

Thunder Bay Regional Health Research Institute

2024-2025 Annual Report



Thunder Bay Regional
Health Research
Institute

Exceptional **care** for
every patient, every time.

Message from the Board Chair and CEO



Research and innovation are essential to improving the quality of care at Thunder Bay Regional Health Sciences Centre. At the Thunder Bay Regional Health Research Institute, (TBRHRI) our work is shaped by the specific needs of patients and families in Northwestern Ontario. By focusing on local challenges and integrating patient perspectives into every project, we are helping deliver safer, more effective, and more responsive care.

Now in the third year of our joint *Strategic Plan 2026*, our efforts are focused on developing technologies and ideas rooted in the realities of our region. This work is made possible through strong partnerships with our health system colleagues, community stakeholders, and the generosity of our donors.

In November 2024, the Gairdner Foundation's *Wired for Wellness* webinar featured TBRHRI Chief Scientist Dr. Christopher Mushquash, alongside global leaders in mental health science. Dr. Mushquash highlighted

Indigenous-led research on mental health and substance use and emphasized the importance of culturally grounded services. His work reflects our commitment to community-led solutions that resonate with the people we serve.

We also continue to lead research that strengthens the broader health system. Dr. Brianne Wood's study on equity-centred learning health systems was published in the *International Journal of Health Policy and Management* in August 2024. Her research explores how embedding research within health care teams can support workforce development and system-wide improvement. It provides practical strategies to enhance capacity while addressing health equity.

In cancer care, we are advancing research that will directly benefit patients in our region. With support from the Thunder Bay Regional Health Sciences Foundation, Dr. Mohammed Ibrahim founded the Cancer Therapeutic and Diagnostic Research Northwestern Ontario (CANCARE NWO) collaborative. This group brings together clinicians and researchers to expand cancer trials and build research infrastructure. The initiative includes dedicated staffing and access to lab space and is helping establish

a stronger foundation for collaborative cancer research in Northwestern Ontario.

These initiatives reflect our growing impact and momentum. Our focus remains on innovation that improves care and addresses regional health priorities. As we look ahead, we remain committed to advancing research that is locally grounded, clinically relevant, and responsive to the communities we serve.

Dr. Andrew Dean

Board Chair, Thunder Bay Regional Health Research Institute Board of Directors

Dr. Rhonda Crocker Ellacott

President and CEO, Thunder Bay Regional Health Sciences Centre
CEO, Thunder Bay Regional Health Research Institute

Board of Directors

(as of March 31, 2025)

Executive:

Dr. Andrew Dean
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Dr. Tim Larocque
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Directors:

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Dr. Erin Cameron

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Dr. Mark Henderson
TBRHS Foundation Board of
Directors Representative

Message from the Vice President Research and Chief Scientist



The past year has been remarkable for the Thunder Bay Regional Health Research Institute (TBRHRI),

reflecting our commitment to excellence in health research. We remain committed to providing researchers and trainees with opportunities to pursue innovative projects that address the needs of the patients and communities we serve.

In alignment with our Strategic Plan 2026, TBRHRI fosters a unique research environment tailored to local and regional health care challenges. Our initiatives are guided by the needs of the communities, reinforcing our mission to make a meaningful impact through our work.

We held our annual Research Seed Funding Competition to support promising health research that enhances outcomes and builds capacity. This funding enables physicians, scientists, and staff to focus on health care research relevant to our region, particularly in basic science, clinical research, social inquiry, and other health disciplines that address patient needs at the Thunder Bay Regional Health Sciences Centre and across Northwestern Ontario. Congratulations to all successful candidates.

Dr. Alla Reznik, Canada Research Chair in Physics of Molecular Imaging, published a study in Medical Physics titled “A Multi-angle acquisition and

3D composite reconstruction for organ-targeted PET using planar detectors.” This research explores a multi-angle acquisition method to improve image quality and develop a more accurate tomographic system. Future work will focus on optimizing acquisition protocols and reconstruction techniques.

Dr. Mitchell Albert has made notable contributions to molecular imaging and magnetic resonance, co-authoring a poster on “R3-Noria-methanesulfonate,” a novel imaging agent for hyperpolarized Xenon-129 MRI, presented at the 20th EUROMAR Congress in 2024. His research aims to enhance imaging sensitivity through a new water-soluble resorcinarene trimer methanesulfonate (R3-Noria-MeSO₃H) with a dual contrast mechanism.

Dr. Michael Campbell's lab has accomplished significant achievements, including providing academic support to students earning PhD, MSc, and HBSoc degrees. Under Dr. Campbell's guidance, many papers and grant applications have been successfully advanced. Additionally, he was invited to serve as an external reviewer for the Sylvia Fedoruk Canadian Centre for Nuclear Innovation in Saskatoon.

In a study highlighted on the front cover of the European Journal of Medicinal Chemistry, Dr. Jinqiang Hou explored new drug candidates that block the CXCR4 receptor, offering potential treatment options for ovarian cancer. Additionally, Dr. Hou and colleagues published

“Design, Synthesis and Preclinical Evaluation of a High-Affinity 18F-Labelled Radioligand for Myocardial Growth Hormone Secretagogue Receptor 1A Before and After Myocardial Infarction,” accepted for publication in the Journal of Nuclear Medicine.

We are excited to showcase the research initiatives and achievements realized this year. Our academic partnerships play a pivotal role in advancing research, enabling us to push the boundaries of discovery and train the next generation of thought leaders. I would like to recognize the invaluable contributions of our students and early-career researchers. They bring fresh perspectives and innovative ideas that drive our projects forward. Their enthusiasm and commitment to excellence are instrumental in shaping the future of health research in our region. We look forward to continuing to grow our team.

Our commitment to developing a sustainable research program fueled by innovation and collaboration remains strong. We thank our dedicated scientists, staff, community partners, and board for their unwavering support and hard work.

Dr. Christopher Mushquash

Vice President Research,
Thunder Bay Regional Health
Sciences Centre

Chief Scientist, Thunder Bay
Regional Health Research
Institute

Scientists

Dr. Mitchell Albert

Lakehead University/ TBRHRI Research Chair in Molecular Imaging and Advanced Diagnostics Professor of Chemistry, Lakehead University Adjunct Professor of Biology, Biotechnology, Health Sciences, and Physics, Lakehead University Adjunct Professor of Medical Sciences, Northern Ontario School of Medicine Scientist, TBRHRI

Dr. Michael Campbell

Lakehead University/ TBRHRI Research Chair in Radiochemistry for Molecular Imaging and Advanced Diagnostics Assistant Professor, Department of Chemistry, Lakehead University Scientist, TBRHRI

Dr. Jinqiang Hou

Lakehead University/ TBRHRI Research Chair in Radiochemistry Assistant Professor in the Department of Chemistry, Lakehead University Scientist, TBRHRI

Dr. Alla Reznik

Canada Research Chair in Physics of Molecular Imaging Associate Professor, Department of Physics, Lakehead University Scientist, TBRHRI

Associate Scientists

Dr. Brianne Wood

Dr. Guillem Dayer

Dr. Sasha Bubon

Dr. Christopher Mushquash, PhD, C. Psych

Chief Scientist, TBRHRI and Vice President Research, TBRHSC; Canada Research Chair in Indigenous Mental Health and Addiction, and Professor in the Department of Psychology at Lakehead University and the Division of Human Sciences at NOSM University



Publications

Raynak, A., Wood, B., Mushquash, C., & McLaughlin, B. (2024). Intravenous drug use in the hospital setting: Advancing reconciliation for Indigenous Canadians using in-hospital harm reduction and culturally safe care. *Journal of Addictions Nursing*, 35(4), 237-242. <https://doi.org/10.1097/jan.0000000000000600>

Toombs, E., et al. (2024). Predicting mental health hospitalizations among First Nations adults in residential treatment. *International Journal of Indigenous Health*, 20(1). <https://doi.org/10.32799/ijih.v20i1.42246>

Melro, C. M. et al. (2024). A descriptive overview of healthy relationship programs for Indigenous youth in Canada: an integrated environmental scan. *Discover Public Health*. 21, 120. <https://doi.org/10.1186/s12982-024-00248-0>

Melro, C., et al. (2025) Engaging Indigenous partners in health service transformation: A framework for sustained engagement built on trust. *Res Involv Engagem* 11, 47 <https://doi.org/10.1186/s40900-025-00721-3>

Koscielniak, A., et al. (2025). Two-Eyed Seeing in Action: Project Extension for Community Health Outcomes - Indigenous Chronic Pain & Substance Use. *Canadian Journal of Pain*. 8(2), 2469213. <https://doi.org/10.1080/24740527.2025.2469213>

Quelch, J., et al. (2025). Understanding the circle of care: Indigenous service providers' perspectives on health and well-being. *AlterNative: An International Journal of Indigenous Peoples*, 0(0). <https://doi.org/10.1177/11771801251319274>

Skov, B, Ashley, AM, Malik, I, Storrs, H, Toombs, E, & Mushquash, CJ. (2025). The Relationship Between Culture and the Modifiable Risk Factors of Dementia Among Indigenous Peoples in Canada, the USA, Australia, and New Zealand: A Scoping Review Protocol. *International Journal of Qualitative Methods*, 24. <https://doi.org/10.1177/16094069251315394>

Grants

Canadian Institute of Health Research (CIHR), Planning and Dissemination Grant - Institute Community Support. (2024-2025) *Innovations in Arts-Based Research for Youth Mental Health: An International Symposium*. Awarded \$45,320

CIHR, Operating Grant: NEIHR Ontario (2024 - 2029) *Holistic Indigenous Mental Health and Wellness: Transforming Health Care Strengths and Solutions*. Stewart, S, & Shirt, C. (PAs). Linklater, R, Ansloos, JP, Bombay, A, Dewar, J, Goodwill, AO, Lavallee, L, Mashford-Pringle A, McCormick, R, **Mushquash C.J**, Richmond, C, & Smylie, JK (Co-As). Awarded \$4,000,000

CIHR Project Grant (2024 - 2029) *Supporting Indigenous workplace mental health: a mixed methods approach*. Kristman VL, Levkoe C, **Mushquash C**, Nugent M, Gilbeau A. Awarded \$2,575,000

HBHL Canadian Framework for Brain Health Umbrella Team Grant (May 2024) *Umbrella Team: Social Determinants of Health in Neuroscience Research*. Bombay, A, Cipriani, E, Geddes, MR, Gomez-Carrillo Castro, A, Hai, T, Juster, RP, Laliberté, V, Mahdavi, M, **Mushquash, C**, Sheiner, EO, Poline, JB., Shah, J, & Welch, V. Awarded \$100,000

CIHR Project Grant: Spring 2024 (2024 - 2029) *Supporting Indigenous workplace mental health: a mixed methods approach*. Kristman, VL, Levkoe, C, Mushquash, C, Nugent, M, Gilbeau, A. Awarded \$2,575,000

CIHR IYS-Net Phase 1: Building Learning Health System Networks *A learning health system to monitor, guide and advance quality of care, research and policy within Aire Ouverte, Quebec's integrated youth services initiative*. Iyer, S, **Mushquash, C**, et al. Awarded \$1,454,998

CIHR Accelerating Clinical Trials: Trial Networks Grant (2024-2026) *Canadian Network for Children and Youth Mental Health Trials*. Gallagher, L, Newton, A, Dimitropoulos, G, Hawke, L, Kimber, M, MacMaster, F, Mushquash, A, **Mushquash, C**, Sassi, R, Szatmari, P. Awarded \$187,500

Public Health Agency of Canada Preventing Gender-Based Violence: the Health Perspective (2024-2028) *Promoting Positive Healthy Youth Relationships*. Hill, ME, Hacquoil, A, Stewart, M, Nadin, S, **Mushquash, C**. Awarded \$1,000,000

One Child Every Child Strategic Catalyst Seedling Award. (2024-2027) *Applying Indigenous ways of being, knowing and doing to a talk therapy program for Indigenous youth, families and communities in Alberta*. Lindenbach, D, Eaglespeaker, EC, Dimitropoulos, G, **Mushquash, C**, Sipos, V, Wang, E, Arnold, P, Moore, EK, Austin, A, Hews-Girard, J, Ehrenreich-May, J, O'Neill, T, Scammell, J, Rose, T. Awarded \$50,000

CIHR - IYS-Net Phase 1: Building Learning Health System Networks (2024-2028) *Strengthening Capacity to Support Indigenous Youth and Communities by Sharing and Learning from Wise Practices, Data, and Stories*. **Mushquash, C**, Iyer, S, Dimitropoulos, et al. Awarded \$1,455,000

Catalyst Grant: Moving Upstream - Structural Determinants of Health (2025-2026) *Structural determinants of Indigenous health and well-being in Quebec: Improving policy and practice pertaining to substance use health and harm reduction*. Wendt, D, Phillips, M, Laliberté, A, Garneau, M (PIs), Blanchet Garneau, A, Laventure, M, Marsan, S, Motta-Ochoa, R, **Mushquash, C**, Plourde, C, Bertrand, K, Charlong, P, Millaire, K (Co-Is). Awarded \$124,852

Dr. Mitchell Albert

Lakehead University/TBRHRI Research Chair in Molecular Imaging and Advanced Diagnostics Professor of Chemistry, Lakehead University; Adjunct Professor of Biology, Biotechnology, Health Sciences, and Physics, Lakehead University; Adjunct Professor of Medical Sciences, NOSM University; Scientist, TBRHRI



Publications

Batarchuk V, et al. (2024) Hyperpolarized Xenon-129 Chemical Exchange Saturation Transfer (HyperCEST) Molecular Imaging: Achievements and Future Challenges. *Int J Mol Sci*. 25(3): 1939. <https://doi.org/10.3390/ijms25031939>

Hodgson A, et al. (2024) Novel frequency selective B1 focusing passive Lenz resonators for substantial MRI signal-to-noise ratio amplification. *Physics in Medicine and Biology* 69(24): 245010 <https://doi.org/10.1088/1361-6560/ad965b>

Popov, MA et al. (2025). Magneto-optical tuning of ferromagnetic resonance in silicon-doped yttrium iron garnet. *Journal of Applied Physics*, 137(13), 133905. <https://doi.org/10.1063/5.0200174>

Grants

NFRFE (2025 - 2027) *Non-invasive immunohistochemistry of human breast cancer using hyperpolarized xenon-129 molecular MRI*. Yurii Shepelytskyi (PI), **Mitchell Albert** (Co-A) (Awarded)

NSERC Discovery Grant (2024 - 2029) *Hyperpolarized Xenon MRI Biosensor Development Program PI: Dr. Mitchell Albert* Awarded \$145,000

INOVAIT (2024-2026) *Intelligent PET Low-Dose Brain Imaging PI: Michael Waterston Dr. Mitchell Albert* Awarded \$1,985,330.94

Patents

"A System and Methods for Organ-Targeting Multinuclear Functional and Molecular Magnetic" Y. Shepelitsky, A. Reznik, M. Albert, United States Application No: 19/173,233

Dr. Michael Campbell

Lakehead University/TBRHRI Research Chair in Radiochemistry for Molecular Imaging and Advanced Diagnostics; Assistant Professor, Department of Chemistry, Lakehead University; Scientist, TBRHRI



Presentations

Phenylthiazoles as ligands for Pd(II) Suzuki-Miyaura cross-coupling catalysts

Craig McKinnon, **Michael Campbell**, Clifford Agyei, Craig Robertson

Canadian Chemical Conference and Exhibition; Winnipeg MN; June 3, 2024

Playing with your toys in ways they were never intended. Neutron activation using a medical cyclotron

Michael G. Campbell, Adrianna Tikka, Sarah Tribe, Stephen Kinrade

Canadian Chemical Conference and Exhibition; Winnipeg MN; June 4, 2024 *N-Heterocyclic Carbene Promoted Enantioselective Arylation of Ferrocenes using Palladium Catalysts*

Connor McGovern, **Michael Campbell**, Christine Gottardo

Canadian Chemical Conference and Exhibition; Winnipeg MN; June 6, 2024

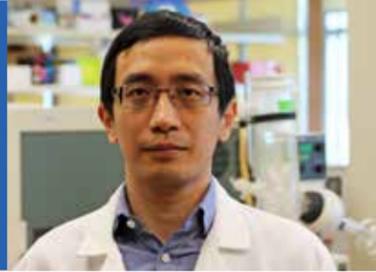
Publications

Liu, W, et al. (2024) Lysophosphatidic acid receptor 1 (LPA1) antagonists as potential migrastatics for triple negative breast cancer. *ChemMedChem* 19(16): <https://doi.org/10.1002/cmdc.202400013>

Clifford, A, et al. (2024) Simple thiazole-based ligands for palladium (II) Suzuki-Miyaura aryl cross-coupling catalysts" *Canadian Journal of Chemistry* 102(12): 830-835 <https://doi.org/10.1139/cjc-2024-0023>

Dr. Jinqiang Hou

Lakehead University/TBRHRI Research Chair in Radiochemistry Assistant Professor in the Department of Chemistry, Lakehead University Scientist, TBRHRI



Publications

Sullivan R, et al. (2024) Design, Synthesis and Preclinical Evaluation of a High-Affinity 18F-Labelled Radioligand for Myocardial Growth Hormone Secretagogue Receptor 1A Before and After Myocardial Infarction. *Journal of Nuclear Medicine* 65(10):1633-1639 <https://doi.org/10.2967/jnumed.124.267578>

Liu, W, et al. (2024) Lysophosphatidic acid receptor 1 (LPA1) antagonists as potential migrastatics for triple negative breast cancer. *ChemMedChem* 19(16): <https://doi.org/10.1002/cmdc.202400013>

Guo XC, et al. (2025) PET Imaging of Solid Tumors with a G-Quadruplex-Targeting 18F-Labeled Peptide Probe. *Journal of Medicinal Chemistry* 68 (3): 2804-2814 10.1021/acs.jmedchem.4c02121 This paper was

recently highlighted as Front Cover in *J. Med. Chem.*

Liu, W, et al. (2024) *Cancer Cells in Sleep Mode: Wake Them to Eliminate or Keep Them Asleep Forever?* *Cells* 13 (23),2022 <https://doi.org/10.3390/cells13232022>

Mukaidaisi, M, et al. (2024) *Several birds with one stone": exploring the potential of AI methods for multi-target drug design".* *Molecular Diversity* 1-17 <https://doi.org/10.1007/s11030-024-11042-0>

Grants

Mitacs Elevate Postdoctoral Fellowship Program (2024-2026) *Development and Evaluation of Novel Small Molecules Targeting Lysophosphatidic Acid Receptor 1 for the Treatment of Triple-Negative Breast Cancer*

Dr. Jinqiang Hou – Academic Supervisor, Postdoctoral Fellow - Wenjie Liu Awarded \$120,000

2025 NOAMA AFP Innovation Fund. *Development of Novel Treatment and Identification of Novel Biomarkers for Breast Cancer.* **Dr. Jinqiang Hou** (co-Lead); Dr. Mohammed Ibrahim (Lead) Awarded \$60,000

NSERC-DG COVID-19 Extension with Funds, Awarded: \$24,000

Ontario Institute for Cancer Research OICR-CTIP *Development of Molecular hybrids to Tackle Cervical Cancer* **Dr. Jinqiang Hou** (PI), Dr. Guillem Dayer (Co-PI) Awarded \$84,430

Thunder Bay Regional Health Sciences Foundation *Flexstation3 Microplate Reader for the discovery of cancer migrastatics* **Dr. Jinqiang Hou** (PI) Awarded \$189,951

Dr. Alla Reznik

Canada Research Chair in Physics of Molecular Imaging; Associate Professor, Department of Physics, Lakehead University; Scientist, TBRHRI



Publications

Rapley M, et al. (2024) Case report: Possible role of low-dose PEM for avoiding unneeded procedures associated with false-positive or equivocal breast MRI results. *Frontiers in Oncology* 14: 1405404 <https://doi.org/10.3389/fonc.2024.1405404>

Shahi A, et al. (2024) Multi-angle acquisition and 3D composite reconstruction for organ-targeted PET using planar detectors. *Med Phys* 52(4): 2507-2519 <https://doi.org/10.1002/mp.17606>

Rado, J, et al. (2025) *Mechanical Stress-Induced Defects in Thick a-PbO Layers* *Materials* 18, 1904. <https://doi.org/10.3390/ma18091904>

Komarov, B, et al. (2025) *Transition to GPU-based Reconstruction for Clinical Organ-Targeted PET Scanner.*

Physics in Medicine and Biology, 70 055001. <https://doi.org/10.1088/1361-6560/adb198>

Popov, MA, et al. (2025). *Magneto-optical tuning of ferromagnetic resonance in silicon-doped yttrium iron garnet.* *Journal of Applied Physics*, 137(13), 133905. <https://doi.org/10.1063/5.0201234>

Grants

Mitacs Accelerate (2024-2026) *Advanced technologies for breast imaging.* **Dr. Alla Reznik** (Academic Supervisor), Interns: Harutyun Poladyan, Janos Rado, Mikhail Vostokov, Galina Nagicheva, Anirudh Shahi Awarded: \$360,000

Clinical Trials and Commercialization

Breast Cancer Combined Visualization And Characterization

Tools (bCOMBAT): Low-Dose PEM and Liquid Biopsy Study

This study assesses the effectiveness of low-dose Positron Emission Mammography (PEM) and liquid biopsy in detecting breast abnormalities in high-risk patients. Early findings suggest low-dose PEM is more sensitive than liquid biopsy, with high specificity compared to MRI. Data from the first 25 patients (of 100 planned) has been submitted to the San Antonio Breast Conference (Dec. 2024).

Patents

"A System and Methods for Organ-Targeting Multinuclear Functional and Molecular Magnetic" Y. Shepelitsky, **A. Reznik**, M. Albert, United States Application No: 19/173,233

Research Seed Funding Competition

The Research Seed Funding Competition aims to support promising health research that enhances outcomes and builds capacity while also helping researchers apply for external funding. The funding focuses on health care research that is relevant to the residents of our region, emphasizing areas such as basic science, clinical research, social inquiry, humanities, or other health research that addresses patient needs at Thunder Bay Regional Health Sciences Centre and across Northwestern Ontario.

Understanding the perceptions of Regulated Health Care Professionals' current workload and associated/influencing variables in a hospital setting in Northwestern Ontario: An interdisciplinary perspective

Primary Applicant - Andrea Raynak RN, PhD(c), Director, Nursing Practice, TBRHSC

Co-Investigators - Brianne Wood, PhD, Associate Scientist, TBRHRI; Holly Freill MSc RD, Interprofessional Educator, TBRHSC; Brittney McLaughlin MN, RN, Interprofessional Educator, TBRHSC

Background: Emerging evidence indicates that workload is an important factor that influences the retention of regulated health care professionals in an acute care hospital setting. Supporting research has primarily explored regulated health care professionals' experiences pre-pandemic and amidst the pandemic, which can be argued to have influenced their perceptions of workload.

Examining the Rate of Inflammatory Breast Cancer within a Northwestern Ontario Population

Primary Applicant - Dr. Adrien Chan, Medical Oncologist, TBRHSC, Assistant Professor, NOSMU

Co-Investigators - Dr. Olexiy Aseyev, Medical Oncologist, TBRHSC, Associate Professor, NOSMU; Ms. Samantha G. Ribey, UGI, NOSM U

Background: Inflammatory breast cancer (IBC) is a rare but aggressive form of breast cancer with a high risk of metastasis and a low survival rate. Early detection and treatment of IBC is extremely pertinent to improve patient outcomes. Many factors determine the treatment of IBC, including hormone status (estrogen and progesterone), human epidermal growth factor receptor 2 (HER2) status, and cancer staging. The population of Northwestern Ontario (NWO) has been shown to have higher rates of cancer diagnosed at a later stage, leading to poorer health outcomes. There are no statistics on the rate of IBC in a NWO population.

The Incidence and Risk Factors of Hepatocellular Carcinoma in Northwestern Ontario: A Retrospective Cohort Study

Primary Applicant - Dr. Joseph Del Paggio, Medical Oncologist, TBRHSC, Assistant Professor, NOSMU

Co-Investigator - Dr. Jordan Green, Gastroenterologist, TBRHSC, Assistant Professor, NOSMU

Background: Hepatocellular carcinoma (HCC) is a rare malignancy with a significantly poor prognosis if not detected early, manifesting as the second most common cause of cancer-related deaths. The incidence of HCC has been increasing worldwide, including in Canada and Ontario, based on data from 2015. However, the incidence of HCC has not been examined in Ontario since 2013, making the available data more than 10 years old.

Opioid Sparing Effects of Regional Blocks in Outpatient Rotator Cuff Surgery: A Prospective Cohort Study

Primary Applicant - Dr. Jubin Payandeh, Orthopaedic Surgeon, TBRHSC, Assistant Professor, NOSMU

Co-Investigators - Dr. Neil Thomas, Orthopaedic Surgery Resident, NOSMU; Dr. Michael Riediger, Orthopaedic Surgeon, TBRHSC, Assistant Professor, NOSM U; Mr. Sacha Dubois, Assistant Professor, NOSMU; Ms. Rabail Siddiqui, Research Development Coordinator (Acting), TBRHRI; Ms. Lahama Naeem, Orthopaedic Research Development Officer (Acting), TBRHRI

Rotator cuff injuries are common shoulder disorders that can significantly impact one's ability to accomplish daily activities due to debilitating pain. Treatment for rotator cuff injuries may involve surgery which can cause significant post-operative pain, leading to a reportedly high rate of post-operative opioid use. However, there is some evidence that use of peripheral nerve blocks can potentially reduce the dose and need for opioids post-operatively.

Year in Review



Photo (L-R): Emcee Mary-Jean Cormier, keynote speaker Dr. Alla Reznik, and patient speaker Jennifer Miller at Thunder Bay Regional Health Sciences Foundation's Tbaytel Luncheon of Hope.

Tbaytel Luncheon of Hope

At this year's Tbaytel Luncheon of Hope hosted by the Thunder Bay Regional Health Sciences Foundation, Dr. Alla Reznik, Canada Research Chair in Physics of Molecular Imaging Associate Professor, Department of Physics, Lakehead University and Scientist, TBRHRI, was invited to speak about the future of breast cancer diagnosis.

Dr. Reznik has dedicated her career to finding new and better ways of detecting breast cancer, particularly for patients with dense breast tissue. Her research led to the development of Radialis, a low-dose Positron Emission Tomography (PET) cancer cells during the scan.

In short, Radialis may reduce the need for biopsy, reduces the risk for unnecessary treatments including surgery, and has a much lower rate of false positives than MRI.

In her October 2024 talk entitled *"Better Breast Imaging, Better Treatment: Ultra-high sensitivity Positron Emission Mammography (PEM) technology"*, she spoke of the issues her friend faced because of dense breast tissue, the challenges of traditional mammography and MRI, and how Radialis may help overcome those challenges.



Local Research Improving Cancer Treatments Worldwide

The new Cancer Therapeutic and Diagnostic Research Northwestern Ontario (CANCARE NWO) research group formed only a few months ago, but it already has an impressive head start with several studies underway.

Dr. Mohammed Ibrahim, a medical oncologist at the Cancer Centre and the group's founder, said that the new research group provides an opportunity

for researchers to collaborate within the region and potentially with other research groups around the world.

"CANCARE NWO is a group that combines physicians and scientists," Dr. Ibrahim said. "It's a platform for conducting cancer research in all its types including clinical and pre-clinical (lab) research. It's the first group of its kind in Northwestern Ontario."

[Click for full article](#)

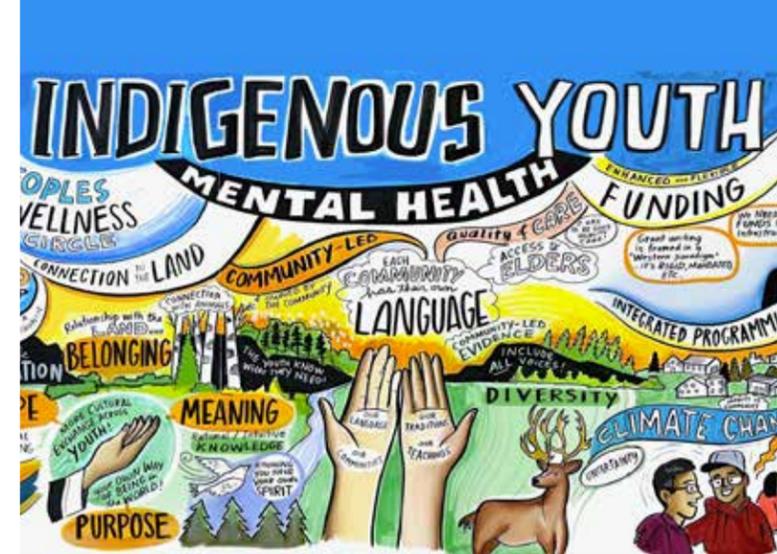


Promising drug discovery research gets funding boost from Ontario Institute for Cancer Research

Congratulations to all of the Cancer Therapeutics Innovation Pipeline recipients — including Dr. Jinqiang Hou, Lakehead University and Thunder Bay Regional Health Research Institute (TBRHRI), and Dr. Guillem Dayer (TBRHRI) - who will explore a potential treatment

for cervical cancer, the world's third most common cancer among women aged 20-39. By targeting a protein found only in cervical cancer cells, they will develop a drug to find and kill cancer cells, with limited damage to surrounding healthy tissue.

[Click for full article](#)



Strengthening capacity to support Indigenous youth mental health services

A national initiative, the ACCESS Open Minds Indigenous Youth Mental Health and Wellness Network, to enhance Indigenous youth mental health services, co-led by researchers from Lakehead University and McGill University has received \$1.45 million from the Canadian Institutes of Health Research.

Lakehead's Dr. Christopher Mushquash, Canada Research Chair in Indigenous Mental Health and Addiction, Professor in the Department of Psychology, Vice President Research at the Thunder Bay Regional

Health Sciences Centre and Chief Scientist, Thunder Bay Regional Health Research Institute, and McGill's Dr. Srividya Iyer, Tier 1 Canada Research Chair in Youth, Mental Health, and Learning Health Systems and Professor in the Department of Psychiatry, are leading the five-year project. This initiative will strengthen capacity amongst Indigenous communities and integrated youth services to provide culturally affirming, high quality and responsive mental health services for Indigenous youth.

[Click for full article](#)

Thunder Bay Regional Health Sciences Centre and Thunder Bay Regional Health Research Institute

Thunder Bay Regional Health Sciences Centre (TBRHSC) is a 425-bed acute care facility and academic health sciences centre. As the only tertiary health care provider in the region, our Hospital provides comprehensive care to more than 245,000 people in a region the size of France. TBRHSC teaches the next generation of health care providers and advances medical research through the Thunder Bay Regional Health Research Institute (TBRHRI). Patients benefit from interprofessional teams of dedicated health care providers and access to leading-edge medical technology and clinical trials. TBRHSC is proudly affiliated with Lakehead University, Confederation College and NOSM University.

TBRHSC operates on Sacred Land. We respectfully acknowledge that we work on the traditional lands of the people of Fort William First Nation. This land is the territory of the Anishinabek Nation and is home to the Robinson-Superior Treaty of 1850. Today, Thunder Bay is the home to many Indigenous Peoples from across Turtle Island and we are grateful to have the opportunity to work together in this community and on this territory.

We are committed to embedding equity, diversity and inclusion in all the care, education and research that we do. We believe that our differences are key to our growth as an organization and a community, and to our ability to develop innovative approaches to deliver exceptional care to every patient, every time.



STRATEGIC PLAN



Exceptional care for every patient, every time.

For the first time ever, *Strategic Plan 2026* is a joint plan for Thunder Bay Regional Health Sciences Centre (TBRHSC) and Thunder Bay Regional Health Research Institute (TBRHRI). As the inaugural joint strategic plan, it is the foundation on which significant progress in patient care and health research will be made. This plan was built on extensive engagement with patients, families, the public, volunteers, staff and health service providers. Updated Mission, Vision and Values statements reflect the input received, while responses were clear that the organizations' philosophy needs to remain the same: patients at the centre of everything we do. TBRHSC is committed to upholding its position as a leader in Patient and Family Centred Care by introducing the principles of co-design into care planning to ensure care better reflects the needs of the patients and families. *Strategic Plan 2026* is an evolution that

builds on the successes of the previous strategic plan, with focused strategic directions identified during stakeholder consultations, including Equity, Diversity, & Inclusion, Patient Experience and Staff Experience. A clear emphasis on Research, Innovation, & Learning will help prioritize and integrate research efforts, build research capacity and create an environment that better supports research, innovation, teaching, and learning. The strategic enabler Sustainable Future is critical to the organizations' financial health and future success, and includes supporting expansion of digital health, creation of a clinical services plan, advancing partnerships and system integration, and achieving operational sustainability. Through the next few years, the plan will be a base for continuous improvement, driven by the needs of the patients and families served, and the commitment to *exceptional care for every patient, every time.*

For a closer look at our Strategic Plan 2026, check out this video:

MISSION:

We provide quality care to patients and families, supported and advanced by research, innovation, and education that is responsive to the needs of the population of Northwestern Ontario.

VALUES:

DIVERSITY

We foster a people-centred environment that is inclusive of all.

COMPASSION

We show empathy, compassion and respect by acknowledging ourselves as learners in understanding the experiences of others, and by considering the needs, thoughts and feelings of those we serve and with whom we work.

EXCELLENCE

We deliver the highest quality service in every encounter and in all our work.

INNOVATION

We embrace continual learning and improvement to drive positive change.

ACCOUNTABILITY

We sustain and reinvest in our mission and communities by wisely planning for and managing our resources.

PHILOSOPHY:

Patients at the centre of everything we do.

VISION:



OUR STRATEGIC DIRECTIONS:

- Equity, Diversity, & Inclusion**
We all belong
- Patient Experience**
Empathy, compassion, and respect in every encounter
- Staff Experience**
This is where we want to work, grow, and thrive
- Research, Innovation, & Learning**
Driven by the needs of our patients, our staff, and our communities

Sustainable Future Ensuring our Healthy Future

Equity, Diversity, & Inclusion

We all belong



WHAT WE WILL DO

Embed Equity, Diversity, and Inclusion in everything we do.

HOW WE WILL DO IT

- Assess policies and procedures, using an equity lens.
- Create an Equity, Diversity, & Inclusion Steering Committee.
- Recruit Indigenous staff.
- Identify opportunities for education and development of Indigenous individuals.

WHAT WE WILL DO

Provide a culturally safe experience for all patients and staff.

HOW WE WILL DO IT

- Provide cultural safety and equity, diversity, and inclusion training for all staff.
- Conduct a walk-through of the Hospital's physical environment with an equity lens.
- Implement the principles of the Truth & Reconciliation Call to Action.

HOW WE WILL MEASURE IT

- Increase staff engagement in cultural safety and equity, diversity, and inclusion training.
- Increase positive patient experience survey results related to their experience, views, and beliefs being acknowledged as part of care.

Equity, Diversity & Inclusion (EDI) Physical Environment Review

This project aims to create a culturally safe environment. We plan to conduct a facility review with an EDI lens to identify gaps and determine areas for improvement. Our goal is to integrate EDI considerations into future space planning and assess the impact of current capital projects, reinforcing our commitment to an inclusive and equitable environment.

Indigenous Recruitment and Education

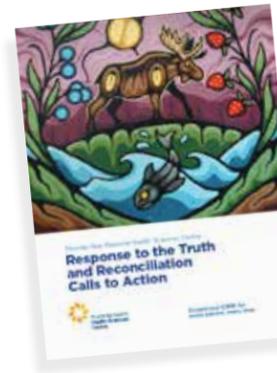
This initiative addresses the under-representation of Indigenous Peoples in health human resources (HHR) roles at Thunder Bay Regional Health Sciences Centre and Thunder Bay Regional Health Research Institute. We will focus on recruitment for HHR positions, evaluate current practices, implement new strategies, and monitor progress. Insights gained will also enhance recruitment for volunteers, Patient Family Advisors, and other staff roles.

EDI Experience Sharing to Build Understanding and Respect

We are creating an EDI assessment tool for managers to evaluate and improve EDI practices within their teams. This tool will provide practical insights to support a more inclusive work environment, helping managers build a more equitable workplace.

Together, these projects help us foster a more inclusive and equitable environment for patients and staff.

Inaugural Report on Response to Truth and Reconciliation Commission's Calls to Action



Thunder Bay Regional Health Sciences Centre (TBRHSC) commemorated National Day for Truth and Reconciliation by launching an inaugural report on the Hospital's response to the Truth and Reconciliation Commission's 94 Calls to Action.

"I am pleased to update the community on the work that our Hospital has

completed to advance truth and reconciliation. This report shows the work we have done to date through Strategic Plan 2026 and highlights our efforts to address the Truth and Reconciliation Commission's 94 Calls to Action," said Dr. Rhonda Crocker Ellacott, President and CEO of TBRHSC, and CEO of Thunder Bay Regional Health Institute (TBRHRI).

"We will continue to apply the 94 Calls to Action as a lens to every decision we make as an institution, to ensure we deliver the highest level of compassion and inclusion to every patient, every time. We look forward to providing updates on this important work to the community annually."

[Click for full article](#)



Repairing the Sacred Circle

As we work to advance Indigenous Cultural Awareness for our staff, professional staff, learners and volunteers, Miskwaa Biidaaban - the Indigenous Collaboration, Equity and Inclusion portfolio - launched "Repairing the Sacred Circle: An Indigenous Cultural Awareness and Education Primer." Designed, developed and launched by N'doo'owe Binesi in 2022 with support and guidance of the Ogichidaa Onaakonigewin - Elders Council, the session introduces participants to an insightful way of thinking about Truth and Reconciliation. The training provides information on the key foundational concepts that have influenced the historical and current treatment of Indigenous Peoples in health care. It is a reflective pathway for cross-cultural discussion and an entry point to create the necessary change for awareness and inclusiveness within our Hospital and Research Institute. This regionally specific training aligns to the strategic direction "Providing a culturally safe experience for all patients and staff".

Indigenous Career Experience

In its fourth year, Indigenous Career Experience (ICE) aims to engage Indigenous youth by offering valuable insights into various career paths in health care and fostering a connection with Thunder Bay Regional Health Sciences Centre (TBRHSC). A key component involves reaching out to high school students before they finalize their post-secondary career choices. By offering students the opportunity to be involved in hands-on learning, the program provides an opportunity for students to get excited about a future career in health care. It also facilitates the recruitment of Indigenous staff within the health care sector. ICE introduces Indigenous youth to Hospital operations and encourages them to consider volunteering opportunities. Over 60 students from school boards across Thunder Bay were on-site at TBRHSC to explore many different health care career and volunteer options. As part of the program, students experienced a day filled with tours, presentations,

and hands-on activities designed to provide them with an authentic feel of various health care roles. Students had the opportunity to interact with managers and staff, ask questions, and learn about the educational pathways required for various positions. Throughout the day participants had the opportunity to visit departments that included the Miskwaa Biidaaban (Indigenous Health Hub), Laboratory Services and Medical Device Reprocessing as well as participate in a clinical simulation and try different tools used in the Operating Room.

Indigenous Peoples may face challenges and barriers when accessing health care services or educational opportunities, particularly for those travelling long distances from their communities. By addressing these challenges and improving cultural safety, TBRHSC is striving to create an environment where Indigenous staff and patients can thrive.

[Click for full article](#)

Patient Experience

Empathy, compassion, and respect in every encounter



WHAT WE WILL DO

Treat each person with compassion, respect, and empathy.

HOW WE WILL DO IT

- Develop and implement the framework for co-design.
- Embrace patient-centred communication principles.

WHAT WE WILL DO

Focus relentlessly on quality.

HOW WE WILL DO IT

- Develop an annual Quality Improvement Plan.
- Incorporate quality best practices.
- Review a summary of patient safety events.
- Assess current services through the lenses of consistency, coordination, and transitions.

WHAT WE WILL DO

Become experts in caring for patients with complex care needs.

HOW WE WILL DO IT

- Improve coordination, care, and support for patients with complex health issues.
- Develop a Substance Use and Addictions Strategy.

HOW WE WILL MEASURE IT

- Increase positive patient experience survey results.
- Improve quality of care and reduce preventable harm.
- Improve access, care, and support for patients with complex care needs in collaboration with our partners.

Coordination and Support for Patients Who Frequently Access Hospital Services

Thunder Bay Regional Health Sciences Centre (TBRHSC)'s Heart Failure Team and Outpatient Clinic have operationalized a team that connects patients who present to the Hospital with heart failure to a rapid access outpatient heart failure clinic. The clinic's focus is to optimize treatment and reduce risk of return to Hospital. Initially, patients are identified in the Emergency Department and seen by a nurse practitioner and physician to determine the best plan of care.

Patients will have an appointment with a nurse practitioner within one-week post-Hospital visit. Within two to four weeks post-discharge, patients will have an appointment with a physician. The outpatient heart failure clinic operates once a week, with patients are seen for follow up on interventions initiated in the Hospital.

Through 2024 -2025, the heart failure clinic at TBRHSC saw **253** referrals and a decrease in repeat visits for heart failure from 24.2% in 2023-2024 to 18.8% in 2024-2025.

Clinical Decision Unit

To further support our capacity, we're excited to introduce a new model of care in the Emergency Department. Efficient patient flow and capacity management are critical for ensuring a positive patient experience, optimizing resources and providing quality care. Through the coordination of the Patient Flow team and the collective efforts of the Hospitalists, Clinical Decision Unit, and all Allied Health Care teams, there have been significant improvements to support patient flow both into and out of our facility. Teams have been working hard to transfer patients from the Emergency Department to a bed, and we are seeing great progress, resulting in a decreased length of stay for these patients.

Co-Design Development Building the Future Together

As part of the Patient Experience strategic priority in *Strategic Plan 2026*, Thunder Bay Regional Health Sciences Centre (TBRHSC) has begun the design and implementation of a co-design framework. This framework aims to foster a shared understanding of co-design among staff, patients, and families, ensuring it becomes a cornerstone of how we deliver care.

A diverse committee of over 30 individuals—including frontline staff, physicians, administrative staff, and Patient Family Advisors (PFAs)—collaborated to craft a definition that reflects the values of TBRHSC.

Once the definition was finalized, the team developed a comprehensive framework to integrate co-design into the fabric of TBRHSC. This framework draws on Appreciative Inquiry and emphasizes person-centred communication principles, ensuring equity, relationship-building, and the inclusion of all voices. It establishes co-design as both a guiding philosophy and an actionable strategy for change.

The implementation of co-design spans two levels, macro- and micro-level co-design.

Macro-Level Co-Design: At the organizational level, co-design serves as a framework for large-scale projects and a change management tool. This structured approach ensures that initiatives across departments and programs are informed by the perspectives and insights of patients and families, creating a shared vision for improvement. The development of the macro-level framework has been completed, providing the foundation for this work.

Micro-Level Co-Design: At the bedside, co-design is about empowering patients to actively co-create their care. This involves applying person-centred communication principles to establish trust, foster mutual understanding, and ensure that care decisions reflect the unique needs and preferences of each patient. The micro-level work is now underway, focusing on embedding co-design into everyday interactions between staff, patients, and families.

By integrating co-design at both the macro and micro levels, TBRHSC is creating a culture where patients and families are truly equal partners in care.

Geriatric Emergency Management Nurses

At Thunder Bay Regional Health Sciences Centre, the Emergency Department (ED) is supported by two Geriatric Emergency Management (GEM) nurses. These specially trained registered nurses have expertise in geriatrics and conduct comprehensive assessments to identify risks such as cognitive impairment, functional decline, and social vulnerabilities. They work collaboratively with the interdisciplinary team to develop individualized care plans that support optimal patient outcomes and safe transitions from the ED.

GEM nurses also play a key role in educating patients, families, and health care providers on evidence-based geriatric care practices.

Additional responsibilities of the GEM nurses include:

- Supporting the implementation of standardized protocols to screen and refer high-risk older adults in the ED, including ongoing staff education and training.
- Conducting assessments to identify acute symptoms, underlying medical conditions, physical and cognitive functioning, emotional well-being, and home supports for at-risk seniors.
- Recommending and facilitating care plans for frail older adults within the ED and across Hospital services, including specialized geriatric programs.
- Helping to strengthen connections with community services such as primary care and Ontario Health at Home.

Contributing to the development of innovative solutions to improve patient transitions between the ED and community providers, including protocol development and education initiatives aimed at building system capacity.



Quality Huddles

As part of the Patient Experience pillar of our *Strategic Plan 2026*, one of the primary goals is to “Focus relentlessly on quality”. Quality Huddles was a corporate initiative that began in January 2023 and since that time we have evolved and expanded to both clinical and non-clinical areas. Quality Huddles is an avenue to share team successes, opportunities for improvement and discuss safety and quality issues. It is evident that this corporate initiative is providing a forum where all staff can feel they are contributing to our safety culture and driving quality work within all areas. In 2024/2025, Quality Huddles expanded to 58 departments.

The inaugural Quality Huddle Excellence Awards was held on October 17, 2024. Over 100 staff members from more than 50 departments came together to celebrate the various change ideas/quality improvement initiatives that have made a significant impact on Safety, Staff Experience, teamwork and collaboration, workflow improvement and promote Patient and Family Centred Care.

A special congratulations goes out to all the award winners who came forward to share their valuable change ideas and the innovative initiatives from various departments who implemented Quality Huddles throughout the year.



Falls Prevention Campaign

Thunder Bay Regional Health Sciences Centre (TBRHSC) re-launched the Falls Prevention Committee. The purpose of the Falls Prevention Committee is to prevent falls and reduce injuries from falling. This committee meets monthly to discuss current trends in falls data and potential preventive strategies for implementation.

The purpose of this committee is to identify activities that will support the reduction of falls and reduce the risk of patient injuries from falls in the Hospital. Over the past year, this team has been working hard on several initiatives not only aimed at reducing falls, but also highlighting that **everyone has a role to play** (whether clinical, non-clinical, inpatient or outpatient), including:

- Implementing non-slip socks (across inpatient and outpatient areas).
- Conducting fall risk simulations (with Dietary Aids and Housekeeping).
- Completing various audits to identify opportunities for improvement (meal tray delivery, time of falls, etc.).
- Updating the bedside communication whiteboards (embedded falling star symbol to identify high fall risk patients).
- Rolling out a campaign focused on overbed tables being cleared and placed within reach prior to meals (“When meals are on the way, make room for the tray – everyone has a role to play”).
- Developing a standardized post-fall checklist.

This initiative is helping strengthen awareness of everyday safety risks and underscore the role all staff, patients, and families play in preventing falls.



Staff Experience

This is where we want to work, grow, and thrive



Staff Lounge

A new staff lounge was unveiled, to provide a comfortable and quiet environment where staff can relax, recharge, and connect with colleagues. The design includes panel walls that allow ambient natural lighting with a delineation of space to provide privacy from the thoroughfare. The lounge has comfortable seating for 58 people, accommodating both individual and small-group seating. There are multi-height tables, benches, coffee tables, and fresh, uplifting colours and patterns on the new furniture. Power sources are conveniently available in the space with both traditional and USB plugs to charge mobile devices or laptops.

It's a step toward enhancing Staff Experience, and the hope that all staff, professional staff, volunteers and learners to take a moment to have a look and enjoy a well-deserved break in this beautiful space.



THUNDER BAY REGIONAL HEALTH RESEARCH INSTITUTE

WHAT WE WILL DO

Retain, recruit and support the people needed to shape our future.

HOW WE WILL DO IT

- Improve physical and emotional safety, and violence prevention.
- Achieve a safe and just culture that encourages open dialogue.
- Update our current wellness plan.
- Monitor our staff vacancy rates and enhance recruitment processes.
- Implement recruitment processes to reflect Equity, Diversity, & Inclusion.
- Implement an Interprofessional Collaborative Model of Practice.

WHAT WE WILL DO

Support the ongoing development of our current and future leaders.

HOW WE WILL DO IT

- Ensure staff have access to professional development resources and opportunities.
- Implement a leadership development framework.

HOW WE WILL MEASURE IT

- Increase positive staff experience survey results.
- Improve staff engagement.
- Recruit and retain necessary staff.



Interprofessional Collaboration Strategy

The goal of Interprofessional Collaboration (IPC) Strategy is to advance IPC, to positively impact quality patient care, patient and family experiences, work environment and staff satisfaction for TBRHSC and TBRHRI. To this end, the IPC Steering Committee co-designed engagement sessions for leadership, patient family advisors, staff and professional staff. Twelve sessions involving 122 participants generated actionable ideas to advance interprofessional collaboration within the organizations, in both clinical and non-clinical settings. For the next steps, the IPC Steering Committee will review the data, make recommendations regarding the ideas proposed from the engagement sessions and finalize the Interprofessional Collaboration Strategy.



Staff Scheduling Software

New staff scheduling system upgrades were introduced with the implementation of Andgo Smartcall and Shift Pre-booking. This software streamlines shift filling work flows and allows staff to easily apply for future shifts that fit their preferences, schedule and lifestyle, and bid on available shifts. This platform enhances integration by connecting seamlessly with the UKG Pro Workforce Management software, streamlining shift filling and schedule planning through automation.



Leadership Development

Our future success hinges on a strong workforce led by individuals who inspire, support, and motivate their teams to reach their full potential. This project empowers all staff to become leaders and includes initiatives designed for all levels of leadership – from aspiring to executive.

Key achievements in our Professional Development and Leadership Community include:

Professional Development

- Welcomed 31 new participants into cohort 3 of the “Power of Persuasion: Mastering Literacy for Humanistic Leaders” program through Humber College.
- Eight leaders have completed the Rotman Healthcare Leadership program, with 13 additional leaders registered for the next session.
- Introduced monthly “Management Essentials” training, providing foundational knowledge across various topics. 259 spots have already been filled for the upcoming sessions.

Leadership Community

- Established a quarterly forum for leaders to connect, share experiences, and learn from one another, fostering collaboration across the Hospital.
- 77 leaders participated in the September “Leveraging Strengths” forum to discuss methods to support our teams.

Through initiatives like these, we are shaping the future of leadership.

Research, Innovation, & Learning

Driven by the needs of our patients, our staff, and our communities

WHAT WE WILL DO

Assess and prioritize our research efforts.

HOW WE WILL DO IT

- Prioritize research and assess current research initiatives.
- Enable opportunities for knowledge translation.

WHAT WE WILL DO

Enhance staff capacity and capability for research success.

HOW WE WILL DO IT

- Recruit researchers to address staffing gaps.
- Retain current staff and mentor new researchers.
- Establish an evaluation framework.

WHAT WE WILL DO

Create an environment supportive of research, innovation, and learning.

HOW WE WILL DO IT

- Encourage staff to lead and participate in research, innovation, and learning.
- Support continuous education and professional development.

HOW WE WILL MEASURE IT

- Increase patients enrolled or involved in research studies.
- Increase number of research publications, grants, and external funding.
- Increase number of learners.



Hello Innovation

Innovation can be difficult to define and challenging for staff to identify. As a pillar of the *Strategic Plan 2026* at TBRHSC and TBRHRI, it is important to grow awareness and support of innovation in the health care setting and develop an understanding of what innovation means to staff. Hello Innovation is a quarterly event which creates a universally accessible opportunity to highlight and celebrate innovation amongst staff at the Hospital and Research Institute. The event brings like-minded, curious, and creative people together, to encourage partnerships, recognize staff for their innovative practices, and promote a culture of creative thinking, as well as accepting failure (high-risk/high-reward). To date, the event has brought innovation into the workspace and built understanding on how staff perceive and practice innovation; fostering learning and creation among individual staff, staff units, and transdisciplinary units. With a mission to bring together creative minds, these events will aim to showcase staff-led innovation and will assist leadership in their goal to understand how staff perceive and practice innovation. Throughout the year, three Hello Innovation events have been held where creative minds have showcased 24 projects that have showed research focused innovation in action.



Learning Culture Initiative with Clinical Nurse Specialists

TBRHRI's Clinical Research Services Department has partnered with TBRHSC's Professional Practice & Learning on a pilot project focusing on research and learning. This project allows interested members of the Professional Practice & Learning team to develop their research skills and abilities through experiential learning, along mentorship and guidance from experienced TBRHRI research staff. Interested members create and lead a research project from concept to publication.

The project aims to enhance nurses' knowledge and competency in caring for patients who use substances, while directly supporting professional development. By advancing evidence-based practices, the initiative will enhance patient outcomes, improve the staff experience through meaningful engagement, and foster a culture of growth and learning. This collaboration also lays the groundwork for future research opportunities, ensuring that research, innovation and learning remains central to TBRHSC and TBRHRI's shared mission.

Outcomes from the pilot will be used to help determine how to best engage staff in research professional development, with a goal of enhancing TBRHSC and TBRHRI's research and learning culture.



Local Research Improving Cancer Treatments Worldwide

The new Cancer Therapeutic and Diagnostic Research Northwestern Ontario (CANCARE NWO) research group formed only a few months ago, but it already has an impressive head start with several studies underway.

Dr. Mohammed Ibrahim, a medical oncologist at the Cancer Centre and the group's founder, said that the new research group provides an opportunity for researchers to collaborate within the region and potentially with other research groups around the world.

"CANCARE NWO is a group that combines physicians and scientists," Dr. Ibrahim said. "It's a platform for conducting cancer research in all its types including clinical and pre-clinical (lab) research. It's the first group of its kind in Northwestern Ontario."

[Click for full article](#)

Sustainable Future

Ensuring our Healthy Future

WHAT WE WILL DO

Advance digital health to improve patient and staff experiences.

HOW WE WILL DO IT

- Secure and implement the electronic health record.
- Determine required data systems.
- Implement a plan to meet information needs.

WHAT WE WILL DO

Develop a Hospital Clinical Services Plan to clarify our acute care and academic mandates.

HOW WE WILL DO IT

- Determine which current services are consistent with our mandates.
- Estimate our short and long-term service demand.

HOW WE WILL MEASURE IT

- Prioritize our services and find operational efficiencies.
- Increase partnerships to improve and integrate care for patients.

WHAT WE WILL DO

Advance Partnerships and System Integration.

HOW WE WILL DO IT

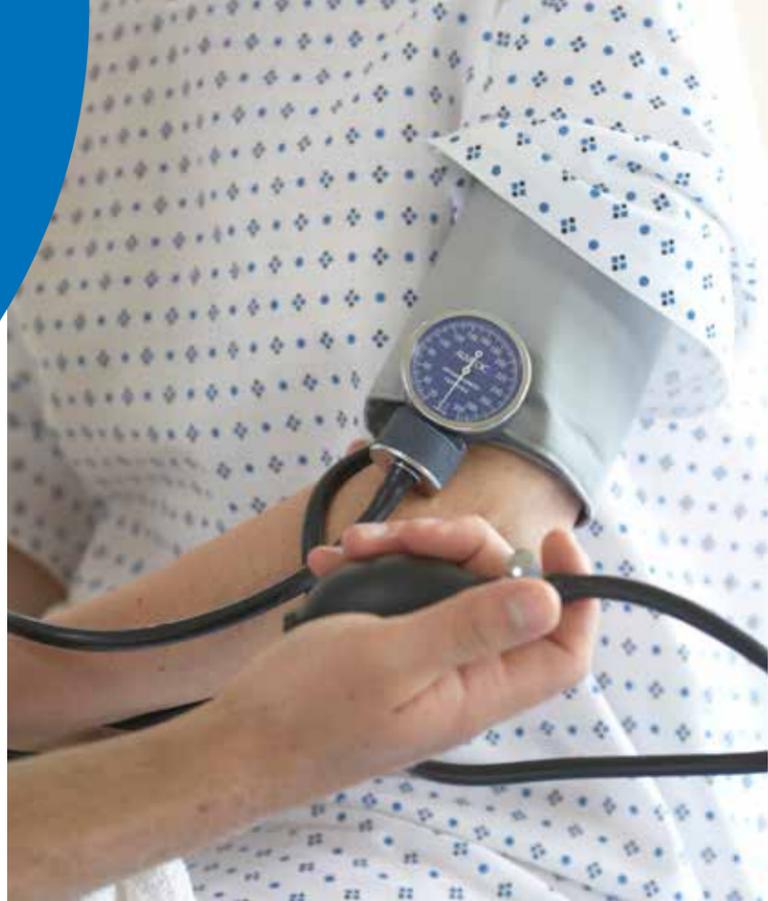
- Advance existing regional partnerships and programs.
- Pursue strategic partnership and integration opportunities.
- Be a voice and advocate for the needs of our entire region.

WHAT WE WILL DO

Achieve Operational Sustainability and Accountability.

HOW WE WILL DO IT

- Create an accountability framework.
- Provide training and supports to improve accountability.



Clinical Services Plan

The Clinical Services Plan will validate Thunder Bay Regional Health Sciences Centre's (TBRHSC) acute care and academic mandates. In doing so, we will inform and guide planning for short- to medium-term services, as well as related resource requirements, to assess long-term service demands and the impacts on the resources required to support them.

Our Hospital plays a crucial role in providing health care services to our community and surrounding regions. As we plan for the future, we are committed to ensuring continued excellence in care through strategic planning and investment in our facilities.

The Ministry of Health: Health Capital Investment Branch has requested the development of a Stage 1.2 Proposal to establish a Master Plan following the completion of the cardiovascular surgery project. This proposal aims to help us understand the long-term redevelopment strategy for our existing site, ensuring that our future smaller and short-term projects are aligned with our broader vision.

Updates to our Master Plan typically occur every 10 years or in conjunction with major capital projects, with the last update completed in 2011.

The planned Master Program and Master Plan will ensure that TBRHSC is well-positioned to meet the evolving health care needs of our community. By carefully aligning our projects with long-term goals, we are committed to enhancing health services and infrastructure, ultimately leading to better health outcomes for all.

The North West Ontario Digital Health Strategic Roadmap

To improve patient and staff experience and enhance ongoing clinical operations, Thunder Bay Regional Health Sciences Centre (TBRHSC) is committed to advancing digital health. TBRHSC has developed a sustainable regional digital health infrastructure roadmap to guide future development, embracing a "digital first" approach and enhancing the maturity and functionality of systems and processes.

Through various phases, TBRHSC will work closely with partners and transform care innovatively with the North West Ontario (NWO) Health Record

Current state and analysis work, including a tools review and maturity model, has been completed and through various partnerships, including with Confederation College Health Information Management students and Lakehead University PhD candidates, awareness and understanding of the need for information-led approaches within public sector organizations have been developed to raise awareness.

Additionally, a NWO Digital Health Innovation Board has been formed to define our strategic focus and evaluate opportunities. TBRHSC is also exploring commercially-ready opportunities for piloting in real-life scenarios and ongoing discussions with the NWO Innovation Centre have opened several possibilities that are currently being evaluated. To further implementation of Artificial Intelligence initiatives, TBRHSC is also in consultation with other hospitals in Ontario and exploring a research pilot for ambient AI transcription in the Northwest. Once the trial is completed, collaboration will occur with the Ontario Medical Association.

TBRHSC has been recognized as one of the 10 regional cyber security operations centers in the province by the Ministry of Health and Ontario Health. In the government's hub-and-spoke model, TBRHSC serves as a spoke for all health care organizations in Northwestern Ontario. All baseline assessments for Ontario Health have been completed for hospitals, with primary care assessments currently in progress.

TBRHSC is committed to advancing digital health, enhancing patient care, and ensuring the organization is well-equipped for future challenges and innovations. The progress made thus far reflects our dedication to a digital-first approach and collaboration with partners across the region.



Academic & Hospital Care Mandates

Numerous partners were consulted to help inform Thunder Bay Regional Health Sciences Centre's and Thunder Bay Health Research Institute's joint *Strategic Plan 2026*. A key theme in stakeholder feedback was the need to clarify the Hospital's academic and care mandates to ensure a clear understanding of its areas of focus and priorities.

The Hospital's academic and Hospital care mandates are intended to provide guidelines to inform decisions and priorities in areas including expansion, growth, and opportunities for long-term realignment to ensure patient care needs continue to be met.



Strategic Plan 2026 Year 3 Progress Report

We are now more than half way through our plan and we continue to make steady progress on all of our initiatives across each of our strategic pillars.

To date, we have completed 7 initiatives. We anticipate all initiatives will be completed within the duration of the strategic plan.

SP2026 Direction / Enabler	TOTAL	ON TRACK	SLIGHTLY BEHIND	SIGNIFICANTLY BEHIND	NOT STARTED	COMPLETE
Equity, Diversity & Inclusion	7	4				3
Patient Experience	5	3				2
Staff Experience	7	6				1
Research, Innovation & Learning	3	2				1
Sustainable Future	4	4				
TOTAL	26	19	0	0	0	7

Strategic Indicators Year 3 Performance

Exceeding target for the number of patients that self-identify as Indigenous.	Exceeding target for reduction of patient harm.
Exceeding target for the number of staff that have participated in "Repairing the Sacred Circle: An Indigenous Cultural Awareness and Education Primer".	Evaluation of data source and target for staff experience is in progress.
Wake the Giant training continues to increase towards current target. High compliance has been met for leaders and management.	Exceeding target for number of investigator-initiated research studies informed by Northwestern Ontario population needs.
Exceeding target for overall positive experience ratings for Inpatient & Emergency Department patients.	Exceeding target for number of participants enrolled in a clinical trial in 2024/25.
Results for repeat Emergency Department visits for heart failure through quarter 4 have fluctuated and remain below target.	Improved and now better than stretch target for percent operating gross margin.
	Exceeding target for the proportion of patients aligned with regional programs/services.

At or better than target

Slightly below target

Considerably below target

Our Plan Forward Years 4 – 5

Based on our Annual Review cycle, we have made some minor refinements to project timelines and scope.

We are proud of the completion of 7 initiatives to date, and the continued progression of the remaining initiatives.

	2022/23				2023/24				2024/25				2025/26				2026/27				2027/28			
	Q1	Q2	Q3	Q4																				
Strategic Directions / Enablers & Projects																								
Equity, Diversity & Inclusion (EDI)																								
EDI Steering Committee Development																								
Truth & Reconciliation Call to Action Principles																								
EDI Policy & Procedure Review & Adjustment																								
Cultural Safety Training for Staff																								
EDI Physical Environment Review																								
EDI Experience Sharing to Build Understanding & Respect																								
Indigenous Recruitment, Education Support & Related Strategies																								
Patient Experience																								
Evolve Patient & Family Centred Care Using Co-Design																								
Focus on Quality																								
Seamless Transitions - Assess & Improve																								
Support Improved Coordination & Support for Frequent Users																								
Implement Substance Use and Addictions Strategies																								
Staff Experience																								
Organizational Workplace Violence Prevention																								
Implement Strategies to Support a Safe & Just Culture																								
Implement Healthy Workplace Strategies																								
Staffing, Vacancy Reporting & Recruitment																								
Design & Implement Interprofessional Collaborative Strategy <i>Model of Practice</i>																								
Value Based Recruitment																								
Enhance Leadership Development																								
Research, Innovation & Learning																								
Research Prioritization & Operationalization																								
Researcher Staffing & Recruitment																								
Establish a Culture to Support Learning & Professional Development																								
Sustainability																								
Digital Health - Shared Vision, Electronic Health Record, and Ongoing Development																								
Build and Enhance Regional Partnerships																								
Develop Clinical Services Plan to Project Future Service Demand and Required Capacities																								
Develop Framework and Strategies to Support Sustainability & Accountability																								

Ensuring Accountability, Alignment and Focus

- At the initiation of *Strategic Plan 2026*, we implemented an annual review cycle to ensure that we regularly seek and consider data and feedback to guide our plan.
- In Year 3, we conducted stakeholder engagements and an annual scan of the environment to ensure our plan is still relevant and focused as we proceed.
- The annual review resulted in the following findings and recommended refinements:
 - Directions and initiatives remain relevant – no significant changes, other than minor refinements to the timelines and scope of some projects.
 - 7 initiatives now complete and all others tracking to be complete within the duration of the plan.
 - Some indicators and targets updated, as appropriate, to ensure relevance and continued progress.
 - Continue/enhance prioritization efforts.
- Robust feedback was provided by stakeholders and partners through this process – related to advancing partnership opportunities and continuing communication and engagement efforts, internally and externally (e.g. request to continue to publish annual Truth and Reconciliation report to community). All feedback has been noted and is being considered by Project Teams for ongoing implementation.

Our Cascading and Monitoring Plan

Senior Leadership

1. Monthly progress reports and monitoring
2. Quarterly deep dive sessions (Strategic Performance Review)

Management and Staff

1. Bi-weekly Strategic Alignment meetings and monthly Town Hall updates
2. Director and manager-led discussions and monitoring with teams
3. Quarterly performance debriefs
4. Quarterly "Celebrating Our Progress" poster and social media updates for staff
5. ***NEW*** Quarterly/annual updates to the public

TBRHSC & TBRHRI Boards

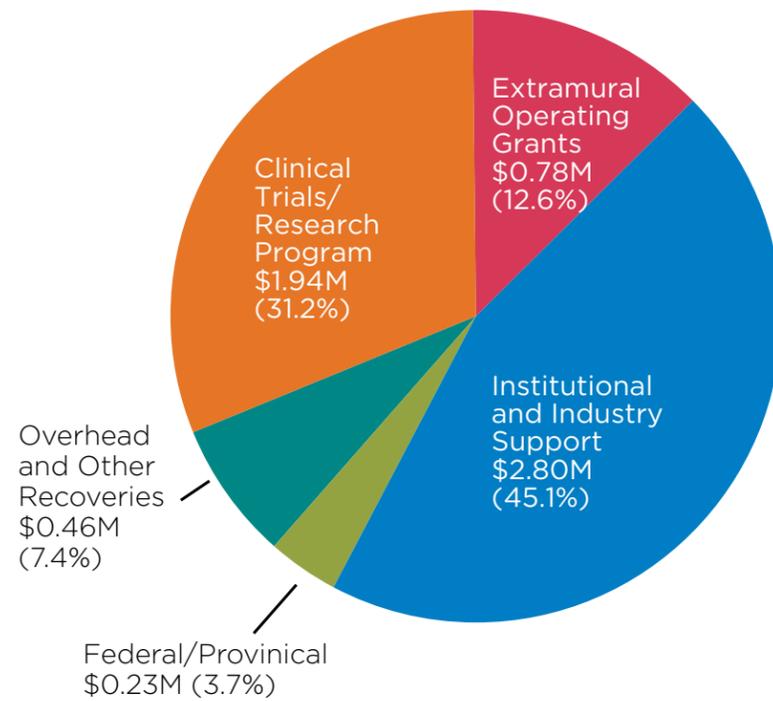
1. Quarterly reporting
 - SP2026 Strategic Scorecard (10 strategic indicators and project status reports)
2. Annual environmental scan, partner engagement, initiative and indicator refinements

Annual Community Partner Session

2024-2025 Financials

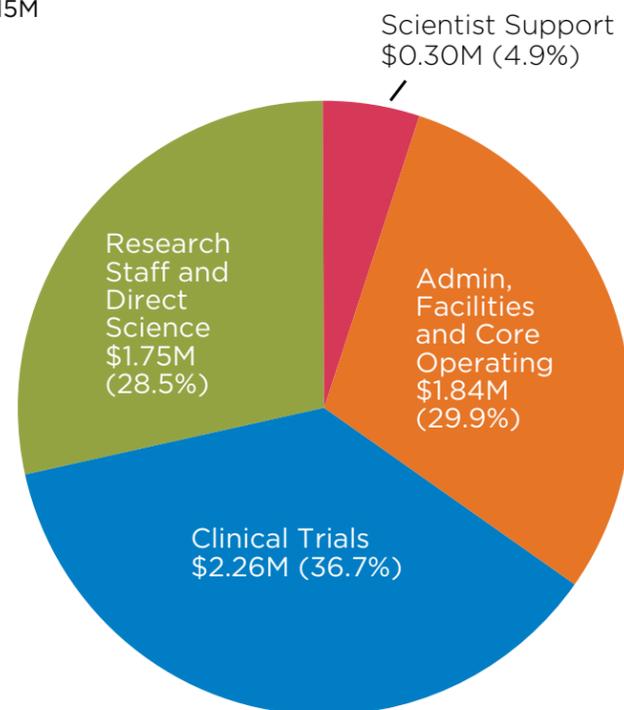
REVENUE SOURCES

Total = \$6.21M



EXPENSES

Total = \$6.15M



Funders and Partners

GOVERNMENT:



ACADEMIC HEALTH SCIENCES NETWORK



ACADEMICS:



NOT FOR PROFIT:



INDUSTRY:





Exceptional **care** for
every patient, every time.



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