

# ANNUAL REPORT

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## DEAN'S MESSAGE

Our 2019/2020 annual report highlights many achievements and advancements accomplished by Memorial University's Faculty of Medicine.

I'm very proud of the success of our strategic plan, Destination Excellence, now in its third year of implementation. This success speaks to the importance of meeting the needs of the people and communities we serve as our project teams continue to work hard to help us reach our goals.

In this report, you will also read about how we are providing state-of-the-art tools for education, such as the Anatomage 6.0 virtual dissection table. We are one of the few medical schools in the country to have this amazing tool for our learners and our faculty. You'll also learn about the success of the implementation of competency based medical education across our postgraduate programs.

There are some great examples of the Faculty of Medicine's diverse research initiatives. A lot of important research answering questions that matter to the people in our communities is happening here at Memorial University. Our research projects are receiving national recognition and funding, like SurgeCon, an emergency department management platform that is improving emergency department efficiencies and the patient experience.

Enabling our learners, faculty and staff to succeed is an important part of our success as a faculty. In 2018, we had an independent unit assessment completed. The unit assessment working group has been replaced by a Culture of Excellence Project Team under Destination Excellence, continuing the efforts to foster an enhanced and renewed culture of professionalism within the Faculty of Medicine. The new project team will ensure the sustainability and long term success of the implementation of the unit assessment recommendations.

In addition to our faculty, staff and learners, we have many alumni across the globe who are among our rising stars. This year's Memorial University Tribute Awards saw two of our alumni receive prestigious recognition.

On behalf of the Faculty of Medicine, I extend my thanks to all those who support and are connected to Memorial's Faculty of Medicine in so many different ways. As we continue to advance health through medical education, research and social accountability, I appreciate having you on this journey with us.

*Margaret Steele*

Dr. Margaret Steele  
Dean, Faculty of Medicine  
Professor, Discipline of Psychiatry  
Memorial University of Newfoundland

## IN THIS ISSUE

DEAN'S MESSAGE • ADMINISTRATIVE OVERVIEW • OUR SHINING STARS

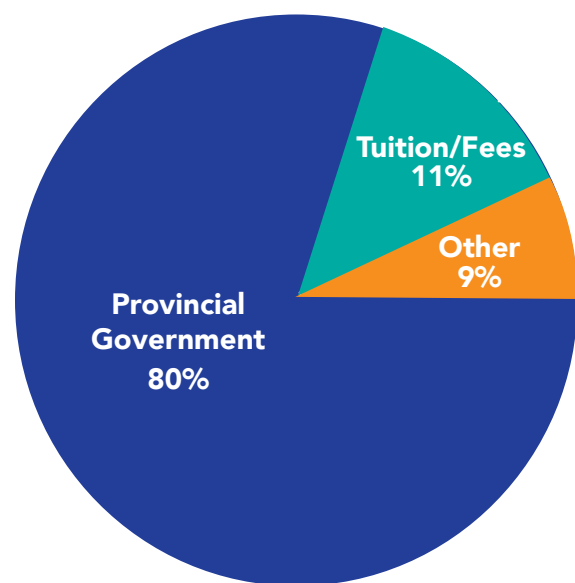
EDUCATION • RESEARCH • SOCIAL ACCOUNTABILITY • DONOR PRIDE

FUNDING, AWARDS AND SCHOLARSHIPS • NOTEWORTHY

Cover: The Anatomage 6.0 is a new teaching and learning tool housed in the Multidisciplinary Laboratories ([story on page 14](#)). Photo by Rich Blenkinsopp.

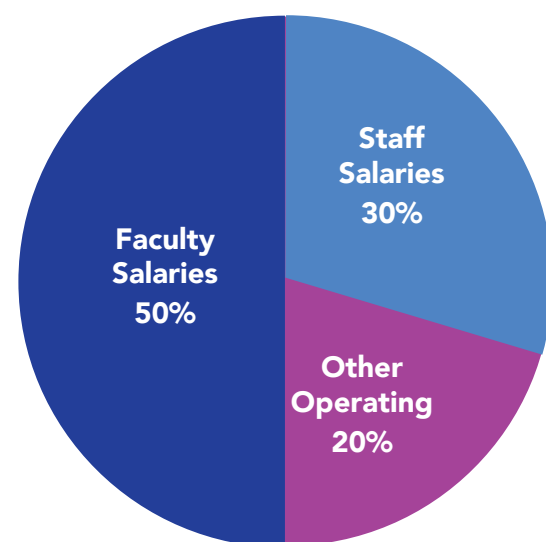
# ADMINISTRATIVE OVERVIEW

In 2019/20, the Faculty of Medicine received more than \$17 million in external research awards and \$72 million in operating revenues, a \$4.9 million stabilization payment from the Department of Health & Community Services to eliminate the annual operating deficit. As at March 31, 2020, the Faculty had an accumulated operating surplus of \$193,808.



### Other revenue is comprised of:

- External Recoveries
- Other Learner Related Revenue
- Indirect Cost of Research Funding



### Other operating expenses is comprised of:

- Externally Contracted Services/MOUs
- Utilities
- Library Collection
- Operating Leases
- Materials and Supplies
- Building & Capital Infrastructure
- Professional Fees
- Travel / Hosting
- Internal Transfers
- Other Expenses

Office	Full-time Faculty	Part-time Faculty	Staff
Admissions	0	0	4
Building Operations	0	0	1
CLSC	0	0	10
Dean's Office	1	0	11
Discipline of Anesthesia	13	63	2
Discipline of Emergency Medicine	7	59	2
Discipline of Family Medicine	31	397	26
Discipline of Genetics	7	11	1
Discipline of Laboratory Medicine	11	42	2
Discipline of Medicine	51	191	7
Discipline of Obstetrics/Gynecology	16	44	2
Discipline of Oncology	8	24	2
Discipline of Pediatrics	23	75	4
Discipline of Psychiatry	22	81	2
Discipline of Radiology	7	54	4
Discipline of Surgery	13	26	4
Division of BioMedical Sciences	26	10	7
Division of Community Health & Humanities	27	34	12
Finance	0	0	10
Health Sciences Library	6	0	10
Human Resources	0	0	4
Health Research Ethics Authority	0	0	4
Health Sciences Information and Media Services	0	0	31
Medical Laboratories	0	0	11
Development Office	0	0	3
NL Centre for Applied Health Research	0	0	6
Office of Professional & Educational Development	1	0	15
Postgraduate Medical Education	0	0	4
Research and Graduate Studies	0	0	6
Rural Medical Education Network	0	3	6
SafetyNet	0	0	2
Student Affairs	0	0	4
Undergraduate Medical Education	0	0	8
<b>Total</b>	<b>270</b>	<b>1114</b>	<b>227</b>

**STUDENT NUMBERS:**

**Doctor of Medicine learners:**

Class of 2020	83
Class of 2021	81
Class of 2021	80
Class of 2022	80
<b>Total</b>	<b>324</b>



**Graduate learners enrolled for 2019-2020:**

Graduate Program	Diploma	Masters	Doctoral
BioMedical Sciences	0	35	30
Clinical Epidemiology	19	54	18
Community Health & Humanities	4	65	26
Human Genetics	0	10	4
<b>TOTAL</b>	<b>23</b>	<b>164</b>	<b>78</b>

**Postgraduate Medical Education learners as of July 1, 2019:**

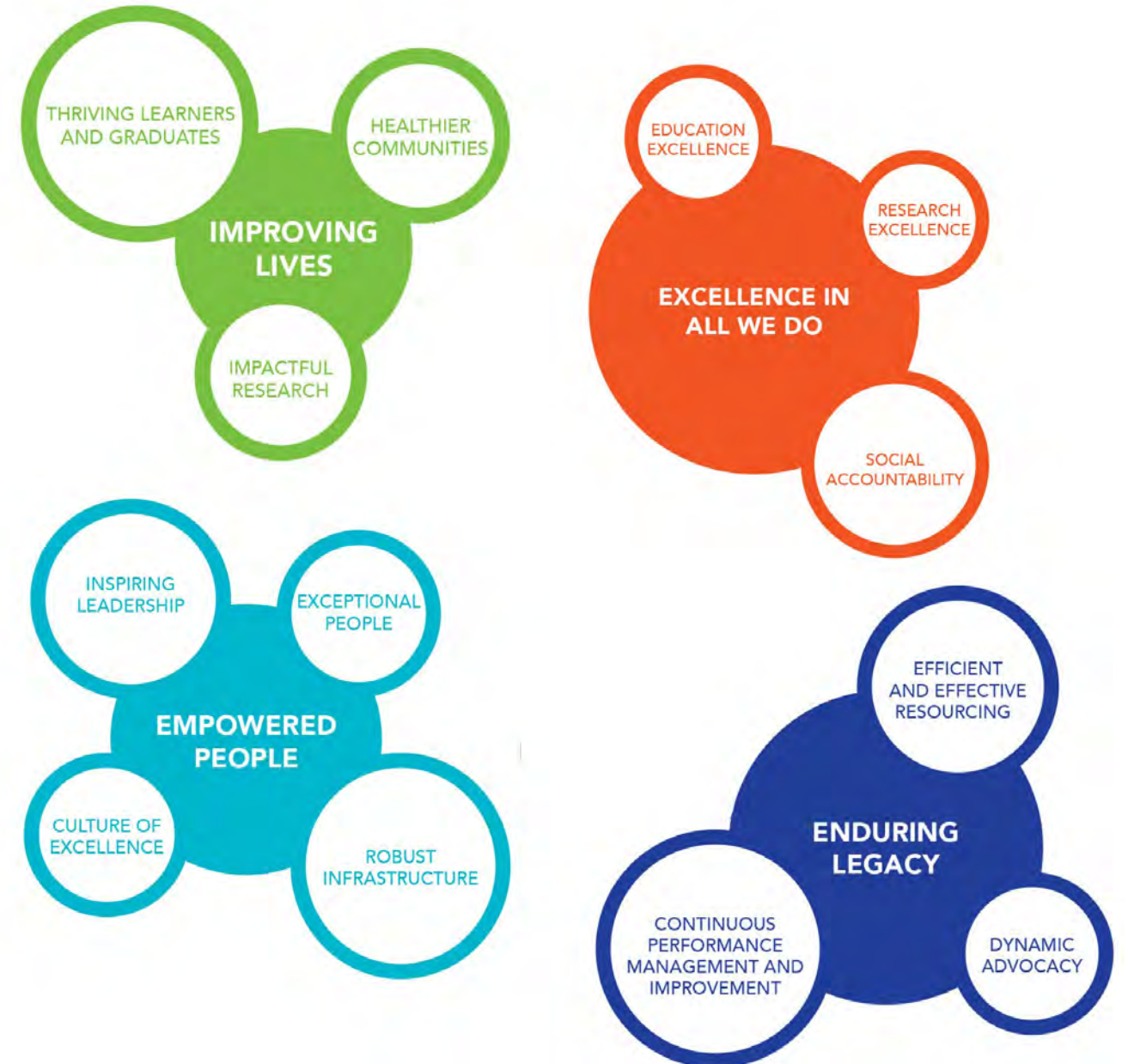
Anatomical Pathology	9
Anesthesia	21
Care of the Elderly	0
Care of Under Served Populations	1
Child and Adolescent Psychiatry	2
Diagnostic Radiology	15
Emergency Medicine	6
Family Medicine	70
General Internal Medicine	4
General Surgery	20
Internal Medicine	40
Medical Oncology	2
Nephrology	1
Neurology	10
Obstetrics and Gynecology	20
Orthopedic Surgery	13
Pediatrics	19
Psychiatry	23
<b>Total Residents</b>	<b>276</b>

**MOVING FORWARD TOWARDS DESTINATION EXCELLENCE**

As the Faculty of Medicine marks the second year of implementation for our strategic plan, *Destination Excellence 2018-2023*, we would like to highlight for you the many initiatives that have taken place to support the plan.

Faculty, staff and learners have shown their commitment to integrating education, research and social accountability to accelerate the Faculty of Medicine’s collective impact on the communities we serve.

In 2018, project teams were established to focus on implementing key areas of the strategic plan and work to achieve the principles of the four strategic pillars from our strategy map. On November 30, 2018 and November 29, 2019 we held update and planning days to keep stakeholders informed about the progress of the implementation and to solicit input to guide future actions of the *Destination Excellence* project teams.



## IMPROVING LIVES

A review regarding the consolidation of activities of the Rural Medical Education Network (RMEN) and some aspects of the Discipline of Family Medicine's streams activities was completed in May 2019 with 11 recommendations to create one **DISTRIBUTED MEDICAL EDUCATION OFFICE**. The consolidation will provide better support to learners and faculty, helping them achieve academic success and further support under served, rural and remote locations.

## EXCELLENCE IN ALL WE DO

In an effort to unify our team around a focus on excellence and achievement of our shared vision, mission and values, in December 2019, tips were shared on **HOW TO INCORPORATE THE STRATEGIC PLAN INTO MEETINGS** to raise awareness and further engage stakeholders. We have embedded the language of the plan in everything we do - from email signatures to the strategy maps on the walls to meeting management and communications.

In August 2018, Undergraduate Medical Education launched a **LONGITUDINAL INTEGRATED CLERKSHIP**, implemented in Moncton, New Brunswick. Learners gained exposure to all core disciplines via a year-long hospital/community placement, providing them with active, engaged, empowering and authentic community-based experiences.

Postgraduate Medical Education implemented **COMPETENCY BASED MEDICAL EDUCATION**, specifically Competence by Design for specialty-based training. This change to dynamic and innovative programming, moves the focus from training based on a set number of years to focusing on the acquisition of specific skills, knowledge and attitudes relevant to the specialty.

In March 2020, the Faculty of Medicine participated in the **POST-SECONDARY EDUCATION REVIEW** of Memorial University citing *Destination Excellence* outcomes in three key areas (thriving learners and graduates, impactful research and healthier communities) contributing towards making Memorial University a distinguished public university and fulfilling its special obligations to our provincial communities through excellence in education, research and public engagement.

The new Distributed Medical Education Office will see administrative support in more geographic regions, dedicated to **ENHANCING ENGAGING AND AUTHENTIC COMMUNITY BASED ROTATIONS** for both undergraduate and postgraduate learners.

A **UNDERGRADUATE CURRICULUM REVIEW** was conducted to ensure we are delivering high quality, dynamic and innovative academic programming, resulting in enhanced governance and improved communication.

Dean Margaret Steele formed a **COVID-19 TASK FORCE**, chaired by Vice Dean Cathy Vardy, to discuss issues related to educational programs, research programs, national medical school discussions, as well as other university and provincial issues.

### SOCIAL ACCOUNTABILITY PROJECT TEAM:

- Developed a definition of social accountability in the context of the Faculty of Medicine.
- Developed a governance structure for a new Office of Social Accountability.
- Increased awareness of community engagement initiatives and socially accountable actions through the presentation of stories from units.

### RESEARCH PROJECT TEAM:

- Developed an 'innovation wheel,' demonstrating how our researchers are answering the questions that are important to the people and communities we serve.
- Identified areas of focused strength where we can lead and maximize return on investment, gathering our most common themes in peer reviewed publications over the last five years.
- Ensured an integrated and coordinated research curricula is embedded across all programs by effectively disseminating research outcomes and forming a working group to conduct a systems analysis with work on overcoming barriers to research.

## EMPOWERED PEOPLE

The **ESSENCE OF LEADERSHIP WORKSHOP** was held in June 2019 for managers to strengthen emotional intelligence and leadership skills, while raising awareness about how to lead and inspire change.

**DEVELOPING A SERVICE MODEL WORKSHOP** was held for staff in several units to discuss how we perform our work and make a difference for internal customers.

A new **OFFICE OF LEARNER WELL-BEING AND SUCCESS** (the re-constituted Office of Student Affairs) seeks to empower undergraduate and postgraduate medical learners so they achieve and maintain well-being and academic success throughout their educational journey.

A **NEW ASSISTANT DEAN OF FACULTY WELLNESS, EQUITY AND PROFESSIONALISM** has been established and the inaugural dean has been hired.

As part of our commitment to continuous performance management and improvement, a **MEETINGS THAT WORK WORKSHOP** was offered through the Office of Professional and Educational Development to improve efficiencies for meetings and within the faculty.

Empowering researchers with appropriate resources and support, the Development Office has focused on increasing **SUPPORT FOR RESEARCH**.

A **WELL-BEING TASK FORCE** was created as a subcommittee of the COVID-19 Task Force with a connection to the Wellness Project Team and a mandate to provide timely well-being resources to learners, faculty and staff during the pandemic.

### WELLNESS PROJECT TEAM:

- Developed a definition of wellness suitable to our Faculty of Medicine context.
- Compiled an inventory of wellness resources available to learners, faculty and staff.
- Conducted an anonymous wellness survey to inform initiatives and programs to advance health and wellness and to help create a culture of wellness.

### CULTURE OF EXCELLENCE PROJECT TEAM:

- A newly established project team that will continue the efforts of the Unit Assessment Working Group to foster an enhanced and renewed culture of professionalism, the team will support leadership and professional development opportunities and celebrate individual and team success.

### MENTORSHIP PROJECT TEAM:

- Created a platform for learners and faculty mentees to search and connect with potential faculty mentors based on their areas of interest and expertise through a new website at [www.med.mun.ca/Mentorship](http://www.med.mun.ca/Mentorship).

## ENDURING LEGACY

In the past two years, we have conducted **INTERNAL BUSINESS REVIEWS TO FIND EFFICIENCIES AND STREAMLINE ADMINISTRATIVE PROCESSES** such as:

- The merger of the Office of Professional Development and the Medical Education Scholarship Centre achieved operational efficiencies but more importantly provides faculty development, assessment and evaluation oversight and programming across the educational continuum. The new office is called the Office of Professional and Educational Development.
- Merger of Community Health and Humanities with Clinical Epidemiology.
- In October 2019, a review was conducted of the Chief Operating Officer governance/office structure in order to streamline our organization. As a result, we developed standardized meeting agendas and minutes templates to ensure the processes associated with the COO office structure are efficient and effective.

In collaboration with the dean, the Development Office has **ESTABLISHED A DEVELOPMENT COUNCIL** comprised of alumni, donors and friends to support the Faculty of Medicine by generating philanthropic support for activities identified in the faculty's strategic plan.

### BALANCE SCORE CARD PROJECT TEAM:

- In 2019/2020 all units were asked to align their budget submissions with the strategic plan and complete inventories of their achievements in the areas of education, research and social accountability.
- A balanced scorecard is under development specific to *Destination Excellence*.

## UNIT ASSESSMENT UPDATE

In November 2017, an independent Unit Assessment (<http://bit.ly/2Gv6XEx>) was conducted at the Faculty of Medicine after the dean was made aware of concerns around bullying, harassment and sexual harassment.

Upon release of the unit assessment final report in July 2018, Dean Margaret Steele established a Unit Assessment Working Group to review the 39 recommendations and to establish an implementation plan. The unit assessment working group evolved into the Culture of Excellence Project Team as part of *Destination Excellence* to establish an accountability framework and process to monitor and evaluate the action plans. The Faculty of Medicine is confident that the tremendous work currently underway will foster an enhanced and renewed culture of professionalism within the faculty.

We are making great progress on the implementation of the recommendations in the Unit Assessment report. We have worked quickly and efficiently to implement several recommendations and will continue to foster a working and learning environment that is free of bullying, intimidation, harassment and sexual harassment.

### PROGRESS TO DATE:

Senior leadership released a strong statement reaffirming their commitment to providing a respectful learning and work environment free from intimidation, bullying, harassment and sexual harassment for all learners, academic and clinical faculty members, as well as administrative and other staff members.

An accountability framework has been established to monitor implementation.

A Respectful Environment Working Group was established.

Development of a Respectful Learning Environment Policy and Procedure.

Form developed for addressing breaches of professionalism by undergraduate medical students.

Revised Privacy Policy into Confidentiality Policy.

The School of Graduate Studies convened a working group of graduate officers, graduate students and others to review policies and assess whether they are appropriate and adequate for the reporting and resolution of issues related to intimidation, bullying and harassment in the various learning and research environments of graduate students.

A Professionalism Working Group was established in June 2017 with a mandate to review professionalism practices and curriculum within all educational programs, to create a set of recommendations to enhance the culture of professionalism within the faculty and encourage the appropriate development of a professional identity in our learners. They developed a mistreatment survey.

In 2019, an anonymous online mistreatment survey on intimidation, bullying, harassment, sexual harassment and the perceived culture in the Faculty of Medicine was distributed to all faculty, staff and learners.

A Mistreatment Research Group has been established to analyze the results of the mistreatment survey.

A website focused on professionalism and mistreatment, which contains resources and contact information has been developed. <http://bit.ly/2SxmaOr>

All policy concerns raised in the unit assessment are being addressed by the Faculty of Medicine Policy Development Committee. They have been divided into short and long term recommendations with the goal that all policies need to reflect the same values of respect, fairness and freedom from mistreatment/harassment in the learning environment.

There is increased awareness of existing policies and procedures regarding intimidation, bullying, harassment and sexual harassment. In 2018, educational sessions were provided to all learners, faculty and staff regarding the Respectful Workplace/Learning Environment policies and procedures and the Sexual Harassment and Sexual Assault policy and procedures.

Information about policies and procedures is provided at all learner orientations and on a faculty onboarding checklist.

A planning committee was established to create training modules regarding intimidation, bullying, harassment and sexual harassment. Some online modules have been released and others will follow in 2021.

The Office of Student Affairs has been reconstituted and is the Office of Learner Well Being and Success and serves undergraduate and postgraduate medical learners.

A new position of Assistant Dean, Faculty Equity and Wellness was established to provide a leadership focus on understanding, supporting, improving and advancing equity, professionalism and health needs of faculty.

Co-chairs of the Community Health and Humanities Respectful Workplace Committee were invited to share their experience of the development, evolution and function of the committee.

The faculty is acknowledging the expertise of staff by including them on decision making committees and working groups.

### IN THIS ISSUE

# OUR SHINING STARS



## GRADUATE STUDENT NAMED YWCA WOMAN OF DISTINCTION

**Nabila Qureshi** started volunteering with refugee families three years ago and she has gone from making deliveries, to making friends. <http://bit.ly/2TV9GMn>

*"When you actually meet a family, that's when you realize there's more to them than just words that are printed in an article which may just highlight what that refugee is going through. When you meet them you realize they are individuals just like us; just like me and you and they just happen to be experiencing unfortunate events."*

## AWARD WINNING START-UP GOT ITS START IN MEDICINE

Three alum from the Faculty of Medicine, **Dr. Stephen Ryan (MD '18), Michael Bartellas (MD '19) and Travis Pickett (MD '20)**, won top prize of \$10,000 at Mel Woodward Cup on March 28, 2019 for their start-up company, PolyUnity Tech. It's the first time students from the Faculty of Medicine have won this prestigious prize.

The founders of PolyUnity Tech began their journey as co-founders of MUNMed 3D - Newfoundland and Labrador's, first biomedical 3D printing facility, created for students, physicians and researchers to explore the world of 3D printing and how it can be applied in health care. <http://bit.ly/2l647IF>



## MEDICAL MILESTONES: PHD GRADUATE LANDS DREAM GIG AT HARVARD UNIVERSITY

**Justin Pater** has some sage advice for those crossing the stage at convocation: patience and resilience will lead to great things. The emerging researcher practises what he preaches.

While completing his PhD in the Faculty of Medicine – under the supervision of alumna Dr. Terry-Lynn Young – Mr. Pater's persistence led to a medical breakthrough when he discovered the gene mutation linked to hearing loss in children in this province. <https://gazette.mun.ca/student-life/medical-milestones/>

## AWARD WORTHY

Dr. Gary Kachanoski recognized outstanding educators, researchers, staff members and community partners during the 2019 President's Awards ceremony on Dec. 12.

**Dr. Daryl Pullman** was named University Research Professor in acknowledgment of his highly influential body of transformative scholarship, the formation of a rigorous bioethics program at Memorial, and his role in establishing a Provincial Health Ethics Network that provides clinical ethics support across the province. Dr. Pullman, professor of bioethics, is considered one of Canada's top experts in research ethics.



For her service and commitment to the Division of Community Health and Humanities from 1987 to 2019 and to medical students over the years, **Ms. Janet Bartlett** received the President's Award for Exemplary Service. During her career, Ms. Bartlett held many roles; however, from 2004 up to her retirement in September 2019, she focused on being the program coordinator of community health for the undergraduate medical education program. <http://bit.ly/2PltcwL>

## INSPIRED BY COMPASSION

**Maggie O'Dea** admires how Dr. Elizabeth Bagshaw "led by example, stood with conviction and practised with compassion." Ms. O'Dea, a doctor of medicine student, was Memorial's 2019 Canadian Medical Hall of Fame recipient.



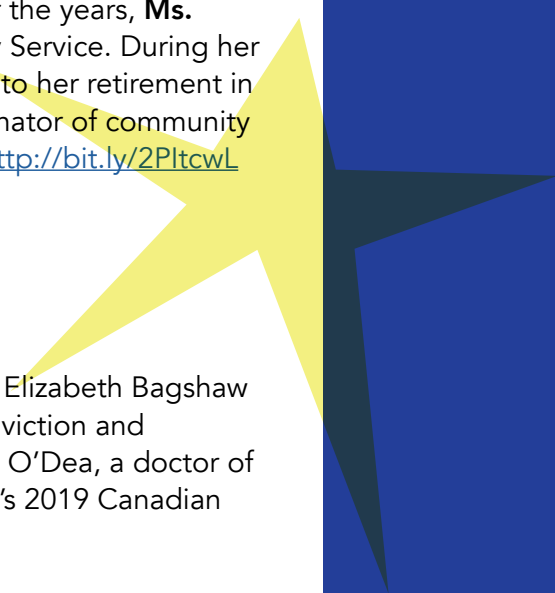
*"I kept reflecting on how fortunate I have been to have had such incredible colleagues and mentors who have challenged me and inspired me. In some ways, I think I am merely a reflection of all these different people in my life."*

<https://gazette.mun.ca/student-life/inspired-by-compassion/>

## MEDAL OF RESEARCH EXCELLENCE 2019

Known as a pillar in Canadian research, **Dr. Brendan Barrett** has contributed continuously to the Canadian kidney research landscape for over 25 years and has received the Medal of Research Excellence from the Kidney Foundation of Canada.

The award is presented to a Canadian resident who is recognized nationally and internationally for excellence in kidney research and is the Kidney Foundation of Canada's highest and most prestigious research award. <https://kidney.ca/Research/The-Impact-of-Research/Medal-for-Research-Excellence/Dr-William-Clark>





### DECADES OF DEDICATION TO FAMILY MEDICINE

Born to physician parents, Dr. Ean Parsons grew up hearing how satisfying it was to practise in rural, remote Newfoundland. "I had heard stories from family of the satisfaction of medical work in rural, remote Newfoundland. I wanted a challenge and to be able to be as independent, flexible and resourceful to my patients as possible."

Rotations with family medicine role models in Twillingate and Brookfield, Newfoundland confirmed his decision. Dr. Parsons' dedication to family medicine has earned him a Family Physician of the Year award from the College of Family Physicians of Canada (CFPC) for 2019. <http://bit.ly/2RALQYd>

### RENAISSANCE MAN: Q&A WITH TRIBUTE AWARD RECIPIENT DR. BOLUWAJI OGUNYEMI

For the 2019 recipient of the Horizon Award, the idea of becoming a doctor lived in his heart since his youth. Dr. Boluwaji Ogunyemi (Dip. in Clinical Epidemiology '09, MD '13) overloaded on math and science in high school, but recognized his own path to medicine would be a crossover of science and art – studying both medical science and sociology. And you can see it in the way he approaches his profession. <https://gazette.mun.ca/campus-and-community/renaissance-man/>



### CATALYST FOR GOOD: A Q&A WITH TRIBUTE AWARD RECIPIENT DR. PETER COLLINGWOOD

Here's a tricky interview assignment: try to get a humble, altruistic, all around good guy to tell you about all of his accomplishments.

Getting anything even remotely close to swagger out of Dr. Peter Collingwood (BMS '79, MD '81), recipient of the 2019 J.D. Eaton Award, which recognizes outstanding volunteer contributions to Memorial University, is impossible. In order to learn more about the good things he has done, persistence is necessary. And it's not because he hasn't done all that much. <https://gazette.mun.ca/campus-and-community/catalyst-for-good/>



### PASSION FOR TEACHING GARNERS AWARD

Dr. Sonia Sampson is breaking some records with an award for her excellence in education.

The associate professor from the Discipline of Anesthesia received the John Bradley Young Educator Award from The Canadian Anesthesiologist's Society (CAS). It recognizes excellence and effectiveness in education in anesthesia.

It's the first time since the award's inception in 2006 that women have received it, and the first time they've awarded two. Dr. Sampson said, receiving this award has been a dream of hers. "There have been fabulous educators that have taught me the depth and breadth of medicine that have received this award." <http://bit.ly/2JsBq9g>



### DEAN NAMED PROFESSOR EMERITUS

On May 17, 2019 Dean Margaret Steele received a prestigious recognition: Professor Emerita at The University of Western Ontario.

Dr. Steele was one of nine faculty members to receive Professor Emeritus status at the 2019 convocation ceremony. "I feel incredibly honoured to have received the recognition of Professor Emerita at The University of Western Ontario. It has been a privilege to have contributed to the education of learners, staff and faculty as well as research and academic administration and to have this work recognized by Western University," Dr. Steele said. <http://bit.ly/2WbdEGH>





## THE RIGHT TOOLS

In 2019/2020, the Faculty of Medicine made some great strides in medical education. Here are just two examples of how we are delivering high quality, dynamic and innovative academic programming, using the latest education technologies.



### VIRTUAL GETS REAL: 3D ANATOMY TOOL BRINGS BODIES TO 'LIFE' FOR MD STUDENTS

The Anatomage 6.0 is a new teaching and learning tool housed in the Multidisciplinary Laboratories. It is the world's first virtual dissection table and the only fully segmented, real human, 3D-anatomy system. Users can visualize anatomy exactly as they would on a fresh cadaver – and beyond. Read more about this one of a kind teaching tool: <http://bit.ly/2oh2G2q>.

### BEYOND THE IMAGE: NEW ULTRASOUND MACHINES FOR MEDICAL EDUCATION

The faculty purchased 12 new Point of Care Ultrasound machines. They are used as a teaching tool for medical students and residents to learn clinical skills, like how to put in IVs or central lines and how to image different parts of the body. It will also help expand the faculty's undergraduate curriculum, which in the past year, started using ultrasound technology to teach anatomy: <http://bit.ly/2JDlkKw>.

## UPDATE FROM NEW BRUNSWICK

In 2019 Dr. Todd Lambert, MD, FRCPC, assistant professor of pediatrics at Memorial and Dalhousie Universities, became the new assistant dean following Dr. Tom Laughlin's five year appointment.

Dr. Lambert continues to forge a strong partnership with Horizon Health Network and is leading the Memorial-NB team in the development of new training opportunities in two sites:

- Completion of first cohort of Longitudinal Integrated Clerkship learners at the Moncton site.
- The Miramichi site continues in its quest with the Family Medicine Residency Training Program to develop a rural training stream unique to New Brunswick.

Over the past year, New Brunswick faculty have delivered 800 weeks of clinical training to learners both at the undergraduate and postgraduate level.

"We continue to search for opportunities to enhance this current training with faculty development and innovative delivery of educational objectives. We also continue to support and encourage our tremendous administrators, faculty leads and preceptors of these existing programs," noted Dr. Lambert. "I am privileged to have the opportunity to work with this dedicated group and look forward to future developments and challenges that lie ahead in my new role."



## UNDERGRADUATE MEDICAL EDUCATION

Based on the Curriculum Review in 2019, Memorial's doctor of medicine (MD) program implemented a series of recommendations focused on enhancing governance and improving communication and curriculum delivery.

The report, which identified gaps and redundancies, informed the reorganization of the curricular content into themes which were largely focused around patient presentations, and integrating basic and clinical sciences with clinical learning. The curricular review also resulted in an increase in social accountability teaching, incorporation of learner wellness and establishment of a curriculum oversight working group. Over the last year, this group has formalized the process for proposing changes to course and session objectives which is overseen and approved by the Undergraduate Medical Studies (UGMS) Committee. The theme-based curriculum was introduced in August 2019 with the MD class of 2023.

This year, in collaboration with the Office of Professional and Educational Development (OPED), Undergraduate Medical Education (UGME) learners had the opportunity to complete a Leadership in Medicine Certificate program with eight modules to introduce learners to leadership and management skills, incorporate the latest research and educational practices, explore emerging leadership strategies, and apply these strategies to specific scenarios within the health care system. Upon completion of these modules, OPED offers undergraduate learners the opportunity to pursue a Leadership in Medicine Certificate through an additional online capstone learning module. In completing the module, learners apply and integrate topics covered in the eight MD program leadership modules with real health care scenarios and are introduced to new concepts relating to conflict resolution, continuing professional development and physician wellness.

In anticipation of the next accreditation cycle, the UGME leadership team is preparing for the Committee on the Accreditation of Canadian Medical Schools (CACMS) full accreditation site visit in 2022. The UGME Accreditation Oversight Committee hosted an accreditation kick-off workshop with representation from CACMS to help guide preparations and has begun collecting information to populate the CACMS Data Collection Instrument; formed an Accreditation Review Committee to complete the Medical School Self Study; and formed a group of learners to spearhead the Independent Student Analysis. The Accreditation Oversight Committee is also planning a mock accreditation site-visit, complete with external reviewers who can identify areas of weakness in advance of the full accreditation site visit.

In the final two years of the MD program, course goals are achieved through competency-based clinical learning using Entrustable Professional Activities (EPAs) as an assessment tool. This framework provides opportunities for coaching, intervention and competency demonstration during the Core Experiences course, and through selective experiences to ensure graduates are prepared for the next stage of training. Shifting from the discipline-specific examinations, this year has marked completion of the first progress testing cycle as a measure of competency based medical education in the Core Experiences course. The MD program introduced the National Board of Medical Examiners Comprehensive Clinical Examination as a formative baseline measure in 2018. The exam was offered formatively twice more at six months and nine months into the course. The progress testing cycle culminated with a summative Comprehensive Clinical Science exam in 2019. The MD program will see one more progress testing cycle prior to evaluating its efficacy for competency based medical education assessment.

## POSTGRADUATE MEDICAL EDUCATION

Postgraduate Medical Education (PGME) at Memorial University has faced a number of challenges this year, including a state of emergency and of course, the ongoing pandemic. The answer to all of the above lay in the strength and dedication of our people: Our staff, program directors and program administrators.

The challenges to health care delivery faced by our institutions during the state of emergency and then the pandemic were significant. PGME is fortunate to work with a remarkable group of up and coming family physicians and specialists/sub-specialists in-training in the body of the postgraduate learner. Aside from their role as front-line health care workers, our residents banded together to ensure appropriate distribution of work commensurate with level of expertise and support for one another in times of need, both for their current cohort and the incoming cohort that started their training on July 1. Their dedication to the service of our people in the province is noted and applauded.

PGME's support of the postgraduate community of the Faculty of Medicine entailed the creation of a State of Emergency Policy and planning measures, as well as the creation of a set of 'Redeployment' global principles. PGME continues to monitor and track, in real time, details regarding every learner's availability to be redeployed should the health system's needs exceed current levels. Residents are keen to return to some form of normalcy from an academic standpoint and are now able to engage in all types of rotations locally, provincially and nationally. Advocacy on a national level to meet Memorial's learners' needs continues in earnest.

PGME has also focused its attention on matters such as the launch of another cohort of Competence by Design programs (Psychiatry, General Surgery, Orthopedics and Neurology). To support our programs, PGME has also launched a search for a faculty lead in each of accreditation and program evaluation, allowing for the institutionalization of continuous quality improvement measures and to meet upcoming accreditation reviews.

A breakdown of our current programs and residents is outlined below:

Program	Years of Training	Number of Residents
Anatomical Pathology	5	9
Anesthesia	5	21
Care of the Elderly*	6 months	0
Care of Under Served Populations*	6 months to 1 year	1
Child & Adolescent Psychiatry	2	2
Diagnostic Radiology	5	15
Emergency Medicine	1	6
Family Medicine	2	70
General Internal Medicine	2	4
General Surgery	5	20
Geriatric Psychiatry - begins July 1, 2020	2	0
Internal Medicine	3 to 4	40
Medical Oncology	2	2
Nephrology	2	1
Neurology	5	10
Obstetrics/Gynecology	5	20
Orthopedic Surgery	5	13
Pediatrics	3 to 4	19
Psychiatry	5	23
<b>Total</b>		<b>276</b>



Providing care to our patients often involves commuting to rural and remote regions of our province. This photo was taken by one of our Family Medicine Residents, Laurence, while flying to the coastal Innu community of Natuashish!

## RESEARCH AND GRADUATE STUDIES

### 2019 GAIRDNER LECTURE

On Dec. 10, 2019, Research and Graduate Studies (RGS) hosted The Gairdner Foundation Lecture Series. This year's speaker was Dr. Lynne E. Maquat, a biochemist and molecular biologist whose research focuses on the cellular mechanisms of human disease. The title of her talk was *Nonsense-mediated mRNA decay and human disease: Genome guardian and executor*.

Dr. Maquat is an elected member of the American Academy of Arts and Sciences, of the National Academy of Sciences and of the National Academy of Medicine and is the J. Lowell Orbison Endowed Chair as well as professor of biochemistry & biophysics and of oncology at the University of Rochester Medical Center. She is also founding director of the Center for RNA Biology and founding chair of Graduate Women in Science at the University of Rochester.

Each year seven Canada Gairdner Awards are presented to honour the world's most significant biomedical and global health researchers. Dr. Maquat was awarded the 2015 Canada Gairdner International Award for the discovery of the mechanism that destroys mutant messenger RNAs in human cells, nonsense-mediated mRNA decay, which is critically important in both normal and disease states.

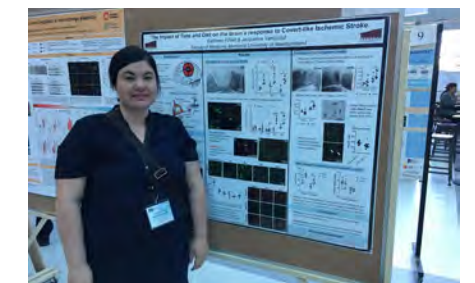
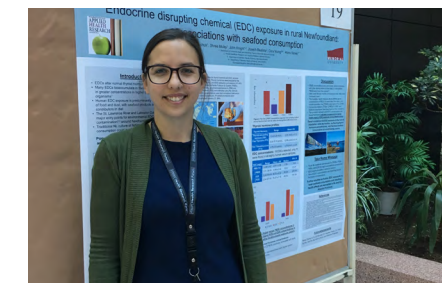
### WHERE OUR GRADUATE STUDENTS TRAVELLED IN 2019/2020



### CANADIAN STUDENT HEALTH RESEARCH FORUM

Three PhD candidates attended the 32nd annual Canadian Student Health Research Forum in June 2019, a national conference for PhD students in health medicine. The event is an opportunity for Canadian health research trainees in all fields at the doctoral level to present their work, to network and be recognized for their contributions. It features a judged research poster exhibition, awards of excellence, tours of unique research facilities and student-led social events as well as a cross-disciplinary symposium where some of the world's leading scientists in the field present their work. It's held annually in Winnipeg, Manitoba.

The learners who attended and presented their research were: Emily Doyle (Community Health & Humanities); Nicole Babichuk (Community Health & Humanities), who received an honorable mention; and Kathleen Fifield (BioMedical Sciences).





## OFFICE OF PROFESSIONAL AND EDUCATIONAL DEVELOPMENT

### CULTURALLY SAFE HEALTH CARE

Through a grant provided by the College of Physicians and Surgeons of Newfoundland and Labrador (CPSNL), the Office of Professional and Educational Development (OPED) is developing a training module for health care professionals on providing culturally safe health care to Indigenous populations in Newfoundland and Labrador (NL). The module is a response to the Truth and Reconciliation Commission's Call to Action that all provinces in Canada provide cultural competency training for all health care professionals (TRC Call to Action 23.3). The purpose of the module is to increase awareness and understanding of the historical trauma experienced by Indigenous Peoples in this province; to educate health care professionals about Indigenous cultures and healing; and to teach health care professionals how to provide culturally safe health care to Indigenous patients. OPED has engaged with the Faculty of Medicine's Aboriginal Health Initiative Advisory Board and established a Guiding Committee consisting of representatives from Indigenous communities.

### ECLINIC CARDS

Memorial University has been at the forefront of the shift to Competency-based Medical Education and the first medical school in Canada to introduce workplace-based assessment of Entrustable Professional Activities (EPAs) into an undergraduate medical education curriculum. This project will evaluate the integration of mobile technology and eClinic Cards to facilitate and document in-the-moment coaching and professional activity assessments of clerks. OPED led a collaboration with Health Sciences Information and Media Services and Dr. Norah Duggan, phase IV lead, to evaluate the adoption of an eClinic Card app for medical students and preceptors to complete workplace-based assessments of EPA achievement. The mobile system enhanced data collation to support programmatic assessment in the undergraduate medical education curriculum. This work has been presented at several national and international medical education meetings.

### QUALITY IN FAMILY PRACTICE PROGRAM

OPED has partnered with the Family Practice Renewal Program and Health Innovation Group to design and deliver MyQ Quality in Family Practice program (<https://myq.familypracticerenewalnl.ca>), a program to improve clinic processes, optimize patient care and increase physician engagement and satisfaction. This unique program is built to fit the needs of each family physician's clinic and patients, while offering opportunities to claim CPD credits, engage in reflective activities and/or test specific practice changes. OPED is providing the academic rigour, information technology infrastructure and web-based/virtual technology, making learning and implementation accessible to all practices.

### NL360+

A pilot program that combines the strengths of multisource feedback and peer coaching. Volunteer physicians have completed the Medical Council of Canada 360, a process through which they receive feedback from multiple sources related to their performance of the CanMEDs roles professional, communicator and collaborator. MD peer coaches are guiding participants through their results and development of a personal learning plan.

### PHYSICIAN ASSESSMENT, TRAINING AND OVERSIGHT (PATO)

In collaboration with CPSNL, the Government of Newfoundland and Labrador, the Newfoundland and Labrador Medical Association and the Regional Health Authorities, OPED is developing this new program to support physician assessment, continuous learning, and opportunities for feedback and retraining. PATO's first program pathway is Practice Ready Assessment – Newfoundland and Labrador (PRA-NL) (<https://www.med.mun.ca/opd/pato/>) which will assess eligible family physicians applying for a provisional license to practice in the province. The CPSNL has mandated that all family medicine applicants applying for a provisional license will require a PRA. The Faculty of Medicine will play an integral role in ensuring that family physicians applying to practice in the province are ready to practice and to advance the health of the people and communities we serve.

### TEACHING EFFECTIVENESS PROGRAM (TEP)

This mandatory program provides residents with an introduction to teaching and learning. Using a blend of in-person and online instruction, the TEP allows residents to collaboratively learn about medical education. Residents practice the skills of giving feedback, teaching in the workplace, giving presentations and small group facilitation.

### VIRTUAL REALITY (VR) STUDY

OPED has been leading an exploratory study of the use of VR technologies in collaboration with clinicians, faculty and staff from the Disciplines of Pediatrics and Emergency Medicine, and the Perinatal Program and Learning and Development departments of Eastern Health. Funded through the Janeway Research Foundation, the study is exploring the use of 360 degree videos of simulated resuscitation scenarios that can be viewed using VR headsets as a means of updating and boosting knowledge and skills of health care providers trained in the Neonatal Resuscitation Program and Pediatric Advanced Life Support Program. Evidence suggests that resuscitation skills can deteriorate very quickly following initial training, which can be problematic for providers working in rural or remote areas where access to skills refresher sessions may be limited.

## CENTRE FOR COLLABORATIVE HEALTH PROFESSIONAL EDUCATION CELEBRATES 20 YEARS

The Centre for Collaborative Health Professional Education (CCHPE) celebrated its 20th anniversary in 2019. The CCHPE's mission is to provide leadership in inter-professional education (IPE) and research to enhance the development of collaborative care providers.

Participating learners in IPE programs hail from the Faculties of Medicine and Nursing, the Schools of Pharmacy, Social Work, and Human Kinetics and Recreation, the Doctor of Psychology program, the Centre for Nursing Studies, and the Western Regional School of Nursing. In 2018-2019 over 900 individual learners completed at least one IPE learning activity. Scholars from the programs listed above, plus the Faculty of Education and Student Wellness and Counseling Centre also contribute to designing and delivering IPE curriculum at Memorial. <http://bit.ly/2Wcy9zr>



## RURAL MEDICAL EDUCATION AMONG FACULTY OF MEDICINE AWARDS



The Faculty of Medicine is once again being recognized for encouraging physicians to practice in rural areas. For the second time in 10 years, the Faculty of Medicine was awarded the Rural Education Award from the Society of Rural Physicians of Canada.

“As the only medical school in Newfoundland and Labrador, we have a special obligation to meet the unique health needs of the communities we serve,” said Dean Steele. “Because of this, we have cultivated partnerships at a community level so that when our learners are in these rural and remote areas, they are able to develop connections and foster relationships that can grow and encourage the learner to consider a career in rural medicine.” <http://bit.ly/2UELF1e>

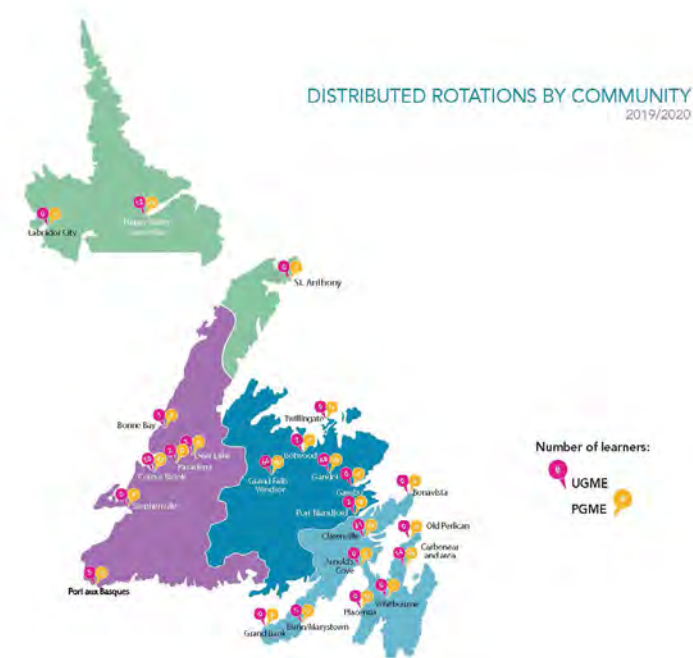
## RURAL MEDICAL EDUCATION NETWORK (RMEN)

### OVERVIEW

Our number of distributed rotations in Newfoundland and Labrador increased in 2019/2020 by 29 per cent for a total of 648 learner rotations. There were 399 undergraduate medical education rotations.

### 703 distributed clinical faculty members:

- 258 in Newfoundland and Labrador
- 392 in New Brunswick
- 43 in Prince Edward Island
- 1 in the Yukon and
- 9 in Nunavut



### REVIEW

A review was started in 2017 regarding the consolidation of the activities and some aspects of the Discipline of Family Medicine’s streams activities. Consultations included staff in RMEN, Discipline of Family Medicine, Undergraduate Medical Education, Postgraduate Medical Education, clinical disciplines, faculty and academic leadership positions.

A final report was presented to the dean of medicine in May 2019, with 11 recommendations brought forward to consolidate the administrative processes of the RMEN/Streams Offices and create one Distributed Medical Education Office, which would include an assistant dean, Distributed Medical Education to work closely as part of the academic leadership team.

The consolidation will provide better support to learners and faculty, helping them achieve academic success and further support under served, rural and remote locations. The report identified efficiencies and areas of realignment to ensure all medical learners, both undergraduate and postgraduate, receive comprehensive training and support during their rural rotations as well as promote healthier communities in our rural and remote locations. A subcommittee has been created to oversee the structure of the Distributed Medical Education Office.

## RESEARCH



### A NEW HOPE

#### PRECISION MEDICINE: MEMORIAL TO JOIN NATIONAL CANCER NETWORK

Memorial University has joined hospitals, cancer centres, universities and research institutes from across Canada to improve delivery of personalized and precision medicine to cancer patients. The pan-Canadian Marathon of Hope Cancer Centres Network, led by the Terry Fox Research Institute includes the Atlantic Canada Cancer Consortium led by Memorial researcher Dr. Sherri Christian.

“This is a new era for cancer research, backed by precision medicine.”

~Dr. Sherri Christian

The national network has received seed funding of \$150 million from the Government of Canada to create linkages between researchers and institutions across Canada and enable a team of dedicated cancer researchers to share knowledge, harness technology and champion collaboration.

<https://gazette.mun.ca/research/a-new-hope/>



## WORKING WITH THE NUNATSIAVUT GOVERNMENT

Cancer has become increasingly prevalent in First Nations, Inuit and Métis populations in recent decades in Canada.

Supported by the Canadian Partnership for Cancer, Dr. Jennifer Shea is hoping to make cancer care delivery more culturally responsive and respectful. "For First Nations, Inuit and Metis, a cancer diagnosis has obvious health

implications but also social, financial and interpersonal challenges. Often people living in rural and remote communities have to leave their homes and familiar surroundings for health services in unfamiliar territory." The initiative is led by the Nunatsiavut Government, in partnership with Memorial University, the NunatuKavut Community Council, Sheshatshiu Innu First Nation and the Mushuau Innu First Nation. <https://bit.ly/2Pcai01>

With a five year grant from the Canadian Institutes for Health Research, Dr. Shea is working with the NunatuKavut Community Council on another project to strengthen mental wellness resources in the territory: *Understanding People, Place, & Culture: A NunatuKavut Inuit Mental Wellness Initiative*. <https://gazette.mun.ca/research/culturally-appropriate-care/>



## SEARCH AND DESTROY: RESEARCHERS WORKING TO ENSURE NOT ONE CANCER CELL LEFT BEHIND

Undergoing surgery to remove a cancerous tumour is not something anyone wants to experience. But to discover a surgery did not remove all the cancer is another harsh reality that many face. Dr. Ken Hirasawa, a professor of immunology, and his team are looking at ways to ensure that the success rate for destroying cancer cells during surgery is 100 per cent thanks to a large grant from the Canadian Cancer Society.

"If it works, we can better detect, and remove, cancer." ~Graduate learner, Chantel Rice

<https://gazette.mun.ca/research/search-and-destroy/>



## LOW BACK PAIN

According to research, low back pain is one of the most problematic issues facing society today. It has a high recurrence rate and is one of the largest health care burdens on society worldwide, representing 25 per cent of all workplace injuries.

Dr. Diana De Carvalho is the principal investigator for the largest study of the biomechanics of sitting that includes participants with both a history and no history of clinical low back pain.

The results, recently published in the journal *Ergonomics* (<https://bit.ly/3nPPm8>), is the first study to show that a lifetime history of low back pain does not determine whether they are more prone to pain from sitting. Until now, it's been assumed that the pain response from sitting is an aggravation of an existing condition. Instead, Dr. De Carvalho and her colleagues have shown that it could be that this response is an early diagnostic indicator for low back pain. They're now completing a longitudinal study of this cohort to determine whether a relationship exists between pain group membership and episodes of clinical low back pain within a three-year follow-up period.

Also involved in the study were Ryan David Greene (research coordinator, Nova Scotia Health Authority and Dalhousie University; new PhD in clinical epidemiology); PhD candidate Mona Frey; Samareh Attarsharghi (faculty, College of North Atlantic-Quatar, School of Engineering Technology and Industrial Trades); MD learners John Charles Snow and Matthew Barrett.

## SURGECON: IMPROVING WAIT TIMES AND PATIENT CARE

An initiative aimed at lowering emergency department wait times received ethics approval in March 2020. SurgeCon is an emergency department management platform that aims to improve efficiency, increase patient satisfaction and improve the value of emergency health care spending by restructuring organization and workflow; fostering a patient-centric environment; and quantifying emergency department demands and available resources in real-time.

Principal investigator for the project is Dr. Shabnam Asghari. Co-principal applicants are Ron Johnson, Dr. Chris Patey and Dorothy Senior. The research team has presented at five national and international conferences and soon hope to develop the digital whiteboard application.

The SurgeCon project is jointly funded by the Canadian Institutes of Health Research (\$2.4M), Newfoundland and Labrador Provincial Government – Department of Tourism, Culture, Industry and Innovation (\$500K), Eastern Health (\$2.3M), and the Trinity Conception Placentia Health Foundation (\$100K).

The research team is looking at how the study can be adapted to provide support to Eastern Health and the Newfoundland and Labrador's Public Health division to help with pandemic response planning and COVID-19 reporting.

They recently published an article in the Canadian Medical Association Journal (CMAJ) which describes the experience of developing and deploying a COVID-19 preparedness and rapid response plan in the context of a rural emergency department. <https://www.cmaj.ca/content/192/19/E518>

The CMAJ invited two members of the team for a podcast discussion of the measures being taken at the Carbonear emergency department (<https://www.cmaj.ca/content/192/19/E518/tab-related-content>). In addition, the Australasian College of Emergency Medicine have included material from the article for their rural pandemic operations guide. <http://bit.ly/2mfALyD>

## MEMORIAL UNIVERSITY'S CENTRE FOR BIOETHICS OPENING

On October 3, 2019 Memorial University's Centre for Bioethics officially opened its doors.

The centre, housed in the Faculty of Medicine, is engaged in innovative research and teaching, responding to the province's clinical ethics needs. It offers a master's program and works with the local health board, the province's regional health authorities and government.

The launch of the Centre for Bioethics has meant a new and expanded mandate for bioethics at Memorial. With a growing master's program, the new centre aspires to address issues from across the life sciences as well as those that arise at the interface of science and technology.

On Oct. 4, the centre held its inaugural symposium with guest speaker Dr. Michael McDonald, founding director of the W. Maurice Young Centre for Applied Ethics at the University of British Columbia.

<https://www.mun.ca/bioethics/>

**MEMORIAL UNIVERSITY CENTRE FOR BIOETHICS**  
*Grand Opening*

Oct. 3, 2019, 4 - 5:30 p.m.  
**Keynote Speaker:**  
**Josephine Johnston**  
Main Auditorium, Health Sciences Centre

Reception to follow in the Faculty of Medicine Atrium  
5:30 - 7 p.m.  
Please RSVP to [bioethics@mun.ca](mailto:bioethics@mun.ca)

**THE CASE FOR NUANCED USE OF SEQUENCING TECHNOLOGY IN PRENATAL AND NEWBORN CARE**

Many scientists and doctors hope that affordable genome sequencing will lead to more personalized medical care and improved public health. To this end, some have called for all babies to have their genomes sequenced at birth, or while still in utero. This sweeping suggestion raises pragmatic, legal and ethical challenges and comes with its own set of economic costs. A more nuanced approach—one that attends to context—can lead to ethically defensible practices and policies for use of this powerful technology in prenatal and newborn care.

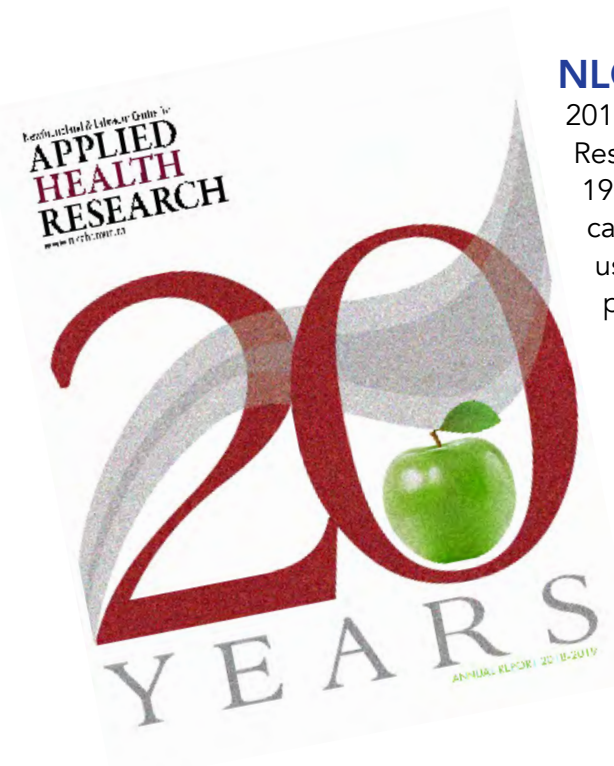
**Bio:**  
Josephine Johnston is director of research and a research scholar at The Hastings Center, an independent bioethics research institute in Garrison, New York. She works on the ethics of emerging biotechnologies, particularly as used in human reproduction, psychiatry, genetics, and neuroscience. Ms. Johnston holds degrees in law and bioethics from the University of Otago in New Zealand. You can follow her on Twitter @bioethicsjosie.

## NLCAHR 20TH ANNIVERSARY

2019 saw the Newfoundland and Labrador Centre for Applied Health Research (NLCAHR) celebrate its twentieth anniversary. Established in 1999 under the leadership of Dr. Stephen Bornstein, NLCAHR builds capacity for applied health research with the goal of optimizing the use of research evidence to inform health care decision making in the province.

Aligning with the Faculty of Medicine's strategic plan, NLCAHR is a leader in socially-accountable research — its Contextualized Health Research Synthesis Program and its Research Exchange Groups bring together community, health system, government, patients and caregiver partners to set priorities for locally-relevant applied health research. You can view their 20th anniversary annual report here.

[https://www.nlcahr.mun.ca/About/NLCAHR\\_20TH\\_ANNIVERSARY\\_AR.pdf](https://www.nlcahr.mun.ca/About/NLCAHR_20TH_ANNIVERSARY_AR.pdf)



## RESEARCH – BY THE NUMBERS

The Faculty of Medicine was awarded just over **\$17 MILLION** (\$17,139,603) in external funding for the 2019-20 fiscal year. Of these funds, just under \$4.1 million was from the tri-council funding agencies.

Centre for Collaborative Health Professional Education  
**\$823**

Discipline of Anesthesia  
**\$2,618**

Discipline of Family Medicine  
**\$1,715,782**

Discipline of Pediatrics  
**\$134,211**

Discipline of Genetics  
**\$594,675**

Discipline of Medicine  
**\$10,727,200**

Discipline of Obstetrics & Gynecology  
**\$44,949**

Discipline of Oncology  
**\$127,691**

Discipline of Psychiatry  
**\$20,000**

Discipline of Surgery  
**\$19,833**

Discipline of BioMedical Sciences  
**\$3,091,541**

Discipline of Community Health and Humanities  
**\$660,277**

**TOTAL AWARDED 17,139,603**

Canada Research Chairs Total	\$689,999.34
Canadian Foundation for Innovation Total	\$170,966.00
CIHR Total	\$3,537,769.97
NSERC Total	\$507,496.33
SSHRC Total	\$50,000.00
Total amount of Tri-council (CIHR, NSERC, SSHRC only)	<b>\$4,095,266.30</b>
Total amount of funding from federal sources (all above)	<b>\$4,956,231.64</b>

# SOCIAL ACCOUNTABILITY



## OH BABY: MD STUDENTS HELPING GET BABY CLOTHES LIBRARY OFF THE GROUND

St. John's has a new library but instead of borrowing books, you can borrow baby clothes. The St. John's Baby Clothes Library is supporting families while ensuring a sustainable future – and four Faculty of Medicine learners are helping to make that happen. Rebecca Matthews, Mark Hewitt, Jasmine DeZeeuw and Lauren Winsor are volunteering to launder and sort baby clothes to help parents in the community who are struggling with the cost. *"When children and their parents have access to basic necessities, such as clothing, their focus can shift to other things."* ~ Lauren Winsor <http://bit.ly/2kxjlgu>

## THE GENE TEAM

The Human Genetics Student Society with their team, The Gene Team, participated in the Metro Relay for Life event organized by the Canadian Cancer Society – NL.

Together, members Christie Costello, Aaron Curtis, Gerissa Fowler, Alexia Hawkey-Noble and Barathy Logendra – all graduate students in the Discipline of Genetics – raised nearly \$900 for the Canadian Cancer Society, placing fourth. These funds will be used to help support cancer patients and cancer research. <http://bit.ly/2kq4QLa>



## FACULTY OF MEDICINE HOSTS THIRD ABORIGINAL HEALTH SYMPOSIUM

Our third Aboriginal Health Symposium was held on November 21, 2019. The half day event once again showcased Indigenous education and research taking place at Memorial and featured keynote speaker Dr. Debbie Martin, Tier II Canada Research Chair, Indigenous Peoples Health and Well-Being, as well as a discussion with the Visiting Elders Project Panel.

Nearly 100 people attended including Premier Dwight Ball and Minister of Health and Community Services, Dr. John Haggie.



## WALK IN CLINIC FOR THE GATHERING PLACE

On Dec. 2, 2019 the first walk-in gynecology clinic was held by Dr. Atamjit Gill and team at The Gathering Place.

Clinics will be held monthly with help of the OBGYN residents, medical learners and the nursing staff at The Gathering Place. The clinics are available for anyone who requires a Pap test, sexually transmitted infections testing, contraception or anyone with concerns about their reproductive health.



## MEDICAL GRADUATE STUDENT SOCIETY SUPPORTING STUDENTS AND THE COMMUNITY

In March 2020, the Medical Graduate Student Society (MGSS) raised \$203.35 in support of Jersey's Journey. Jersey, a three-year-old child in Port aux Basques, NL, was diagnosed with a rare terminal genetic disorder called CLN2 Batten Disease; a neurodegenerative disease.

Jersey is a candidate for an experimental procedure at the Janeway which will require her to travel to St. John's every three weeks to receive an intracerebral ventricular infusion. The family is raising money to offset travel costs, as well as prepare for equipment that will be needed to care for Jersey over the next two to seven years (the life expectancy associated with the disease) to give her the best possible quality of life.

MGSS also organized several fundraisers to support the three MGSS scholarships offered through the Faculty of Medicine's Office of Research and Graduate Studies including two Scholar and Community Involvement Awards and one travel award to support a graduate learner attending their first conference. Along with bake sales, MGSS has organized events at Quidi Vidi, board games night and held their annual holiday party for learners and faculty. To promote wellness, MGSS offered monthly lunch action sessions as well as monthly lunch and learns covering a variety of topics including ergonomics for graduate learners.

## QUALITY OF CARE NEWFOUNDLAND AND LABRADOR

Key components of the valuable work undertaken by Quality of Care NL, Choosing Wisely NL and NL SUPPORT are outreach and engagement – connecting with the people on whom their work has an impact, especially patients and the public, and engaging them in meaningful dialogue about the potential impact on the provincial health care system.



As part of World Antibiotic Awareness Week 2019 (November 18-24, 2019), Quality of Care NL hosted the Antibiotics FutureForum at the Faculty of Medicine.

Quality of Care NL welcomed Dr. Theresa Tam, Canada's Chief Public Health Officer, the Honourable Dr. John Haggie, minister of Health and Community Services, Dr. Peter Daley, infectious disease specialist, and Drs Wade Locke and Lynn Gambin, Memorial University economists, along with patients and other health care providers to discuss the roles we all play in reducing antibiotic overuse.

Newfoundland and Labrador has the highest rate of antibiotic use in the country. Since 2016, Quality of Care NL has been working in partnership with Choosing Wisely Canada to promote guidelines and recommendations on the appropriate use of antibiotics. According to the latest provincial data, in 2018/19 there was a 5.2 per cent reduction of all oral antibiotic prescriptions compared to the previous year. Learn more about Quality of Care research and outreach projects at [www.qualityofcarenl.ca](http://www.qualityofcarenl.ca).



### MONTE CARLO 2019

The 43rd annual Monte Carlo Charity Gala was held on Nov. 23, 2019 at the Delta St. John's Hotel. The fundraiser, which is planned and managed by medical students, raised \$62,100 for local charities including:

- The Angel Fund
- Buckmaster's Community Circle
- Islaview Foundation
- Thrive

### MOMENTS THAT MATTER: FUTURE DOCTORS HELPING FUTURE PATIENTS

Sometimes knowing that you have somewhere to go for a warm meal where you'll be greeted by a friendly face can make all the difference. Sarah Devereaux and Melissa O'Brien have seen first-hand that Thursday evenings are very special to a group of moms in the Momma Moments program at local non-profit, Choices for Youth.

The third-year medical students are part of the Obstetrics and Gynecology Interest Group (OGIG), Faculty of Medicine students who share an interest in women's health and the field of obstetrics and gynecology. The group's goal is to provide medical students with opportunities to gain exposure to this field and to women's health-related initiatives in our community.



Funded by Memorial's Quick Start Fund for Public Engagement, the OGIG's partnership with Momma Moments involves organizing volunteers to cook and serve meals and craft sessions with the children while the mothers participate in separate programming.

Providing opportunities for community engagement is critical in helping medical students understand how concepts such as social determinants of health affect the populations that they will see in a clinical setting and the Mama Moments program has created positive experiences for the learners and participants. Read more about Mama Moments: <https://bit.ly/3980SOv>



### FOR A GOOD CAUSE

In June 2019, Faculty of Medicine staff won best costume at the Candlelighters Newfoundland and Labrador fundraiser. Way to go team Lord of the Wings!



### SHOWING OUR PRIDE

Many of our faculty, staff and learners took part in the 2019 Pride Parade on July 14 organized by St. John's Pride Inc. Photo by: Ritche Perez.



# DONOR PRIDE

## THE DR. LEE ERRETT BOARDROOM

Dr. Lee Errett, MD class of 1979, believes it is a privilege to be given the opportunity to study medicine. To express his gratitude, he wanted to provide something that was needed, would be useful and would last for many years. He did this by donating furniture for some areas of the Faculty of Medicine building located in St. John's.

*"I wanted to give back in a concrete way," said Dr. Errett. "Since I owned a furniture business I offered to furnish the new faculty building; the board room and other furnishings were chosen."*

To recognize this gift, room 2M314, a large boardroom located in the Office of the Dean, was officially named the Dr. Lee Errett Boardroom on June 28, 2019.

## DR. NIGEL RUSTED DIARIES

On June 20, 2019 Memorial University launched the digitized diaries of Dr. Nigel Rusted.

A member of the inaugural class of Memorial University College in 1925, Dr. Rusted kept a daily diary from 1925 to 2012. These diaries highlight and showcase the profound impact Dr. Rusted had on the medical community in Newfoundland and Labrador in the early days of medicine.

Dr. Rusted was well known for performing cleft palate and hare lip repair surgeries. His contributions to the medical field were paramount in advancing and promoting medical services across the province. His notebooks also contained retrospective essays that he drew on for publications and interviews.

After his passing, his children, Ms. Elaine Hyde, Ms. Joan Rusted and Mr. Tom Rusted donated the diaries, photos and other personal items related to his passion for medicine in Newfoundland and Labrador. The process of digitizing the journals was overseen by archivists in the Health Sciences Library and took years to complete.

A digital archives initiative, the journal entries are available online for anyone to access.

<http://bit.ly/rustedcollection>

## GLENN CHATMAN MEMORIAL AWARD

The Glenn Chatman Memorial Award Endowment Fund was established through a generous gift from Glenn's Helping Hand Foundation, in memory of Glenn Chatman, who passed away from Diabetic Ketoacidosis.

Glenn Chatman was a friendly, loving, sentimental young man, with a perpetual smile. As a tribute to Glenn, his family created Glenn's Helping Hand Foundation to enhance the quality of life for those living with Diabetes. Through the foundation, they created an award to be granted annually to a medical student during their studies who excels in studies related to diabetes.

## WHAT IS IT ABOUT CANNABIS?

Dr. Curtis French is hoping some new funding will help figure out which molecules in cannabis plants help reduce seizures. Dr. French's research received a boost of \$25,000 from Epilepsy NL, an organization serving and representing more than 10,000 men, women, children and their families in Newfoundland and Labrador who are living with epilepsy.

Cannabis, which contains hundreds of molecules that may help manage seizures, has been used to treat the condition for centuries but not much research has been done on its effectiveness. Dr. French's lab will test at least eight molecules found in the plants, including Cannabidiol CBD which has shown promise, for anti-epileptic properties.

<http://bit.ly/2ICkjAP>

## DR. THOMAS MICHALAK GRADUATE AWARD IN MEDICINE

This award was established through gifts from family, friends, laboratory alumni and coworkers of Dr. Thomas Michalak. Dr. Michalak, now retired, was a Canada Research Chair Tier One in Molecular Virology and a distinguished university professor. Known for his significant contributions in the area of hepatitis research, he also had a considerable impact on the Faculty of Medicine and the scientific community both nationally and internationally.

Mr. Paul Hodgson (PhD '02) and Ms. Carla Coffin helped establish this award to honour Dr. Michalak and his illustrious career in research. The award was supported by many of his previous students and resulted in a symposium in 2019.



# FUNDING, AWARDS AND SCHOLARSHIPS

## A PASSION FOR VIRUS VANQUISHING

Hannah Wallace has a thing for viruses. As in, eradicating them. A PhD learner in the Division of BioMedical Sciences, Ms. Wallace is particularly interested in eliminating hepatitis C virus and, what she calls her side project, Ebola.

Ms. Wallace's virus goals got a major boost with a fellowship from the Canadian Network on Hepatitis C to fund her PhD studies worth \$25,000 a year for four years. "I have always wanted a career that somehow helps people. I figure that if I can help explain how a virus causes disease then I'm contributing to the virus research field which could contribute to the development of a drug which could help patients directly."

<http://bit.ly/2looLuA>



## NEW CANADA RESEARCH CHAIR, NEW CANCER TREATMENTS

The Faculty of Medicine has welcomed a new Canada Research Chair whose leading edge work will focus on developing new drugs for cancer treatments. Dr. Michael Leitges has been named a tier one Canada Research Chair in Cell Signaling and Translational Medicine.

Dr. Leitges is establishing a new laboratory and research program at Memorial aimed at identifying new drugs for cancer treatment with less side effects. He brings more than 25 years of research experience to the Faculty of Medicine.

"I hope that my research group will be able to provide within the first seven-year time frame two or three new drug targets for a more specific cancer treatment and that at the end of the term we are ready to screen for such drugs. That is definitely my prime focus."

Dr. Leitges is also receiving \$50,000 from the Canada Foundation for Innovation's John R. Evans Fund for critical infrastructure for his studies. <http://bit.ly/2KoTNx4>

## RESEARCHERS RECEIVE MAJOR BOOST

Three Faculty of Medicine projects received funding from the Natural Sciences and Engineering Research Council of Canada in 2019.

Dr. Jessica Esseltine, Division of BioMedical Sciences - Connexins in mouse and human stem cell pluripotency: "Pluripotent stem cells also heavily rely on cell-cell communication and they have the capacity to differentiate into any cell type in the embryo. They represent an especially powerful tool to investigate cell fate decisions under normal and diseased conditions. With the development of straight-forward gene editing techniques we can also easily delete genes or correct genetic mutations in a patient's own cells, resulting in a potential tool for regenerative medicine."

Dr. Curtis French, Discipline of Genetics - Assessing defects in embryonic development due to loss of protein fucosylation:

"The zebrafish ear contains hair cells that are almost identical to those found in the human ear, providing balance and the ability to hear. With support from the Natural Sciences and Engineering Research Council, we can now pursue multiple avenues of research to try and understand how protein fucosylation affects hearing and balance in addition to stroke and vascular biology related research."

## MUSIC LESSONS IMPROVE HEARING FOR SENIORS

Dr. Ben Zedel has discovered that older adults hear better when they are musically trained.

The Canada Research Chair in Aging and Auditory Neuroscience says hearing issues are one of the most commonly reported health problems in older adults. According to research, older adults report no difficulty with hearing when in a quiet room, but when they are in a noisy environment, hearing and understanding speech is much more difficult. They found that after six months of music training, older adults were better able to understand speech in background noise.

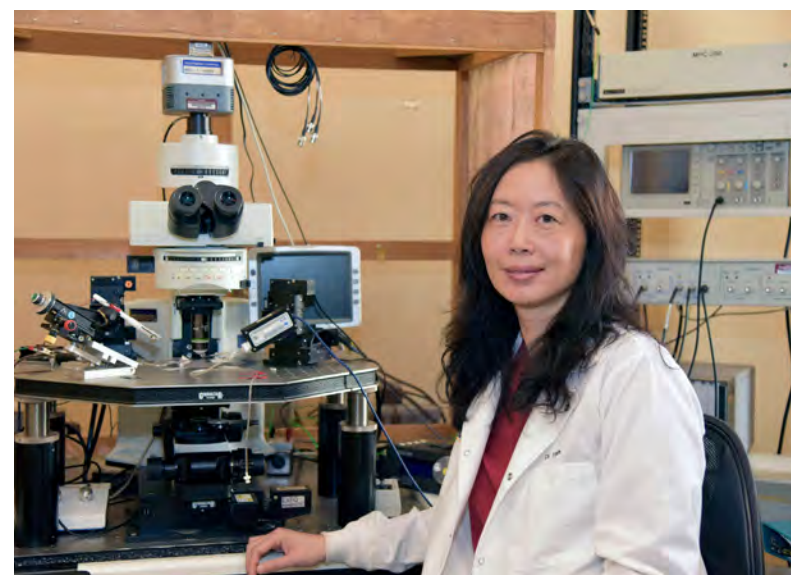
"We think music training strengthens the connections between the auditory and motor system and that facilitates speech understanding." <http://bit.ly/2XjWwuU>



## URGENT INSIGHT

Memorial researchers are advancing critical health-related studies that matter to Canadians thanks in large part to more than \$1.8 million in new funding from the Canadian Institutes of Health Research.

- Dr. Qi Yuan (left), associate professor of neurosciences, Division of BioMedical Sciences, received \$1,032,750 for research focused on better understanding the progression of Alzheimer's disease.
- Dr. Michelle Ploughman (right), Canada Research Chair in Rehabilitation, Neuroplasticity and Brain Recovery, secured \$100,000 for a project focused on whether or not exercise can help heal the brain and protect it from degeneration. <https://gazette.mun.ca/research/urgent-insight/>





## **FORK INTERRUPTED: HOW SECURE IS OUR FOOD IN A WORLD OF CLIMATE CHANGE?**

As we see more extreme weather patterns around the globe and witness sea levels rising and the spread of illness, climate change and its impact on food security is something that researchers are urging policy makers and people in our communities to see as sustainable solutions to a growing problem.

Dr. Atanu Sarkar, associate professor of environmental and occupational health in the Division of Community Health and Humanities, is one of over 70 researchers who came together to publish a volume focusing on food security and how we can address it. In addition to his research contributions, including a chapter examining adaptation of strategic and major challenges for India, he also edited all chapters and authored an introduction and the conclusion.

*Sustainable Solutions for Food Security* contains the latest technological solutions and governance frameworks for sustainable food security that have been tested across the globe. A project that began as a conversation during a conference in 2015 was published in 2019 and as of December 2019 has been downloaded as a full-book or select chapters over 11,000 times.

## **NUTRITIOUS PROGRESS: PUBLIC ENGAGEMENT-DRIVEN FOOD SECURITY INITIATIVE AT O'BRIEN FARM**

Think of it as the offspring of a greenhouse and a root cellar. An earth-sheltered greenhouse project piloted by an eclectic group of Memorial faculty, staff and local food activists is taking direct aim at Newfoundland and Labrador's food security issues.

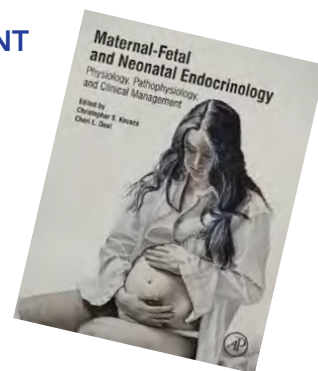
Dr. Atanu Sarkar, Division of Community Health and Humanities, is also on the garden's academic advisory committee. And with the provincial government's The Way Forward Plan calling for a doubling of local food production by 2022, the timing for the initiative could not be better. <https://gazette.mun.ca/public-engagement/healthy-affordable-sustainable/>

## **GUIDING DIAGNOSIS: NEW TEXT BOOK ANSWERS QUESTIONS FOR PREGNANT AND BREASTFEEDING WOMEN**

A Faculty of Medicine professor, Dr. Christopher Kovacs, has published a book on endocrinology in pregnant and breastfeeding women, including a groundbreaking chapter on pregnancy and lactation in transgender individuals.

After two years of concerted effort, the 1,000-page textbook *Maternal-Fetal and Neonatal Endocrinology: Physiology, Pathophysiology, and Clinical Management*, made it to press in October 2019.

<https://gazette.mun.ca/teaching-and-learning/guiding-diagnosis/>



## **IT TAKES A VILLAGE: FAMILY SUPPORT AND SACRIFICE GET GRADUATE THROUGH MEDICAL SCHOOL – AND HER BABY'S FIRST YEAR**

Starting a family, relying on family and practising with families. For Janine Woodland-Flaherty, family was key during her journey through medical school.

A practising lawyer for six years before applying to the MD program, Ms. Woodland-Flaherty knew the sacrifices the program would entail. What she didn't expect was, after four years of hoping, to find herself pregnant during one of the most challenging times in her new educational path.

<https://gazette.mun.ca/student-life/it-takes-a-village/>



## **DIVING INTO DATA: MICRODATA RESEARCH CENTRE CELEBRATES FIFTH ANNIVERSARY AT MEMORIAL**

A unique research facility housing in-depth Statistics Canada data is celebrating its fifth anniversary at Memorial.

The Research Data Centre (RDC) is part of a national network that provides researchers access to detailed information in a secure setting. Nelson Lau, a master of science student in clinical epidemiology in the Faculty of Medicine, researches how exposure to pollution affects the development of different asthma patterns in children. He says the RDC has been "really crucial" to his research.

<https://gazette.mun.ca/research/diving-into-data/>



## **VIRTUAL DEFENCE: DEFENDING MEMORIAL'S FIRST ONLINE THESIS – DURING A PANDEMIC**

It's not unusual for events to be postponed in Newfoundland and Labrador because of the weather. So Augustine Devasahayam (AJ) didn't panic when a snowstorm on March 2 delayed his PhD defence until March 19.

Enter a global pandemic. On March 15, Memorial University suspended all classes and labs. On March 17 it was declared that all PhD defences would be conducted entirely online. The entire campus was thrown for a loop, including Mr. Devasahayam: <https://gazette.mun.ca/campus-and-community/virtual-defence/>

## SNOWMAGEDDON

On January 17, 2020, Newfoundland and Labrador experienced a record-breaking snowstorm, which the media labelled "Snowmageddon." The unexpected intensity of the storm triggered a week-long state of emergency throughout most of the province.

Faculty, staff and learners all found themselves adapting to unique situations that could not have been anticipated. "With such an epic storm, we were facing circumstances far beyond what anyone expected," said Dean Margaret Steele. "It was inspiring to hear about the dedicated health-care professionals taking care of patients and assisting other team members during such a difficult and stressful time."

During Snowmageddon, some of the postgraduate residency programs were conducting their Canadian Resident Matching Service (CaRMS) R-1 Main Residency Match interviews, held annually. Typically, the interviews are conducted in person with medical students from across the country. Until this year.



## THE DISCIPLINE OF FAMILY MEDICINE GETS CREATIVE

With CaRMS interviews schedule for two days, January 20 and 21, it became clear to faculty and staff in the Discipline of Family Medicine that most out-of-province candidates would not arrive in St. John's in time for the interviews due to the weather.

Under the guidance of program director Dr. Danielle O'Keefe, faculty and staff started to make alternate plans on the January 18. First contacting 180 candidates who were expecting in-person interviews to confirm where they were and let them know what changes were taking place. Forty-eight hours later, all interviews went ahead over the next two days as scheduled, by telephone. And the rest of the program's CaRMS process proceeded as planned.

In addition to coordinating phone interviews, a group of faculty and residents worked on program promotion – mostly via Facebook. They created a group for candidates to interact with representatives from the discipline. All five of Family Medicine's stream leads posted their presentations on Facebook. Residents, faculty and former residents leveraged Facebook further, posting program highlights and elaborating on what the province has to offer. Candidates could ask questions and engage with people so that they could get to know the program and its people.

Other postgraduate programs also adapted to the changing circumstances during Snowmageddon and their quick thinking and creative approaches helped ensure this important process took place despite a state of emergency.



## OPEN HOUSE

On November 17, 2019, the Faculty of Medicine opened its doors for the second annual Open House featuring a teddy bear check-up clinic, Body Works, simulation demonstrations, artwork, games and more. Once again, nearly 500 people visited to learn more about what we do!



