Project Team organized a speaker series and accessibility fair held in November 2023. The invited speaker was Dr. Jessica Dunkley, the first deaf Metis physician in Canada. A family doctor in Vancouver and a dermatology resident at UBC, Dr. Dunkley is passionate about inclusion in medical education for medical learners and trainees with disabilities. She spoke about the intersection of bias and inclusive design in medicine. It sparked engaging conversation in how we can create a positive learning environment through innovation and compassion.

The highly engaged accessibility fair was also well attended and included a dozen presenters including organizations such as the Canadian Hard of Hearing Association, Vision Loss Rehabilitation, Autism Society, Blundon Centre and more.

In recognition of Black History Month/African History and Liberation Month in February 2024, the EDI-AR Project Team organized a series of screen displays and social media posts. Information was provided by the undergraduate students on the committee from the Black Medical Students Association of Canada and the Canadian Atlantic Medical Students Association. The initiative was presented in three parts, the first gave an overview of Black History Month. The second looked at Black history in Atlantic Canada and the third provided tools and resources to help others become stronger advocates against anti-Black racism. An op-ed by Dr. Richard Elcock, co-chair of the EDI-AR project team, was also published in the *Gazette*.

A three year refresh of the strategic plan, *Grounded in Excellence* is being launched in 2024 that will take a retrospective look at what we achieved and prospective launch forth of support of our talented dedicated people, our unwavering commitment to excellence in everything that we do and intentional investments in our infrastructure and operations. It will outline all that we do for the next three years to continue to lead to impressive results and tangible benefits for our communities that make up the landscape of Newfoundland and Labrador.

ALL-ALUMNI LEADERSHIP TEAM

The Faculty of Medicine has new leadership at the helm — and they are all alumni of Memorial University. Dr. Dolores McKeen (B.Med.Sc.'90, MD'92, M.Sc.(Med)'04) was appointed interim dean on Aug. 1, the first time an alumnus of the MD program has held the role since the faculty was established more than 50 years ago.

Dr. McKeen says part of her role is to provide stability for the faculty during a time of transition. Prior to her appointment, she held the role of vice-dean, education and faculty affairs. She is also a professor in the Discipline of Anesthesia.

She is joined by Dr. Danielle O'Keefe (Dip.Clin.Epi.'03, MD'05, PGY2(FM)'06; M.Sc.(Med.)'13) and Dr. Rodney Russell (B.Sc.'96, M.Sc.(Med.)'00), into the role of vice-dean, education and faculty affairs, effective Oct. 1.

A family physician, Dr. O'Keefe is a former Family Medicine residency training program director and former chair of the Discipline of Family Medicine.

Dr. Rod Russell, vice-dean, research and graduate studies, is a professor of virology and immunology in the Division of BioMedical Sciences. In 2008 he established a research program at Memorial that covers fundamental virology, viral immunology and viral pathogenesis, as well as antiviral drug discovery and development.

His main priority during his term will be to connect people interested in research and to help move ongoing and new research projects forward.



L to r: Dr. Rod Russell, Dr. Dolores McKeen and Dr. Danielle O'Keefe.



<https://bit.ly/4123Psl>



MEMORIAL UNIVERSITY AND UPEI PARTNERSHIP

Memorial University and the University of Prince Edward Island (UPEI) continue to collaborate on the development of a unique to Canada joint Doctor of Medicine degree.

In the spirit of partnership, while this work continues, Memorial University is opening a regional campus on PEI to offer a Doctor of Medicine degree in the fall of 2025. There will be 20 seats available for Prince Edward Island residents.

PEI residents will apply to Memorial University and attend the PEI regional campus for the fall of 2025, ensuring a seamless and efficient process.

The construction of a new building at UPEI, which will serve in part as the medical school, is well underway. Numerous committees, comprising individuals from both Memorial and UPEI, have been established to plan and execute all aspects of the regional campus meticulously and, in the future, development of the MD joint degree program. These committees meet regularly and report to a project Steering Committee, ensuring a comprehensive and transparent process. Significant progress has been made in various areas, demonstrating solid commitment to this endeavour. The inaugural dean of the UPEI Faculty of Medicine begins a three-year appointment in April 2024.

The associate dean PEI, reporting to the dean of medicine at Memorial is expected to be named for the PEI regional campus in fall 2024. Memorial's didactic curriculum will be delivered synchronously via state-of-the-art information technology from either campus. Clinical skills and laboratory experiences for anatomy and physiology teaching will occur at UPEI and community engagement experience and clinical rotations will take place in PEI.

AWARDS AND HONOURS

MULTIPLE NATIONAL AWARDS FOR FACULTY OF MEDICINE PROGRAM, MDs

Memorial's Faculty of Medicine has a track record for fostering strong foundational experiences in rural medicine.

And for that, the Society of Rural Physicians Canada (SRPC) has, for the second year in a row, awarded both the Rural Medical Education Award and the Keith Award to Memorial.

This is the 10th time Memorial has received the Keith Award. The SRPC presents the Keith Award to a Canadian postgraduate program with the largest number of graduates practising in rural Canada for the most recent 10 years after graduation.

The Rural Medical Education Award is presented annually to the program matching the most graduates to rural family medicine residencies.

Eighty-six per cent of Memorial's doctor of medicine graduates entered a rural residency program in 2022. Memorial also received this award in 2008, 2019, 2020 and 2022.

In addition to these awards, the SRPC recognized a number of Memorial Faculty of Medicine faculty members and learners during the April 21 awards ceremony.

Dr. Lyn Power, from Burin, N.L., received a Rural Service Award; Dr. Samantha Harper, from Happy Valley-Goose Bay, N.L., received a Fellowship of Rural and Remote Medicine; Allison Best received a Student Leadership Award; and Daniel Pearce from the doctor of medicine class of 2024 received a Student Essay Award.



<https://bit.ly/3M8GAqC>

FACULTY OF MEDICINE HONOURS PRESIDENT'S AWARDS RECIPIENTS

The Faculty of Medicine is home to several 2023 President's Awards recipients. The awards were handed out at an event at the Signal Hill Campus on Dec. 8.

Those honoured include Amy Carroll (B.Comm.'02), Office of Research and Graduate Studies; Dr. Proton Rahman (B.Med.Sci.'88, MD'90), Discipline of Medicine and Dr. Guangju Zhai, Division of BioMedical Sciences.



Amy Carroll

President's Award for Exemplary Employees – Champion of Service

Ms. Amy Carroll worked in Memorial's Department of Human Resources before becoming an administrative staff specialist II in the Office of Research and Graduate Studies (RGS) in 2011.

Amy is the go-to person for advice and support in RGS and helps more than 300 students across 10 programs, post-doctoral fellows and supervisors navigate everything from stipends and contracts to payroll, awards, immigration support requirements, award ceremonies and convocation celebrations.

Dr. Proton Rahman

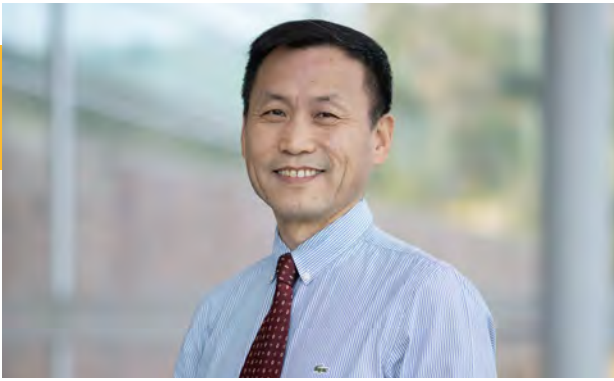
John Lewis Paton Distinguished University Professorship

Dr. Proton Rahman is recognized worldwide for groundbreaking discoveries on the genomics of rheumatic diseases.

A visionary educator, he mentored a generation of physicians and researchers. His seminal scientific contributions guided public health policy as part of Newfoundland and Labrador's response to the COVID-19 pandemic.

A clinical rheumatologist and genetic epidemiologist, Dr. Rahman's work allows clinicians and researchers to rapidly identify diseases and to understand the diseases' response to therapies. It also provides valuable insight into the diseases' pathophysiology.





Dr. Guangju Zhai
University Research Professor

Dr. Guangju Zhai is being recognized for his transformative contributions to his field of medicine, the creation of a world-class osteoarthritis research program and an exceptional rate of knowledge dissemination.

An expert in genetic epidemiology, Dr. Zhai has made a significant worldwide impact on the understanding of osteoarthritis while improving the lives of patients.

He advanced molecular techniques to identify novel metabolites which is helping diagnose osteoarthritis earlier, ensuring patients receive appropriate treatment at the right time.



From left, Dr. Reza Tabrizchi; Dr. Dolores McKeen, Dr. Guangju Zhai, Amy Carroll, Dr. Proton Rahman, Dr. Rod Russell



<https://bit.ly/47THfnM>



NATIONAL HONOURS FOR MEDICAL STUDENT WORKING WITH VULNERABLE POPULATIONS

Lauren Law is the 2023 recipient of the MD Financial Management Canadian Medical Hall of Fame Award for Medical Students.

The award recognizes individuals who demonstrate qualities such as perseverance, collaboration and entrepreneurial spirit and show outstanding potential as future leaders and innovators of health care in Canada.

Born and raised in East Vancouver in a single-parent household, the third-year medical student says her mother and other women in her life were strong female role models who taught her the essence of hard work, perseverance and determination.

Ms. Law devoted herself to succeeding academically as a means to overcome her challenging living circumstances. Volunteering with a harm reduction program in Vancouver allowed her to work closely with people affected by drug addiction and homelessness and got her thinking of a career in medicine. Since coming to Memorial University, Ms. Law has become a leader in her community, volunteering with Gateway Health. The clinic serves new refugees to Newfoundland and Labrador.

Other initiatives, such as co-founding the planetary health interest group at Memorial, which highlights the intersection between the health of the planet and human health, combine her environmental science and medical backgrounds.

She is also a member of the Canadian Association of Physicians for the Environment regional committee. It promotes improvements to medical curricula on education related to environmental and human health.

<https://bit.ly/42eNH7H>



GRADUATE STUDENT RECOGNIZED WITH PUBLIC HEALTH AWARD

When Shianne Combden began a master's in public health (MPH) degree in the fall of 2019, she had no idea she would get a front-row seat to the professional and educational opportunity of a lifetime.

Originally from Fogo Island, Ms. Combden's career in health care began with a bachelor of nursing degree from Memorial.

She was working in Eastern Health's Communicable Disease Control department when she started her part-time graduate studies at Memorial. However, her second semester was interrupted by a massive winter storm which shut down the city, including the university, in February 2020, followed closely by the global lockdowns caused by the COVID-19 pandemic.

As the pandemic began to impact every aspect of public life, she jumped at the opportunity to join the Public Health Agency of Canada. During this time, she also had the opportunity to work alongside Dr. Janice Fitzgerald and the public health leadership team.

The experience eventually led to a new career opportunity with the Public Health Agency of Canada as a senior travel and public health officer for the Health Security and Regional Operations' northern region. In fall 2023 she received the Dr. Heather Onyett Convocation Award for the Master of Public Health. Recipients are nominated by the program's co-ordinators based on academic excellence.



<https://bit.ly/47yxvQ7>

EDUCATION UPDATE



A MESSAGE FROM THE VICE DEAN, EDUCATION AND ACADEMIC AFFAIRS

This year has been an extremely busy one! It's remarkable to see the progress we've made in advancing education and academic excellence across all programs within the Faculty of Medicine.

In addition to the usual running of undergraduate, postgraduate and graduate programs, our teams have been tasked with expansion, curriculum reviews, policy updates, preparing for accreditation, responding to changing requirements for international students, supporting the development of a regional campus, assessing internationally trained physicians, developing briefing notes for medical education expansion priorities and ensuring faculty development and continuing professional development of our teachers, among many other things.

Our teams have demonstrated passion, resilience, innovation and a commitment to continuous improvement. Working together, our efforts highlight the strength of our community and our dedication to excellence in medical education, research and scholarship.

Thank you to our faculty, staff and learners for your ongoing contributions to these successes. I'd also like to thank those who support our learners and their medical education. I am extremely proud of our collective work and look forward to the year ahead.

Dr. Danielle O'Keefe

Vice-Dean, Education and Academic Affairs

UNDERGRADUATE MEDICAL EDUCATION (UGME)

The Undergraduate Medical Studies (UGMS) committee oversees the policy and curriculum for the MD program. Approximately every five years, the UGMS prescribes a curriculum review under the direction of the Program Evaluation Subcommittee (PESC). In the 2023-24 academic year, the PESC initiated a full curriculum review with a focus on Phase 4, the final two years of clinical learning in the MD program. The curriculum review committee targeted the domains of academics, assessment, administration and evaluation. The findings of the review were summarized in a report to UGMS and included 28 recommendations. They varied from logistical considerations, which could be implemented relatively easily, to the reconsideration of the curriculum structure and organization, which would require extensive consultation and university calendar changes.



Class of 2028 White Coat Ceremony

The UGMS quickly established a Core Experience Template Working Group to initiate a revision of the template for the Core Experiences course, with careful consideration given to other course-specific recommendations. The revised Core Experiences course template has been supported by UGMS and will be reviewed by the Committee on the Accreditation of Canadian Medical Schools (CACMS) in the 2024-25 academic year for implementation with the Class of 2027 in the 2025-26 academic year. The Curriculum Oversight Subcommittee (COS) was tasked with engaging existing undergraduate content leads (UCLs) to assign content expertise oversight across all four phases of curriculum delivery. The COS has also initiated the process of incorporating all Phase 4 academic content into the curriculum map.

The Curriculum Review Implementation Working Group will be responsible for considering and operationalizing the remaining recommendations throughout the upcoming academic years.

POSTGRADUATE MEDICAL EDUCATION (PGME)

The PGME team includes staff, program directors and administrators whose dedication and resiliency continues to be a highlight and strength when supporting our postgraduate resident learners. These learners not only provide frontline health care but also collaborate to divide tasks in a way that matches their skills and experience.

PGME has been working tirelessly to submit the required documentation for our institutional accreditation and for each training program. The external review team are scheduled to review Memorial's postgraduate enterprise from Nov. 24-29th, 2024.

In anticipation of this visit, which occurs every eight years, and to meet our continuous quality improvement goals, we have undertaken the following:

- Overhauled and updated our entire suite of policies. This extensive process was led by the postgraduate policy oversight subcommittee.
- Continued to have the interim faculty lead of accreditation and the associate dean visit and support all post graduate programs in the year leading up to the review.
- Developed *The Compendium*, an IT-enabled continuous quality improvement (CQI) resource, and made it available to all programs and clinical disciplines. This tool provides both a high-level overview and

detailed insights into the CQI activities of the PGME office. It supports transparency and knowledge-sharing in the internal review process and utilizes the Smartsheet platform to enhance efficiency.

- Reorganized faculty lead/directorship to enhance quality improvement efforts. The current roles are listed below. Several are awaiting a new search process.
 - Vacant, senior director, CQI
 - Dr. Mary Wells, faculty lead, accreditation (interim)
 - Dr. Kirsty Tompkins, faculty lead, CBME and policy oversight
 - Dr. Melanie Seal, senior educational director, assessment and education
 - Dr. Lisa Kenny, educational director, critical care
 - Dr. Kathryn Sparrow, educational director, quality assessment and improvement/patient safety education
- Formalized processes for site reviews and learning environment check-ins. Data sources, such as the annual exit survey for learners completing their training, continue to undergo regular reviews and updates for QI.
- Filled 88 postgraduate positions (one withdrew) with Memorial (52 per cent), Canadian (24 per cent) and international (24 per cent) medical graduates.
- Filled 13 sub-specialty positions in various programs.
- Spearheaded the introduction of an international medical graduate stream for 2025 with the Internal Medicine training program. This government sponsored initiative guarantees two dedicated three-year core internal medicine seats at the Faculty of Medicine with a five-year return of service commitment to the province. This is in addition to the two expansion seats allocated to the program for the Canadian medical graduate pool.

OFFICE OF RESEARCH AND GRADUATE STUDIES (RGS)

Celebrating awards and honours

Every year the RGS office hosts a graduate student awards luncheon to honour graduate students who have received competitive awards and scholarships. In June 2023, over 130 awards were celebrated at a financial value of nearly \$595,000.

Convocation Awardees

The Governor General's Gold Medal and the University Medal for Excellence (Graduated fall 2022, convocation award nomination in spring 2023) – Dr. Stephanie Blandford
Dr. Sharon Buehler Convocation award – Dr. Alicia Blackmore
Dr. Heather Onyett Convocation Award – Shianne Combden

Symposia Featuring Graduate Student Research

International Conference on Academic Medicine (ICAM), April 2023 – The inaugural ICAM meeting took place in Quebec City. Doctoral student attendees representing the Faculty of Medicine included Eric Mensah (supervised by Dr. Reza Tabrizchi) and Mona Frey (supervised by Dr. Diana de Carvalho).



Dr. Ann Dorward, Associate Dean, Eric Mensah and Mona Frey at ICAM

RESEARCH AND FUNDING



A MESSAGE FROM THE VICE DEAN, RESEARCH AND GRADUATE STUDIES

Research is the cornerstone of medical progress, driving innovations that improve health care and save lives. At the Faculty of Medicine, we are dedicated to advancing scientific knowledge and making a meaningful impact locally and globally.

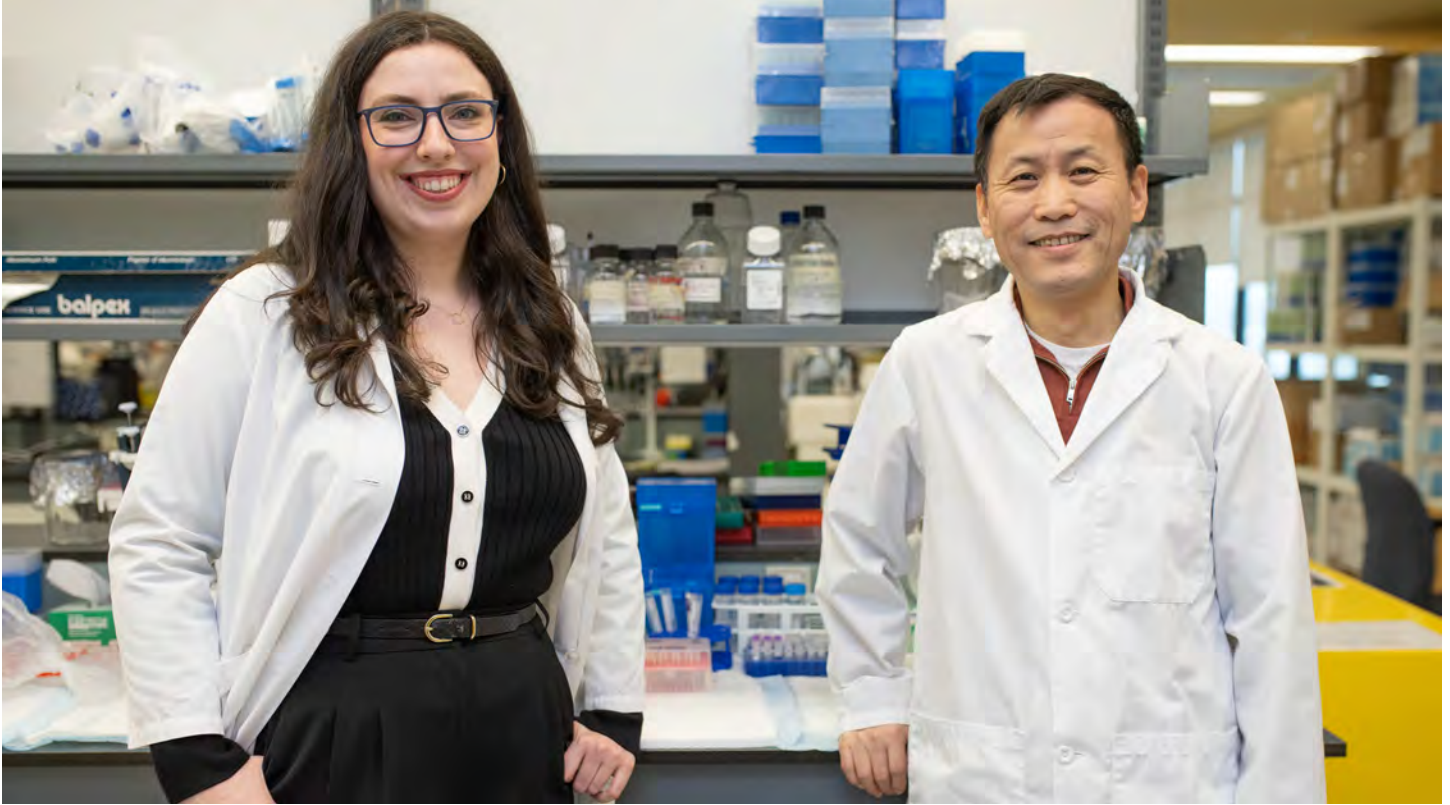
Over the past year, our faculty secured \$17.4 million in annual external research support, enabling groundbreaking discoveries and providing essential training opportunities for students and postdoctoral fellows. This funding empowers our researchers to address critical health challenges, from developing innovative therapies to exploring disease mechanisms and advancing personalized medicine.

As we reflect on this year, we remain committed to fostering a thriving research environment where innovation flourishes and knowledge advances for the benefit of all.

Thank you for your continued support of research at the Faculty of Medicine.

Dr. Rodney Russell

Vice Dean, Research and Graduate Studies



From left, Dr. Christie Costello and Dr. Guangju Zhai

MEDICINE SCIENTISTS INCLUDED IN TOP 10 ARTHRITIS RESEARCH ADVANCES

Researchers in the Faculty of Medicine want to ease the burden for those living with the most disabling joint disorder in the world.

Osteoarthritis affects 500 million people worldwide. Newfoundland and Labrador has the highest prevalence in Canada, with more than 31 per cent of people affected.

Dr. Guangju Zhai, university research professor, human genetics and genomics, Division of Biomedical Sciences, and Dr. Christie Costello, B.Sc.(Hons.)'17, PhD'23, are part of a team being recognized by the Arthritis Society of Canada for their innovative studies aimed at learning more about the disease. They are listed on the society's Top 10 list of research advancements for 2023.

Their research focuses on identifying factors associated with the poor outcomes of total joint replacement surgery, one of the most performed surgeries in orthopedics. In particular, they look at knee osteoarthritis. They found that the detection of traces of a biochemical process called phosphatidylcholine metabolism in the blood is associated with lingering pain even after joint replacement surgery. In the future, a blood test may predict who is likely to still have treatment-resistant pain after joint replacement and be used to create patient care plans.

They hope their research can contribute to our better understanding of the causes of osteoarthritis and develop targeted care for patients who are affected by this disease.

This is the second time research from Dr. Zhai's team has made the Arthritis Society's Top 10 listing.

<https://bit.ly/3UxGrSC>



FEDERAL FUNDING INVESTMENT FOR MEMORIAL UNIVERSITY RESEARCH AND DISCOVERY

The Government of Canada announced funding on March 13, 2024, to support leading-edge researchers and future leaders, allowing them to collaborate and develop new ideas.

Researchers based in the faculties of Humanities and Social Sciences, Engineering and Applied Science, Medicine and Science, the schools of Music, Science and the Environment, Pharmacy and Graduate Studies, and the Marine Institute were among those sharing the funding for projects that are underway.

In the Faculty of Medicine, two researchers received Insight Development Grants from the Social Sciences and Humanities Research Council.



Dr. Desai Shan, Division of Population Health and Applied Health Sciences, received \$69,512 for her project Safety on Board British Columbia Tugboats: Improving Safety for Seafarers and Their Families.

In the Division of Population Health and Applied Health Sciences, Dr. Atanu Sarkar received \$75,000 for his project, Exploring current consumption and sustainability of waste management: a pilot study.



<https://bit.ly/4cO5PKs>



TUMOUR 'FINGERPRINTS' JUST ONE PART OF PROMISING CANCER RESEARCH

The leading-edge work of a Memorial researcher is providing new insight into a devastating disease.

Dr. Thomas Belbin, GlaxoSmithKline Chair in Oncology Research, Discipline of Oncology, Faculty of Medicine, is also an associate member of the Beatrice Hunter Cancer Research Institute.

He specializes in the genomes of head and neck cancer cells, which occur in tumours found in various parts of the nose, mouth or throat. Last year, 7,500 Canadians were diagnosed with some form of this cancer.

Part of his research focuses on the genes and genetic changes that enable cancer to form, grow and spread.

Dr. Belbin and his team examine several genes that code for KRAB-ZNF proteins, a known cancer suppressor protein. They have several ongoing projects to turn these genes back on and observe how their re-expression affects a tumour cell's behaviour.

The group is also gathering insight into what makes these tumours tick. Tumours have unique molecular profiles like individual fingerprints.

These profiles can give a window into sub-types of the disease that were previously unknown. When combined with sophisticated machine learning with computers, this information can be used to make predictions about a patient's outcome, their response to radiation treatment or a particular chemotherapy.

<https://bit.ly/3LNk4E1>



MEMORIAL RESEARCHERS RECEIVE FEDERAL FUNDING TO EXPLORE DIVERSE IDEAS

Memorial's research is expanding and accelerating in a big way thanks to a significant investment from the Government of Canada.

On Aug. 29, 2023, funding was announced for state-of-the-art research infrastructure and leading-edge studies focused on global issues.

In the Faculty of Medicine, Dr. Guangju Zhai, Division of BioMedical Sciences, is co-PI on a project that received funding from the Canadian Foundation for Innovation John R. Evans Leadership Fund.

Dr. Shyamchand Mayengbam, project leader, Department of Biochemistry, Faculty of Science, along with Dr. Kapil Tahlan, Department of Biology, Faculty of Science, and Dr. Zhai, received \$459,701 for a multidisciplinary systems metabolomics research laboratory.

Three Medicine researchers shared \$555,000 in Discovery Grants from the Natural Sciences and Engineering Research Council (NSERC).

Dr. Janna Andronowski, Division of BioMedical Sciences, received \$165,000 for a multiscale model of bone remodeling to investigate interskeletal variability in biomechanical dynamics through the synergistic study of 3D cortical bone microarchitecture and cellular organization.

Dr. Matthew Parsons, Division of BioMedical Sciences, received \$225,000 for the heterogeneity and plasticity of tripartite synaptic nanostructure.

Dr. Deepak Kaushik, Division of BioMedical Sciences, received \$165,000 for identification of metabolic mediators of microglial function during development.

Two of those researchers also received Discovery Launch Supplements from NSERC.

Both Dr. Andronowski and Dr. Kaushik received an additional \$12,500 each for their projects.



<https://bit.ly/40FoSkZ>

SOCIAL ACCOUNTABILITY



BLACK EXCELLENCE: CELEBRATION OF OUR TRAILBLAZERS MUST INCLUDE OPPORTUNITIES TO CULTIVATE FUTURE ONES

(Abridged op-ed by Dr. Richard Elcock)

Examples of Black excellence within our Canadian borders are abundant, illustrious, and longstanding. However, they also remain largely unknown.

The significant contributions of Black Canadians to all facets of Canadian life are numerous, yet are far too often overlooked in the public sphere and our history books.

Highlighting examples of Black excellence is not just Black history, but an essential thread in the tapestry of our collective Canadian story.

Such history serves to accurately depict Canada's history in its totality and the realities of those who have called this land home.

The term "Black excellence" has become increasingly prevalent for the better part of a decade, if not longer. More recently, ongoing discussion of Black excellence has been paired with an emphasis on Black mental health and wellness as well as Black joy; these elements serve as the fertile ground for such excellence to sprout and flourish.

Its definition tends to encompass Black persons who excel in any number of fields, including academia, STEM, the arts and athletics, just to name a few.

As we celebrate the accomplishments of incredible Canadians, I find myself wondering, what comes next? The future we strive to build around said excellence must be rooted in both education and mentorship. A keen awareness of the contributions of those who have gone before us and set the bar high encourages future generations to go that much further.

The preservation and further development of equity, diversity, inclusion and anti-racism initiatives within our academic institutions is also essential; education around such issues does not happen passively and equipping future leaders, across sectors, is imperative to effect lasting change and foster opportunities for growth. The same must be concurrent with our collective call to both identify and dismantle existing systemic inequities.

<https://bit.ly/432tEK3>



Highlighting the experiences and accomplishments of all Black persons, namely those of Black women, Afro-Indigenous persons, and Black 2SLGBTQIA+ individuals, is also pivotal in the pursuit of building future excellence.

As we conclude yet another African History and Liberation Month, may our pride and celebration of the excellence of those who have blazed trails — and those who continue to do so — be accompanied by bolstered intentionality around how each of us seek out opportunities to cultivate future examples of the same.



Beverly Edwards, Global Health and Health Equity Co-ordinator, Faculty of Medicine

FACULTY OF MEDICINE CELEBRATES INTERNATIONAL DEVELOPMENT WEEK

The Faculty of Medicine recognized International Development Week with a series of enlightening and impactful activities.

Led by Global Affairs Canada, the week, which took place Feb. 4-10, highlights Canadian contributions to eradicating global poverty and inequality.

SUSTAINABLE DEVELOPMENT GOALS



The focus for 2023 was on the United Nations Sustainable Development Goals (SDGs), a set of 17 global goals the United Nations established in 2015. They address a wide range of global challenges and promote sustainable economic, social and environmental development to create a more equitable, inclusive and environmentally sustainable world by the year 2030.

The Faculty of Medicine held a number of activities around the over-arching theme, Go for the Goals. The Global Health and Health Equity Program organized a showcase highlighting academic endeavours that directly or indirectly address the goals and an open roundtable discussion and reflection on pathways to achieving some of the sustainable development goals and targets for Newfoundland and Labrador. A series of videos, available on our YouTube channel, highlight how the Faculty of Medicine's work forms part of Canada's and this province's progress towards the goals and reflection boards prompted individuals to think about and share notes on what sustainable development means to them.



<https://bit.ly/47Yv896>

ALUMNI PRIDE/DONOR RELATIONS

FACULTY OF MEDICINE CELEBRATES 50TH ANNIVERSARY OF FIRST MD GRADUATES

Memorial University awarded its first doctor of medicine degrees in 1973.

In October, 16 members of that original class of 24, many of whom are still actively practising physicians, gathered together to celebrate their class's 50th anniversary and to give back to their alma mater.

During the Reunion 2023 celebrations, which included alumni from classes throughout the decades, the Class of '73 announced the creation of a 50th-anniversary commemorative bursary in recognition of the milestone.

Established through generous donations from graduates of the class, their friends and family members, the bursary will be awarded to a first-year learner who is entering the Doctor of Medicine program.

Originally, the class had set a target of \$50,000 to endow the bursary, an ambitious amount considering their small class size. But prior to the event they were advised they had raised \$63,000 in cash and pledges.

The generosity of Memorial University donors creates incredible opportunities for student success and 100 per cent of every donation goes to the chosen award or intended area of support.

For more information about giving to Memorial University's Faculty of Medicine, please contact Rebecca Hefferton at 709 864 2163 or Rebecca.Hefferton@mun.ca.

MEMORIAL UNIVERSITY OF NEWFOUNDLAND FACULTY OF MEDICINE SECOND YEAR MEDICAL CLASS 1970



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St. John's, Nfld.



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New York, N.Y.



T. Delaney
Stevensville, Nfld.



D. Eddy
Stevensville, Nfld.



A. Frost
St. John's, Nfld.



A. Giovanni
St. Lawrence, Nfld.



J. Hardy
Carbonar, Nfld.



P. Hart, B.Sc.
Toronto, Ontario



N. Hilliard
Corner Brook, Nfld.



R. Hutchison, B.Sc.
Montreal, Quebec



B. Koerpel, Ph.D.
Madison, Wis.



R. Mead, B.S., M.A.
Ph.D.
South Dakota



D. Moores, B.Sc.
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A. Paul, B.Sc.
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R. Penney, B.Sc.
Carbonar, Nfld.



A. Pike, B.Sc.
St. John's, Nfld.



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S. Shore, B.Sc.
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Toronto, Ontario

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SOME MEMBERS OF THE CLASS OF 1973. THEN AND NOW.



MEDICINE

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