

## 2021 RESEARCH ANNUAL REPORT

## Contents

RESEARCH FOCUSED ON A HEALTHIER NORTH	4
STRENGTHEN RESEARCH CAPACITY IN NORTHERN ONTARIO	5
GOAL	5
ASPIRATION	5
OUTCOMES	5
BRANCHING OUT	6
HEALTH SERVICES	7
NOSM University faculty member is the HSNRI lead	
for research in emerging topics	7
NOSM alumnus leads ICES North	7
ENVIRONMENTAL HEALTH	8
Making strides in environmental health	8
Environmental monitoring using remote sensing technologies	8
CARDIOVASCULAR	9
Critical cardiovascular advancements	9
An innovative ultrasound machine the size of a bandage	9
SURGERY	9
A growing network of urology researchers	9
INDIGENOUS PEOPLES' HEALTH	10
Research focusing on Indigenous health	10
An Anishinabe theatre-based approach to vaccine confidence	10 11
Innovative app improves access to Naloxone in the North Supporting ethically and culturally safe research practices	11
Indigenous women's reproductive health	11
CHRONIC DISEASE	12
Improving services for youth experiencing severe mental illness	12
Continuing smoking cessation research	12
Funding Postdoctoral Fellows	12
RURAL MEDICINE & PRIMARY CARE	13
Research supporting rural medicine in Huntsville and Marathon	13
Launch of primary care research network NORTHH	13
CANCER	14
Partnership for cancer patient clinical trials	14
CENTRE FOR SOCIAL ACCOUNTABILITY	14
Interdisciplinary research for Social Accountability	14
Improving health care in Northern Ontario by informing policy	14
RESEARCH FUNDING	15
FACULTY PUBLICATIONS	17
2021 FUNDING AWARDS	18
	10
RESEARCH, INNOVATION AND INTERNATIONAL RELATIONS PORTFOLIO AT NOSM UNIVERSITY	19
	22
GET INVOLVED IN RESEARCH AT NOSM UNIVERSITY	23

## Research focused on a Healthier North

Research at NOSM University stems from unique questions rooted in the need to improve the health of the peoples and communities of Northern Ontario. For years, Canadian health research took place primarily in large centres. This meant many questions related to the health of Northerners were going unanswered, including the incidences of chronic disease, outcomes for patients with mental illness and how work in industries such as mining or forestry affect one's health. Also left unanswered were specific questions about the health of Indigenous and Francophone communities in the North two groups that have historically been under-represented in research.

Beyond the obvious challenge of delivering care to people across a vast geography, Northern Ontarians have less access to primary-care providers and higher rates of suicide, complex chronic diseases, obesity and are more likely to report having multiple chronic conditions. Conditions in children, including asthma and skin conditions, are on the rise. Mental health and addictions in the North are some of its greatest challenges. The youth suicide rate of Indigenous people is six times higher than non-Indigenous youth in Canada.

This is where the University's social accountability mandate comes into play—NOSM U was the first medical school in Canada established with an explicit social accountability mandate. The social determinants of health continue to factor into research and innovation at NOSM University. Today, there are many faculty members—biologists, immunologists, physiologists, medical anthropologists, physicians, sociologists and more—who conduct leading-edge health research in laboratories, communities, hospitals, health clinics and administrative offices across the region.

NOSM University researchers have developed collaborative, participative and meaningful approaches to community-based research, and are working to answer questions that will have a positive impact on communities across Northern Ontario.

In 2021, NOSM University researchers secured nearly \$4 million in new funding and held over \$5 million in active research grants. Many NOSM University researchers are also participating in approximately \$5 million in research funding per year received by the Thunder Bay Regional Health Research Institute and \$10 million per year received by the Health Sciences North Research Institute.

<u>The NOSM Challenge</u>, NOSM University's five-year strategic plan, was launched with a goal to strengthen research capacity in Northern Ontario by aligning with health-research partners to improve performance and measurable outcomes in health services, quality health care, health and biomedical research and knowledge translation.



"Strategic partnerships are key to changing population health outcomes in Northern Ontario. NOSM University will collaborate with research entities, institutes, hospitals and Northern Ontario Health Teams to improve health in our region."

**Dr. David Marsh** Vice Dean, Research, Innovation and International Relations Research at NOSM University is growing strong with an emphasis on:

Themes	Research Priorities
Clinical and Translational Health	• Cardiovascular
	• Cancer
	• Surgery
	Primary Care
Biomedical and Basic Sciences	Environmental Health
	Physiology, Biological Systems and Functions
	Disease Process, Diagnostics and Therapeutics
Population and Public Health	Chronic Disease
	Rural Medicine
	Health Services
	Social Determinants of Health
Humanities and Social Sciences	Indigenous Peoples' Health
	Francophone Health
	Health Professions Education

## Strengthen Research Capacity in Northern Ontario

#### GOAL

To <u>strengthen research capacity</u> in Northern Ontario by aligning with health-research partners to improve performance and measurable outcomes in health services, quality health care, health and biomedical research and knowledge translation.

#### ASPIRATION

NOSM University is the connective tissue between research entities, Northern Ontario Health Teams (OHTs), research institutes and hospitals.

#### OUTCOMES

 $\checkmark$  Establish research partnerships, networks and clusters including those with a cultural focus

- $\checkmark$  Strong capacity in research and analytical processes
- ✓ Develop interdisciplinary centers
- ✓ New research opportunities for learners and faculty





### **HEALTH SERVICES**

## NOSM University faculty member is the HSNRI lead for research in emerging topics

Dr. Robert Ohle, NOSM University Assistant Professor, helped form the Northern Network of Emergency Medicine Research to build research capacity in the region for existing clinicians and learners. Nationally, Dr. Ohle is a founding member of the Network of Canadian Emergency Medicine Researchers, which offers mentorship and support to emergency medicine researchers across Canada. Dr. Ohle has <u>connected Health Sciences North (HSN)</u> and <u>HSNRI</u> to a national project that has secured approximately \$4 Million in peer-reviewed funding from the Canadian Institutes of Health Research (CIHR) and Ontario Research Fund (ORF) for a COVID-19 registry that looks at emergency department patterns in the global pandemic. The researchers are using ICES data and collaborating with other ER's to develop clinical decision making rules for the ER and have been successful with securing grants and high impact publications. Dr. Ohle is a supervisor within NOSM University's Master of Medical Studies program.

#### **NOSM alumnus leads ICES North**

Dr. David Savage (MD 2014, Family Medicine 2016 and Emergency Medicine 2017) is an Assistant Professor at NOSM University, <u>the Interim Site Director of ICES North</u> and co-founder of the <u>Northern Network of Emergency Research (NNER</u>). In his role, Dr. Savage helps guide ICES North, furthering its research mandate in collaboration with three Northern partners: Laurentian University, Health Sciences North Research Institute and NOSM University. ICES North currently leads studies that evaluate health care delivery and population outcomes in Northern Ontario. As an active researcher, Dr. Savage's recent focus is on the application of data specific to Northern Ontario that will inform health human resource planning. Dr. Savage is also a supervisor within NOSM University's Master of Medical Studies program.





## **ENVIRONMENTAL HEALTH**

#### Making strides in environmental health

The Radiation Biology group, consisting of Drs. Doug Boreham, TC Tai, Simon Lees, Neelam Khaper, Christopher Thome & Sujeenthar Tharmalingam, currently oversee research teams of over 24 HQP (highly-qualified personnel). Some examples of their research include:

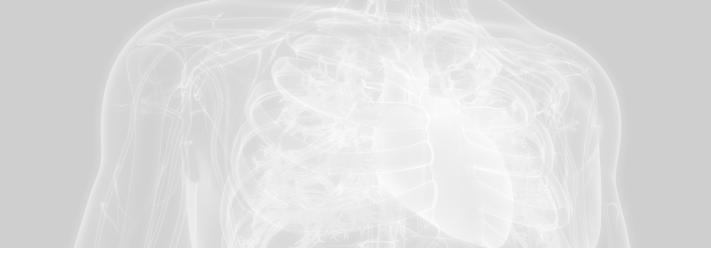
- Effects of Low Dose Radiation on Living Organisms conducted in part at SNOLAB
- Effects of radiation on cataracts
- Effects of diagnostic radiation exposures on pregnancy
- Use of low dose radiation to treat recurrent prostate cancer
- Radiation countermeasures

In the past five years, they have achieved over \$4.3 million in combined awarded funding from multiple sources (tri-agencies, industry, foundations etc.) with 78 publications and 37 HQP trained.

Dr. Christopher Thome, Assistant Professor, Radiation Biology at NOSM University, was the 2021 <u>recipient of the prestigious Rene Guilbeault Award</u>. His research, *lonizing radiation induced stimulation of natural killer cell cytotoxicity: A mechanism for cancer immunotherapy*, explores how different doses of radiation can stimulate specific cells to destroy cancer cells. Dr. Sujeenthar Tharmalingam was awarded a one-year NSERC Alliance grant in the amount of \$45,000 for his project titled, *Bioengineering of microbial systems to remediate plastic pollutants*.

#### Environmental monitoring using remote sensing technologies

Dr. Gregory Ross is a biomedical research scientist specializing in disorders of the nervous system. In addition to being a NOSM University Professor, Dr. Ross is the Vice-President Academic and Research Impact at Health Sciences North (HSN) and the Health Sciences North Research Institute (HSNRI). He held the <u>MAG Aerospace Industrial Research Chair in Health</u> and Environmental Surveillance. NOSM University and <u>MAG Aerospace Canada</u> are testing the new ITRES TABI 1800 Hyperspectral Sensor, which is used for environmental analysis, thermal output of nuclear plants and fire mapping to support wildfire management. The research focus is environmental monitoring using remote sensing technologies and includes studies on wildfires, cyanobacteria, invasive species, and other events impacting human health and environmental factors on brain disease. Dr. Ross has study sites throughout Ontario and in other regions of Canada.



## CARDIOVASCULAR

#### **Critical cardiovascular advancements**

Dr. Mohammed Shurrab, NOSM University Assistant Professor and Cardiovascular Health Research Lead at HSNRI, is improving outcomes for cardiac patients in Northern Ontario. Dr. Shurrab, along with Drs. Andreas Kumar, Atilio Costa-Vitali and Rony Atoui are conducting in depth research in cardiology and cardiovascular surgery. In 2021, Drs. Atoui and Shurrab had publications in the <u>Heart Surgery Forum</u>, <u>CJC Open</u>, <u>Journal of the American Heart Association</u>, <u>JJC Heart & Vascular</u>, and the <u>Annals of Thoracic Surgery</u>. They are collaborating with national and international cardiovascular research centers.

#### An innovative ultrasound machine the size of a bandage

Dr. Joe Eibl, Assistant Professor, Microbiology and Immunology, is the CEO and co-founder of the medical technology company, <u>Flosonics Medical</u>. The company has created a patch the size of a band aid that delivers the medical information of an ultrasound machine. The FloPatch is "an IoT-connected wearable blood flow monitor, which gives critical real-time information to doctors, paramedics and nurses." Flosonics Medical was selected as one of 25 companies in the <u>MedTech Innovator 2019 Accelerator showcase</u> in Boston. Flosonics is conducting studies with the cardiovascular group at HSN on the clinical impact of using their device.

## SURGERY

#### A growing network of urology researchers

Leadership from both NOSM University and Thunder Bay Regional Health Sciences Centre established <u>NOSM U's first internationally sponsored clinical fellowship</u>. Dr. Hazem Elmansy, Assistant Professor and Faculty Lead of Urology and a Urologist at TBRHSC, is one of few doctors in the world who performs holmium laser enucleation of the prostate (HoLEP), a unique prostate laser surgery method that significantly improves care and recovery time for patients. His many 2021 publications included contributing to the <u>Canadian Urological</u> <u>Association Guidelines</u> for Management of ureteral calculi. Dr. Elmansy is helping to teach and guide a growing group of urologists in Northern Ontario.





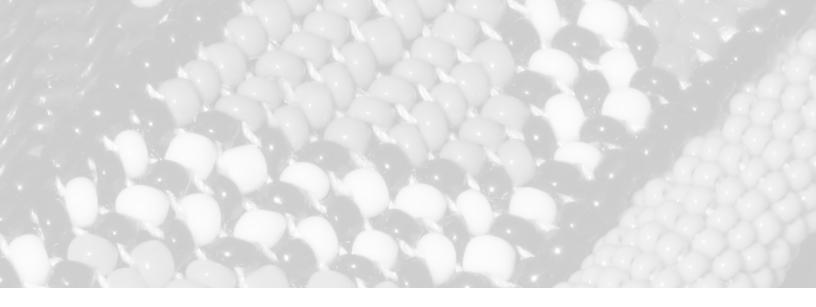
## **INDIGENOUS PEOPLES' HEALTH**

#### **Research focusing on Indigenous health**

Several faculty members at NOSM University are <u>leading studies in the area of Indigenous</u> <u>Health</u>. This year, Dr. Darrel Manitowabi, Assistant Professor and <u>NOSM University-AMS Hannah</u> <u>Chair</u> in the History of Indigenous Health and Traditional Medicine was awarded a \$20,000 grant for a one-year period starting June 2021 from the Associated Medical Services (AMS). These funds are to support the AMS Hannah Chair in the History of Indigenous Health and Indigenous Traditional Medicine for research support and the enhancement of educational programs for medical students. Dr. Manitowabi promotes the discussion of the inherent, constitutional, Treaty and international rights of all Indigenous Peoples and communities and the protection of traditional knowledge and medicines from appropriation.

#### An Anishinabe theatre-based approach to vaccine confidence

NOSM University researchers, Drs. Marion Maar, Associate Professor, Medical Anthropology, and Maurianne Reade, a rural generalist family physician on Manitoulin Island and Associate Professor, are principal investigators for the project, *Co-Creating Vaccine Confidence: An Anishinabe Theatre-based Approach to Strengthen Indigenous Youth and Young Adult Vaccination Support*. They recently <u>received funding</u> of \$200,000 over two years from the Canadian Institutes for Health Research (CIHR). The research team is partnering with Indigenous communities and organizations to strengthen vaccine confidence among Indigenous youth.



#### Innovative app improves access to Naloxone in the North

In collaboration with First Nations communities, Drs. Marion Maar, Darrel Manitowabi, Lorrilee McGregor, and Diana Urajnik received funding from the <u>Canadian Institutes of Health</u> <u>Research</u> (CIHR) to study recovery in the opioid crisis in Northern Ontario. The research team is working in partnership with NOSM U alumni Drs. Jordan Law, MacKenzie Ludgate and Owen Montpellier who developed the <u>Naloxone North app</u>, a free and confidential service that ships a Naloxone kit right to your door. The CIHR study, *A First Nations Community Response to Support Recovery from Opioids: Integrating Cultural and Land-based practices with clinical approaches Naloxone App* (2020-2024) will leverage their work to support ongoing development of the app and study its uptake in rural, Francophone and Indigenous communities.

#### Supporting ethically and culturally safe research practices

Dr. Lorrilee McGregor, Assistant Professor, Indigenous Health, is a founding member of the national <u>Reference Group for the Appropriate Review of Indigenous Research</u>, a community group of sixteen First Nations, Inuit and Métis individuals that provide advice to CIHR, Social Sciences and Humanities Research Council (SSHRC) and Natural Sciences and Engineering Research Council (NSERC) on ethically and culturally safe peer review approaches and practices for research conducted by and with Indigenous Peoples.

#### Indigenous women's reproductive health

Dr. Naana Jumah's research, led to the development of a new curriculum in postgraduate education across Canada called <u>Hearing Our Voices: An Indigenous Women's Reproductive</u>. <u>Health Curriculum</u>, indicates the importance of self-reflection and taking the time to become aware of one's personal biases. Dr. Jumah is an Assistant Professor at NOSM University, clinician researcher, obstetrician-gynaecologist, and Regional Cervical/Colposcopy Lead at the Thunder Bay Regional Health Sciences Centre.





## **CHRONIC DISEASE**

#### Improving services for youth experiencing severe mental illness

Dr. Chi Cheng, NOSM University Assistant Professor, holds a <u>Physicians' Services Incorporated</u>. (PSI)-50 Mid-Career Clinical Research Award of \$300,000 (over four years). Dr. Cheng's research focus is in health services and policy research, with a focus on vulnerable populations, and remote and rural populations. She's studying how to improve the delivery of accessible, quality and equitable services to youth experiencing severe mental illness, in rural and remote Ontario.

#### **Continuing smoking cessation research**

The Ministry of Health (MOH) provided Dr. Patricia Smith, NOSM University Associate Professor, with continued support for her *Moving on to Being Free Smoking Cessation* program in the amount of \$274,800. Since 2012, Dr. Smith's research has received over \$3 million in funding.

#### **Funding Postdoctoral Fellows**

Dr. David Marsh, NOSM University Professor and Vice Dean Research Innovation and International Relations, received a \$45,000 Mitacs grant to support a postdoctoral fellow, Dr. Kristin Morin. They are working on the research project, *Improving Clinical Outcomes for Patients at the Canadian Addiction Treatment Centres*.

## **RURAL MEDICINE & PRIMARY CARE**

#### Research supporting rural medicine in Huntsville and Marathon

The Huntsville Local Education Group has several new and ongoing <u>research projects</u>. Dr. Jennifer Macmillan, Assistant Professor, Surgery in Huntsville, and her research team received a Northern Ontario Academic Medicine Association (NOAMA) grant for the <u>The Evaluation of a Mobile Smartphone Application to Improve Antimicrobial Stewardship in a Rural Hospital</u>. This study aims to determine if the use of an app can improve antimicrobial prescribing practices in a rural hospital. The Spectrum app is customizable to provide locally-relevant content including guidelines, resistance patterns and dosing information. Dr. Hector Roldan, NOSM University Associate Professor, also received a NOAMA grant for the *Evaluation of Patient Outcomes Using Minimally Invasive Pilonidal Cyst Removal in a Small Rural Hospital*. Patient outcomes for surgical treatment of pilonidal cyst will be analyzed to determine if any one approach offers better results.

#### Launch of primary care research network NORTHH

Northern physicians and their practices are invited to join NOSM University's <u>Research Toward</u> <u>Health Hub (NORTHH)</u>. The network focuses on quality improvement and is seeking clinicians and researchers who are both interested in providing data for, and access to, this database to support their own practices and <u>inform better care in Northern Ontario</u>. NORTHH is the first practice-based learning and research network to offer unique Northern Ontario health primary-care, population-based datasets. It also prioritizes Indigenous data sovereignty. NORTHH is part of the Centre for Social Accountability and is led by Dr. Barb Zelek, NOSM University Associate Professor from Marathon.

Several 2021 NOAMA awards were granted to NOSM University Associate Professors and researchers in the Marathon disctrict:

- Dr. Eli Orrantia A Northern Ontario Rural Maternity Care Action Framework: Determining Factors and Solutions to our Rural Obstetrical Services Closures
- Dr. Sarah Newbery Collaborative leadership development network for Northwestern Ontario
- Dr. Barb Zelek Indigenous data sovereignty: Informing the Northern Ontario School of Medicine Research Toward Health Hub (NORTHH) Practice based research network (PBRN)





## CANCER

#### Partnership for cancer patient clinical trials

Dr. Lacey Pitre (MD 2010), Assistant Professor and medical oncologist at HSN in Sudbury, and co-lead Dr. Deborah Saunders, Associate Professor, are conducting clinical trials in cancer care and <u>leading new studies</u> that offer better access to clinical trials for rural and remote populations. Dr. Pitre is the project lead on the group working with Timmins and District Hospital and the Sault Area Hospital and is a member of the Canadian Remote Access Framework for Clinical Trials (CRAFT). Drs. Pitre and Saunders are Health Sciences North Research Institute's Cancer Solutions research co-leads.

## **CENTRE FOR SOCIAL ACCOUNTABILITY**

#### Interdisciplinary research for Social Accountability

Spring 2021 marked the launch of NOSM University's <u>Centre for Social Accountability</u>, generously supported by the <u>McConnell Foundation</u> and a donation from <u>Dr. Hugh Robertson</u>. With <u>Dr. Erin Cameron named inaugural Director of the CFSA</u>, this new interdisciplinary Centre is now dedicated to leading-edge population health, primary care research to innovate new models of education, incubate research in social accountability and advocate about issues that address inequitable health care in the North such as poverty, water insecurity and climate change.

#### Improving health care in Northern Ontario by informing policy

<u>Dr. Brianne Wood</u>, Associate Scientist at NOSM University and the Thunder Bay Regional Health Sciences Centre, was awarded the <u>Fellowship in Health Systems Resilience</u> by the <u>Health</u> <u>Research Foundation of Innovative Medicines Canada</u>. She was selected by the Foundation's committee of leading Canadian life sciences experts to receive \$450,000 over three years to study ways to improve health care in Northern Ontario and investigate how communities and health systems can better generate knowledge and understanding to help inform policy both in times of emergency and for the future of health system improvement.



# RESEARCH FUNDING

#### 2021 Awarded Research Funding

	# applied for	\$ applied for	# awarded	\$ awarded
External grants	40	\$6,400,487	21	\$2,130,130*
NOAMA grants	-	_	38	\$1,797,852
Overall			59	\$3,927,709
NOTE: # of grants applied for are those held at Lakehead University, Laurentian University or NOSM University. * Notice of Award for 10 grants still pending.				

#### 2021 Active Research Funding

	# of active grants	\$ amount funded
Medical Sciences	30	\$1,933,432
Human Sciences	15	\$1,091,106
Clinical Sciences	69	\$2,117,378
Total Research Grants		\$5,141,916

#### 2021 Internal Research Awards: Faculty

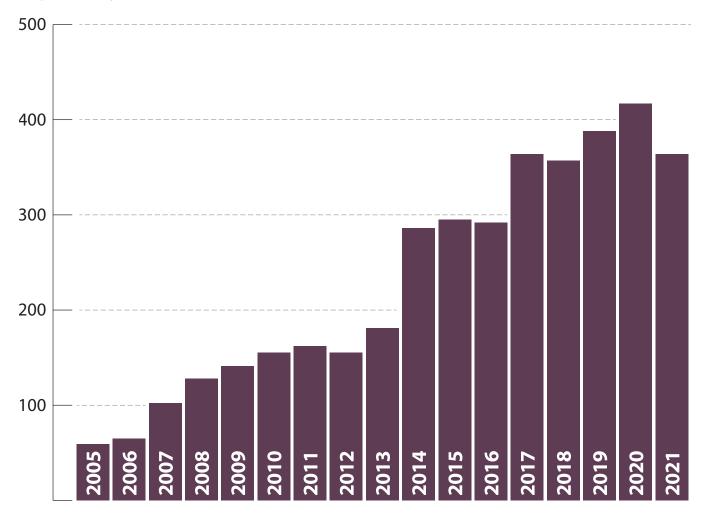
	# of applications funded	\$ amount funded
Rene Guilbeault Research Award	1	\$8,000
NOSMFA Research Development Fund	4	\$35,625
Education Research Fund	2	\$8,000
Total F	aculty Awards	\$51,625

#### 2021 Internal Research Awards: Students

	# of applications funded	\$ amount funded
Summer Medical Student Research Award	20	\$116,600
UME Student Award in Medical Education Research	2	\$16,200
Total Student Awards		\$132,800

## **Faculty Publications**

Total Number of Unique<sup>1</sup> Publications Organized by Year, 2005-2021



<sup>1</sup> "Unique" in this bar graph means that a publication was counted only once, even if there were multiple NOSM University faculty members listed as authors in the publication.

## 2021 Funding Awards

The <u>Northern Ontario Academic Medicine Association (NOAMA)</u> manages, distributes and administers the Alternate Funding Plan (AFP) on behalf of the Ministry of Health and its members. NOSM University faculty received:

- Clinical Innovation Opportunities Fund: 20 funded awards totalling \$955,998
- AFP Innovation Fund: 18 funded awards totalling \$841,581

#### Northern Ontario Heritage Fund Corporation's Workforce Development Stream: Research Interns (\$35,000 each)

- Dr. Sujeenthar Tharmalingam
- Dr. Simon Lees
- Dr. Erin Cameron

#### Northern Cancer Foundation Awards (\$30K each)

- Dr. David MacLean
- Dr. Sujeenthar Tharmalingam
- Dr. Christopher Thome

#### NOSM University Research Development Grants (OPSEU Unit 1) total of \$36,625 to:

- Dr. Erin Cameron
- Dr. Tom Kovala
- Dr. Simon Lees
- Drs. Christopher Thome and Sujeenthar Tharmalingam

#### NOSM University Educational Research Fund total of \$8,000 to:

- Dr. David McLinden
- Drs. Melanie Squarzolo and Alexander Anawati

#### NOSM University Student Research Awards total of \$116,600:

The Summer Medical Student Research Awards began in 2006. Student research projects provide NOSM University medical students the opportunity to pursue hands-on research in a broad range of areas, from biological studies to social research. A list of the 15 <u>Summer Medical Student Award Recipients</u> is available on the NOSM University website.

The Mach-Gaensslen Foundation of Canada has, since 2005, provided grants of approximately \$5,000 per student recipient at thirteen Canadian medical schools. This has enabled <u>5 Mach-Gaensslen award recipients</u> to conduct summer medical research in the fields of cardiology, oncology or psychiatry.

## RESEARCH, INNOVATION AND INTERNATIONAL RELATIONS PORTFOLIO AT NOSM UNIVERSITY



The Research and Graduate Studies Office at NOSM University is here to support with applications for research funding including budget development and personnel recommendations; assistance navigating certifications such as research ethics and animal care; administration of funding and contracts; providing research consultations; and, adherence to national regulations, compliance with certifications and funding requirements. Funding opportunities, research updates, and listings of upcoming events and opportunities are highlighted in the <u>Research Matters</u> newsletter.

The <u>research laboratories</u> at NOSM University are high quality and designated Biosafety Level 2. Labs are shared spaces among 19 active teams with 57 current members and researchers share responsibilities for equipment renewal. Since 2016, NOSM University faculty have supported and supervised 98 graduate (Masters and PhD) and fourth-year students in a variety of research areas including: cardiovascular, metabolism, immunology, microbiology, cancer, developmental biology, free radical biology, radiation and health.

NOSM University's first <u>graduate studies</u> degree, the <u>Master of Medical Studies</u> (MMS) was launched in 2020 and in 2021 doubled its cohort of students. The program is delivered asynchronously online and aims to support physicians who want to develop the skills necessary to build a successful research program. MMS students learn how to acquire grant funding, obtain ethics approval, develop a research question and appropriate methodology, complete a research thesis, and finally write and present the results at conferences and for publication. Profiles of the current graduate students are available on the <u>website</u>.

The <u>Health Sciences Library</u> at NOSM University offers consultations and education sessions, search assistance, copyright and <u>research supports</u>, as well as collection acquisition and management. The research and scholarly communication supports are delivered by skilled library professionals and curated to help busy researchers. This includes research consultations, scholarly publishing support, open access guidance and tracking and assessing research impact services.



To continue to facilitate ongoing growth and improvements in research, specifically in NOSM University's system capacity in analytics and quality improvement, the Office of Institutional Intelligence (OII) was launched in 2020. The OII team ensures effective and responsible use of data, maintains data governance and executes a data strategy that is unique to NOSM University. Data mining is helping to uncover trends in various health-related areas including physician training, practice locations and program evaluation. The OII is reporting data that influences informed decisions and quality improvement across the University.

The Northern Health Research Conference has been held annually since 2006 and, for the past two years, has been held virtually with plans to become a hybrid event in the future. NHRC brings researchers together to share their knowledge and to foster collaboration in priority research areas. The 2021 conference included 23 oral presentations and 25 poster presentations within the research themes: cancer, medical education, environment and health, clinical research, Indigenous Peoples' health, health services, and population and public health. With an accessible virtual format, over 120 attendees joined throughout the day, representing a broad range of Northern Ontario research communities. Participants from Southern Ontario and international attendees joined from Iran and Ireland.

A virtual series of <u>Health Research Town Halls</u> are a collaboration between NOSM University, Health Sciences North, Health Sciences North Research Institute, Laurentian University, Lakehead University, Thunder Bay Regional Health Research Institute, and the Thunder Bay Regional Health Sciences Centre. Each of the 9 town halls had a facilitator and 2-3 expert researchers speaking to the topic area. Town hall topics included: Health Promotion; Child, Youth and Families; Mental Health and Well Being; Funding Partners - Building your research program; Environmental Sustainability - Health and Mining; Healthy Aging; Health Equity; Obesity and Health Complications and Rural and Northern Health.

## In Summary

Research leaders across NOSM University are making an impact on a local, regional, national and international scale. Encouraging researchers and research teams to explore opportunities for collaboration on projects and areas of mutual interest is having a direct impact. NOSM University researchers are able to translate and share their findings to help inform policy and best practices in the priority health areas that are unique to Northern Ontario.

Forming new partnerships with municipalities and communities is underway. Listening to communities and working with them to help identify priority needs and connecting them to opportunities to participate in, as well as engage and invest in research, will lead to better care.

Research at NOSM University has always been rooted in long-established relationships across Northern Ontario, including partnerships with leading research teams, regional and local research institutes, universities, communities, teaching hospitals, teaching sites, and research ethics boards.

It's an exciting time to grow your research and share your research findings, and become a vital part of the growing NOSM University research community in Northern Ontario.

## Get Involved in Research at NOSM University

NOSM University is driving forward best-practice, evidence-based research that will help chart the path forward for equitable, culturally appropriate health care decisions and policy in Northern Ontario.

Here are ways you can get involved in research at NOSM University:

- 1. Advocate and collaborate. Reach out to the <u>Centre for Social Accountability</u> and engage in discussions about how you can contribute to research. Participate in discussions about NOSM University's Equity, Diversity and Inclusion mandate, and support research related to health systems and health human resource improvements.
- 2. **Go deeper.** Consider NOSM University's <u>Master of Medical Studies Program</u> and/or join <u>NORTHH</u> (Northern Ontario's first population-based primary care research database and network, offering unprecedented access to Northern Ontario data) to advance your own research.
- 3. **Participate in research and faculty-related conferences.** Explore the wide range of topics and active studies happening at NOSM University. **Find out how** <u>MERLIN</u> is supporting medical education research at the University and offering skills upgrading to those interested in doing research. Network with active researchers and leaders at the next <u>Northern Health Research Conference</u> and at <u>Northern Constellations</u>.
- 4. Share your research interests. Tell us the inspiration behind your research and what you've discovered. Actively participate in knowledge translation. Tell us what you've been up to: research@nosm.ca.

Explore our research initiatives and collaborations, and connect with the <u>Centre for Social</u> <u>Accountability</u>, <u>NORTHH</u>, <u>MERLIN</u>, <u>ICES North</u>, and research teams and facilitators. The success of these initiatives depend on active participation by alumni, faculty, staff and learners. Plus, you can further your own research interests and research skills in a highly-supportive team environment.

Whether virtually or in person, NOSM University can help you build strong, inclusive partnerships with regional research institutes, universities, communities, teaching hospitals, teaching sites and research ethics boards across the North.

Learn more about the NOSM University research opportunities, access to grants and support for grant applications, and assistance in research skills development. Subscribe to the NOSM University research newsletter <u>Research Matters</u> and visit <u>NOSM University Research</u> for a list of funding opportunities and current studies.

