

THE DISCIPLINE OF LABORATORY MEDICINE

ANNUAL REPORT 2022 - 2023



OUR MISSION

Working in a spirit of collaboration and respect, and by forming mutually beneficial partnerships, the Discipline of Laboratory Medicine delivers excellence in competency-based education, research and evidence-based clinical diagnostics.

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MEMORIAL UNIVERSITY OF NEWFOUNDLAND FACULTY OF MEDICINE STRATEGY MAP

DESTINATION EXCELLENCE 2018-2023

OUR MISSION

Working in the spirit of partnership and respect, the Faculty of Medicine is committed to delivering integrated excellence in education, research and evidence informed care; meeting the unique health needs of our rural, remote and urban communities; and advocating for health, equity, Indigenous health and healthy populations.

OUR VISION

Through excellence, we will integrate education, research and social accountability to advance the health of the people and communities we serve. IMPROVING LIVES

IMPACTFUL RESEARCH

To meet the					
needs of the					
PEOPLE we					
serve,					

Thus, achieving

our VISION and

MISSION.

THRIVING LEARNERS AND GRADUATES

- Learners achieve academic success throughout their Faculty of Medicine aducational
- Learners rate their educational experience as excellent
- Learners feel connected, supported and challenged to reach their full potential, with
- Learners gain the skills to lead and participate in inter-dependent teams
- Graduates are prepared to respond to population needs and to be tomorrow's scientific
- Graduates are equipped with the competencies needed to thrive in the 21st century
- Learners, faculty and staff are lifelong learners

- Our research addresses pressing and emerging needs of regional, Indigenous and global
- Our research eccelerates the transfer of discoveries into clinical practice, education and the health system
- Feculty, staff, researchers and learners are active partners in integrated research and scholarly pursuits
- Our inter-dependent research projects are community informed and inspired
- Our research echievements are nationally and internationally recognized and acclaimed

EXCELLENCE IN ALL WE DO RESEARCH EXCELLENCE: We must excel at... The communities we serve are actively engaged in identifying community needs, influencing education, research and service priorities and evaluating new models of

HEALTHIER COMMUNITIES

- Learners are motivated to remain in our communities after graduation and to support underserved, rural and remote areas
- Government, academic and health partners are involved in the pursuit of our mission We participate in sustainable regional, provincial, national and global partnerships to shape and improve health equity and the health system
- Faculty, staff, learners and graduates embrace their social responsibility to positively impact the health status of our communities

So, we can operate with **EFFECTIVENESS** and EXCELLENCE.

EDUCATION EXCELLENCE: We must excel at...

Delivering high quality, dynamic and innovative academic programming

- Enabling faculty to be exceptional teachers and learner advocates
- Providing learners with active, engaged, empowering and authentic community-based experiences that include longitudinal learning activities
- Incorporating competency-based learning, programmatic assessment and inter-dependent
- · Accelerating the effective use of education technologies across all programs and teaching ppeces
- Teaching, mentoring, assessing and supporting learners
- Providing learners with career planning services to support and prepare them to return to work in our communities
- Identifying focused areas of research strength where we can lead and maximize return on
- Empowering researchers with appropriate resources, support and efficient processes
- Embedding an integrated and coordinated research curricula across all programs
- Promoting and nurturing the development of inter-dependent research teams to accelerate scientific discoveries
- Building robust academic and external partnerships and networks
- Effectively disseminating our research outcomes to the scientific and clinical communities and the public

EMPOWERED PEOPLE

- SOCIAL ACCOUNTABILITY: We must excel at...
- Inscribing global health and community engagement principles and competencies into academic programming
- Preparing learners to understand the determinants of health and health policy and to advocate for patients and communities
- Actively listening to and collaborating with the populations we serve and our health and research partners
- Evaluating and enhancing our education, research and service programs in alignment with community needs
- Developing pertnerships that strengthen community capacity in underserved populations and rural and remote areas
- Building structures that expand our influence and presence in Canada and on the global
- Expanding philanthropic funding models to advance our mission

To build a STRONG and PREPARED team.

CULTURE OF EXCELLENCE: We will...

- Unify our team around a focus on excellence and achievement of our shared vision, mission and values
- Create a productive, engaging, enjoyable and supportive work experience for faculty and staff
- Weave social accountability into everything we do
- Embrace meaningful change and translate ideas and solutions into action
- Cultivate an environment of lifelong learning

INSPIRING LEADERSHIP: We will...

- Nurture and support formal and informal leaders to inspire and lead, in alignment to our vision and mission
- Facilitate effective communication and collaboration amongst learners, faculty, staff and community partners
- Encourage and support leadership development for current and
- Create and embrace opportunities for all staff, learners and faculty to achieve their potential
- Work in a dynamic organizational structure, and ensure our people | Stay at the forefront of advances in educational, research and are in the right roles, equipped with the right skills, focused on the
 - · Build our talent and workforce capabilities through strategic recruitment and retention programs and succession planning

EXCEPTIONAL PEOPLE: We will...

- Facilitate exceptional faculty and staff development and mentoring
- at all career stages Foster an environment that encourages wellness for all Recognize and celebrate individual and team achievements
- information technology Enhance technologies that enable teamwork and collaboration
- Harness the full power of existing and new technology, equipment

ROBUST INFRASTRUCTURE: We will...

- Fortify data management capabilities and capacity to capture, store, preserve, access and utilize data securely
- Provide spaces where faculty, staff and learners can network and

ENDURING LEGACY CONTINUOUS PERFORMANCE MANAGEMENT AND IMPROVEMENT: We will...

We use our RESOURCES wisely,

Allocate resources to the strategic priorities, in direct alignment to our mission and to the health needs / priorities of the populations we serve

EFFICIENT AND EFFECTIVE RESOURCING: We will...

- Enhance our fundraising efforts to attract more charitable donations in support of our
- Expand and diversify Faculty of Medicine revenue

- Track, measure and analyze our performance across our academic mandate
- Use data to continuously improve performance and results and to set improvement goals Strengthen program evaluation to enable improvements
- Improve efficiency and productivity through process, technology and quality improvement Share our performance results with faculty, staff, learners, partners and communities
- Monitor population health and our external environment, including emerging opportunities, risks and challenges

DYNAMIC ADVOCACY: We will...

- Identify, foster and participate in partnerships that advance our mission
- Promote the mission and vision of the Faculty of Medicine and communicate our contributions to our communities and to society

OUR GUIDING VALUES

Put the needs of our learners and communities at the forefront of everything we do Support faculty and staff to succeed Act and lead with integrity and professionalism Embrace learning, creativity and innovative thinking in all we do Foster inter-dependent teamwork and collaboration



Guided by our values.

OUR MISSION Working in a spirit of collaboration and respect, and by forming mutually beneficial partnerships, the Discipline of Laboratory Medicine delivers excellence in competency-based education, research and evidence-based clinical diagnostics thus achieving our mission and vision **OUR VISION** To be recognized as leaders in Laboratory Medicine, in preparing learners for careers in Laboratory Medicine, by conducting research and in embracing our responsibilities to advance the health of our communities IMPROVING LIVES Healthier communities Thriving learners and graduates Impactful research and scholarship Learners gain the skills to excel in the future as clinicians, researchers and Faculty and learners engage in Laboratory Medicine -based research that impacts Graduates are provided with opportunities and support to have satisfying and the scientific field, influences clinical practice, and promotes the health of our rewarding careers in this province to meet the Attract, motivate and retain passionate learners who excel during their population Faculty, learners, staff and graduates actively pursue opportunities to embrace needs of the academic journey Focus our research activities toward developing a center of excellence for their social responsibilities and provide positive outcomes for the communities Learners obtain fellowships and employment in their field upon completion of people we innovative approaches to service delivery, quality improvement, and best practices Highlight the importance of Laboratory Medicine to public health serve, Strengthen and increase the exposure of undergraduate learners to Lab Focus research on innovation, quality assurance and best practices Conduct research and outreach activities based on the needs of our community Pursue collaborative research with strong Laboratory Medicine components Pursue relationships with patient advocacy groups involving faculty, learners, and research partners both within our discipline and Support faculty and staff with continuing education to support life-long learning with other disciplines and units Make publishing in peer-reviewed journals an expectation for all faculty and Faculty and learners participate collaboratively in national and international research initiatives that promote Laboratory Medicine EXCELLENCE IN ALL WE DO Education excellence Research excellence Social accountability Provide high quality, innovative teaching across the educational Organize and participate in special events, such as Resident Research Day, Seek opportunities to engage the public and our communities in continuum in part by utilizing educational technology to showcase research activities among our learners evaluating and developing our programs so we can Continue to successfully implement CBD Schedule mandatory rotations for our residents to participate in research Actively promote high quality, efficient, and value added approaches for operate with Implement one-on-one learning with preceptors Provide funding/support to faculty and residents to participate in evidence informed practice effectiveness Actively encourage participation in education activities for our learners. conferences and present their research and scholarly work Work collaboratively with other disciplines towards formally delivering and excellence. faculty, clinicians, and the community Promote participation in research activities for part-time and full time faculty social accountability awareness and learning opportunities members, learners and staff Continuously evaluate and improve undergraduate teaching to align Use a variety of media to actively and regularly showcase and disseminate information about Laboratory Medicine activities of interest with best practice standards and to compliment clinical skills Designate a faculty member with accountability for assisting residents in Continuously evaluate and improve all our programming developing research skills to and impacting stakeholders Ensure electives are appropriate, relevant and comprehensive Provide mentorship on research design, organization and execution; Engage in ethical research and practice dissemination of findings and resource acquisition, and life-long research Utilize best-practices in our field Leverage our cross-appointed faculty and faculty in New Brunswick towards developing multidisciplinary and multi-site research collaborations

	OUR EMPOWERED PEOPLE					
	Culture of Excellence	Inspiring Leadership	Exceptional People	Robust Infrastructure		
to build a strong and prepared team,	values Promote a culture that values diversity, equality and respect Support advanced learning opportunities for all members of the discipline Recognize and celebrate achievements among our faculty, learners, and staff	 formal and informal leadership training activities Develop a robust succession plan for faculty and staff roles Develop an effective recruitment and retention plan for faculty and key leadership roles Motivate and support faculty, learners and staff to succeed 		learning activities Stay at the forefront of technological innovations that enhance our work and education activities Promote utilization of technologies to facilitate success in educational and research goals Promote use of technology for discipline activities (operational, educational, research)		
we use our resources wisely,	OUR ENDURING LEGACY - SUSTAINABILITY					
	Efficient, Effective Resourcing	Efficient, Effective Resourcing Continuous Performance M		Dynamic Advocacy		
	 Allocate resources to achieve our strategic priorities and high-value outcomes Ensure faculty, residents and staff have the appropriate resources and time available to achieve success Develop budget plans that ensure fiscal accountability Work collaboratively with our faculty, staff and learners to develop discipline priorities Develop and implement a system performance indicators Adopt a data-driven approach to opportunities for improvement and Establish performance benchmark Communicate achievements and Adopt a continuous improvement 		Encourage involvement of faculty, staff and learners on national and international committees sults with our communities			
	OUR VALUES					
Guided by our values,	Engagement of learners and community					
	Success of our faculty, learners and staff					
	Demonstrated integrity, professionalism and leading by example					
	Critical, creative and innovative thinking					
	Teamwork, mentorship and collaboration					

MESSAGE FROM THE CHAIR



Our discipline is dedicated to excellence in teaching, research, and clinical service. We presently have 33 full and part-time faculty, 2 cross-appointed faculty, 2 joint faculty, 4 adjunct faculty, and 10 residents. We also have 22 part-time faculty in New Brunswick.

Our Diagnostic and Molecular Pathology Residency Program is fully accredited with the Royal College of Physicians and Surgeons of Canada. Our faculty work closely with our residents and our

residents are successful not only in their Royal College examinations, but also in securing employment within our province and elsewhere in Canada. We have been granted provisional accreditation by the Canadian association of Clinical Biochemists Board and will start to accept postdoctoral learners into our new Clinical Biochemistry Training Program in July 2024.

Our discipline encompasses pathology, infectious disease and microbiology, chemistry, biochemistry, hematology, cytogenetics, and molecular genetics. Our faculty are striving for excellence in their individual fields.

Jane Barron, M.D., MSc, FRCPC

Our Mission

Working in a spirit of collaboration and respect, and by forming mutually beneficial partnerships, the Discipline of Laboratory Medicine delivers excellence in competency-based education, research and evidence-based clinical diagnostics.

Our Vision

To be recognized as leaders in Laboratory Medicine, in preparing learners for careers in Laboratory Medicine, by conducting research and in embracing our responsibilities to advance the health of our communities.

FACULTY DEVELOPMENT, LEADERSHIP, AND RECRUITMENT

IMPROVING LIVES

Thriving Learners and Graduates

The Discipline of Laboratory Medicine is committed to supporting faculty and staff with continuing education to support life-long learning. Over the past year faculty member Dr. Stephanie Reid completed her Masters of Health Sciences Education from McMaster University and faculty member Dr. Vinita Thakur passed the NRCC certification exam for clinical chemists and the FRCPath Part 1 examination to receive Diplomateship (Dip R C Path) of Royal College of Pathologists.

Our 2 PGY5 residents were successful in the Diagnostic and Molecular Pathology Royal College examinations. Many of our learners' complete fellowships and all obtain employment upon completion of their program. Two of our 2021 graduates completed fellowships in forensics in Toronto. One of them, Dr. Chris Hough was recruited to work in our Office of the Chief Medical Examiner in 2022 and became a part-time faculty member in our discipline 2022. Our 2022 graduate, Dr. Madeline Fitzpatrick, completed a fellowship in gyne-pathology and was recruited for a position with Eastern Health in 2023 and is now a part-time faculty member in our discipline.

OUR EMPOWERED PEOPLE

Inspiring Leadership

Our discipline encourages and supports faculty, learners and staff in formal and informal leadership training activities. We recently had faculty members, Dr. Jane Barron and Dr. George Zahariadis complete the Advanced Physician Leadership course offered by the Gardiner Centre. Dr. Barron also completed the CMA Joule Physician Leadership institute (PLI) certificate and has applied for the CCPE credential.

We also focus on developing leaders internally. We recently developed a Newfoundland government funded Postdoctoral Clinical Chemistry program which is provisionally accredited by the CACB. Dr. Berna Aslan and Dr. Edward Randell have been appointed Program Director and Assistant Program Director. Many of our faculty have one or more leadership positions. The various positions include:

Chair
Vice-Chair
Program Director
Competency Committee Lead
CBD Lead
UG curriculum lead for pathology
UG curriculum lead for microbiology
UG Phase 4 Assessment Lead

UG Student Assessment Sub-Committee Lead
EPA Working Group Lead
UG Comprehensive Review Co-Lead
Progress Examination Group Co-Lead
OPED CPD Lead for Lab Medicine
Resident Annual Examination Lead for Pathology
Wellness Lead
Immunohistochemical Lab Medicine Director

RESEARCH

IMPROVING LIVES

Impactful research and scholarship

Our faculty and learners engage in Laboratory Medicine -based research that impacts the scientific field, influences clinical practice, and promotes the health of our population. For example, one of our faculty members, Dr. Vinita Thakur published a collaborative guidance document titled: AACC Guidance Document on the Use of Point-of-Care Testing in Fertility and Reproduction, which was referenced in USA Today mainstream media article.

Dr. Jane Barron is a co-investigator with Dr. U. Tabori and Dr. C. Hawkins (SickKids), Dr. Etchegary and Dr. Woods (MUN) looking at germline genetic and epigenetic promoter alterations predisposed to tissue specific mismatch repair deficient cancers.

We aim to focus research on innovation, quality assurance and best practices. Dr. Thakur also published a collaborative article titled: Use of a Lean Six Sigma Approach to Investigate Excessive Quality Control (QC) Material Use and Resulting Costs, which is a project on cost saving for the purchase of QC and calibrators in Biochemistry lab. Dr. Jane Barron was invited to join a CAP-ACP Pathology Informatics and Digital Resources, National Specialty Network Committee and is also a member of the Pathology Informatics Quality Control and Assurance Sub Committee.

We encourage our faculty and learners participate collaboratively in national and international research initiatives that promote Laboratory Medicine. One of our residents, Dr. Simrin Sennik, along with faculty member Dr. Sarah Finch contributed to a multi-institutional study titled "Necrosis is associated to progression-free survival, metastasis-free survival, and overall survival in a multi-

centric Canadian analysis of 79 vulvo-vaginal melanomas" that was presented at the 2023 USCAP meeting.

Publishing in peer-reviewed journals is an expectation for all faculty and learners. Appendix A outlines research and published articles by our faculty and learners during 2022-2023. Appendix B outlines current grants held by faculty.



EXCELLENCE IN ALL WE DO

Research Excellence

We organize and participate in special events, such as Resident Research Day, to showcase research activities among our learners. We held our 2022 Laboratory Medicine Research Day on December 2022 and presented prizes for Best Presentation from PGY1-PGY2 and Best Presentation from PGY3-PGY4.

OUR EMPOWERED PEOPLE

Culture of Excellence

We recognize and celebrate achievements among our faculty, learners, and staff. Our Vice-Chair, Dr. Edward Randell, recently received the CSCC Award for Research Excellence for 2023. This award is to recognize contributions made throughout his distinguished career to advance research in clinical biochemistry and laboratory medicine.

EDUCATION

EXCELLENCE IN ALL WE DO

Education Excellence

We continuously evaluate and improve all our programming. Each year we send out our Resident Annual Survey and Resident Exit survey so that residents can evaluate their residency program. Evaluations are also sent out for all resident teaching rounds and research day. Residents also complete evaluations on faculty.

We seek to provide high quality, innovative teaching across the educational continuum in part by utilizing educational technology. For example, our annual resident exam consists of digital slides. We have successfully implemented Competence by Design (CBD) and have our first CBD graduate set to graduate in 2024.



Social Accountability

Resident Dr. Alexandra States and faculty member Dr. Stephanie Reid are working collaboratively with other disciplines towards formally delivering social accountability awareness and learning opportunities. Dr. States and Dr. Reid are working with Dr. Vernon Curran, a faculty member in the Division Community Health and Humanities, on a project titled: Developing a Formal Pathology-Teaching Program for Medical Residents: A Needs Assessment. This project developed and conducted a comprehensive needs assessment survey to validate the need for formal resident pathology training programs.

OUR EMPOWERED PEOPLE

Culture of Excellence

We recognize and celebrate achievements among our faculty, learners, and staff. Our Chair, Dr. Jane Barron received The Canadian Association for Medical Education Certificate of Merit in 2022. This award recognizes senior faculty who have made an exceptional contribution to medical education throughout their academic career. Our discipline has also introduced two new awards for excellence. The Award for Faculty Excellence in Education in Laboratory Medicine recognizes a faculty member who significantly contributes to educating learners in Laboratory Medicine. The Award for Resident Excellence in Diagnostic and Molecular Pathology recognizes a pathology resident who shows a commitment to education, who is collegial, and significantly contributes to the day-to-day workings of the pathology laboratory.

PRIORITIES FOR 2023 - 2024

Our key priorities for 2023-2024 include:

<u>Priority # 1:</u> Continue to plan curriculum, accept our first learner, and to work toward full accreditation in 2025 for our Clinical Biochemistry Postdoctoral Program.

<u>Priority # 2:</u> With the hiring of new GFT pathologists, we plan to expand the exposure of medical students to the Specialty of Diagnostic and Molecular Pathology by offering more elective rotations to clinical clerks. We are hoping that increased exposure would increase interest in our full accredited residency program in Diagnostic and Molecular Pathology.

<u>Priority # 3:</u> Another priority for our discipline is to hire a urogenital pathologist or to secure a permanent rotation location for our residents to do their urogenital pathology rotations. We currently have an interdepartmental agreement with McGill University for our residents to do a 1-month rotation; however, we want to secure something more permanent and increase the length of the rotation, as it is a core rotation.

<u>Priority # 5:</u> An external accreditation of our Diagnostic and Molecular Pathology residency program, will occur at the end of November 2023. It is our priority to continue to be fully accredited and we will work towards further improving our resident's learning experience.

<u>Priority # 6</u>: To finalize the proposal for a laboratory medicine's sabbatical fund. Currently the proposal is with an accounting firm.

APPENDIX A - PUBLICATIONS

Angela C. Rutledge⁻⁻ Anna Johnston⁻ Ronald A. Booth, Kika Veljkovic⁻ Dana Bailey, Hilde Vandenberghe Gayle Waite⁻ Lynn C. Allen⁻ Andrew Don-Wauchope⁻ Pak Cheung Chan⁻ Julia Stemp, Pamela Edmond⁻ Victor Leung⁻ Berna Aslan Lot verification practices in Ontario clinical chemistry laboratories - Results of a patterns-of-practice survey. Practical Laboratory Medicine 32 (2022) e00300. https://doi.org/10.1016/j.plabm.2022.e00300

Moore, C., Barron, J., Manuscript: JNC-2022-0022.R1 Title: Investigating the NLRP3 Inflammasome and its Regulator miR-223-3p in Multiple Sclerosis and Experimental Demyelination 2022. <u>Accepted for publication</u>

Tabori, Hawkins, Barron, J., Woods, Etchegary, Gaiti Germline Genetic and Epigenetic Promoter Alterations Predispose to Tissue Specific Mismatch Repair Deficient Cancers. 2022. Research Proposal

Ongoing - Erivwo P, Salama S, Gai L. Mrkonjic M. Armstrong S. Turashvili G. Point-Based Weighted Diagnostic Scale for Histopathologic Assessment of Mammary Cellular Fibroepithelial Lesions. <u>Pending submission</u>

Everard, K., Tate, A., Case Report: A Plasma Cell Neoplasm Imitating a Carcinoid. CJP. 2022 <u>Submitted for second review</u>

Boone, Hannah; Gao, Yuan; Fitzpatrick, Madeline; Andrews, Matthew; Rideout, Arthur; Johnston, Paul Primary Non-Cutaneous Melanoma of the Glans Penis: A Case Report <u>Publication in draft</u>

Loyzer MN, Grewal K, Ikpatt OF. Plasma cell myeloma following a prior diagnosis of chronic lymphocytic leukemia/small lymphocytic lymphoma. Clin Case Rep. 2022; 10:e6722.

Loyzer MN, Musadak H, Ikpatt OF. Chronic myeloid leukemia, BCR-ABL1-positive, presenting in a previously healthy infant. Canadian Journal of Pathology 2022; 14(4): 28-32.

Fitzpatrick M, Pirzada A, Ikpatt OF. Anaplastic large cell lymphoma, ALK+ and B cell lymphoma with small lymphocytic lymphoma phenotype in a patient with prior breast cancer. Canadian Journal of Pathology 2022, accepted for publication.

Fitzpatrick M, Pirzada A, Ikpatt OF. Crystal-storing histiocytosis in a patient with nodal marginal zone lymphoma. Int J Pathol Clin Res 2022; 8:142.

Everard KR, Pirzada A, Ikpatt OF. Primary follicular lymphoma of the colon presenting as an incidental finding on endoscopy. F1000Research 2022. Accepted for publication.

Zern C, Tate A, Pirzada A, Burrage K, Grewal K, Ikpatt OF. Peripheral lymphadenopathy as initial presentation of hairy cell leukemia. <u>Submitted for publication.</u>

Brenna HL, Kirby SD; Barriers of Artificial Intelligence Implementation in the Diagnosis of Obstructive Sleep Apnea; Journal Otolaryngology - Head & Neck Surgery, (2022) 51:16

Bohn MK, Wilson S, Schneider R, Massamiri Y, Randell EW, Adeli K. Pediatric reference interval verification for 17 specialized immunoassays and cancer markers on the Abbott Alinity i system in the CALIPER cohort of healthy children and adolescents. Clin Chem Lab Med. 2022 Sep 19;61(1):123-132. doi: 10.1515/cclm-2022-0709. PMID: 36117243; PMCID: PMC9691267.

Woodbury-Smith M, Lamoureux S, Begum G, Nassir N, Akter H, O'Rielly DD, Rahman P, Wintle RF, Scherer SW, Uddin M. Mutational Landscape of Autism Spectrum Disorder Brain Tissue. Genes. 2022; 13(2):207.

Gill, S. J., Pirzada, A., Power, P., & Neveu, J. (2022). A Constellation of Rare Gynecological Malignancies and Familial Adenomatous Polyposis Gastrointestinal Adenocarcinoma: A Case Report. International Journal of Gynecological Pathology.

Nichols JH, Ali M, Anetor JI, Chen LS, Chen Y, Collins S, Das S, Devaraj S, Fu L, Karon BS, Kary H, Nerenz RD, Rai AJ, Shajani-Yi Z, Thakur V, Wang S, Yu HYE, Zamora LE. AACC Guidance Document on the Use of Point-of-Care Testing in Fertility and Reproduction. J Appl Lab Med. 2022 Sep 1;7(5):1202-1236. doi: 10.1093/jalm/jfac042. PMID: 36047824.

Thakur V, Anthony Akerele O, Brake N, Wiscombe M, Broderick S, Campbell E, Randell E. Use of a Lean Six Sigma approach to investigate excessive quality control (QC) material use and resulting costs. Clin Biochem. 2023 Feb;112:53-60. doi: 10.1016/j.clinbiochem.2022.12.001. Epub 2022 Dec 10. PMID: 36513121.

Demczuk, W., Martin, I., Griffith, A., Lefebvre, B., McGeer, A., Tyrrell, G. J., Zahariadis, G., ... & Mulvey, M. R. (2022). Linear Regression Equations to Predict β -Lactam, Macrolide, Lincosamide, and Fluoroquinolone MICs from Molecular Antimicrobial Resistance Determinants in Streptococcus pneumoniae. Antimicrobial Agents and Chemotherapy, 66(1), e01370-21.

Bharat A, Petkau A, Avery BP, Chen JC, Folster JP, Carson CA, Kearney A, Nadon C, Mabon P, Thiessen J, Alexander DC, Allen V, El Bailey S, Bekal S, German GJ, Haldane D, Hoang L, Chui L, Minion J, Zahariadis G, Domselaar GV, Reid-Smith RJ, Mulvey MR. Correlation between Phenotypic and In Silico Detection of Antimicrobial Resistance in Salmonella enterica in Canada Using Staramr. Microorganisms. 2022; 10(2):292. https://doi.org/10.3390/microorganisms10020292

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Brennan HL, Kirby SD. The role of artificial intelligence in the treatment of obstructive sleep apnea. J Otolaryngol Head Neck Surg. 2023 Feb 7;52(1):7. doi: 10.1186/s40463-023-00621-0. PMID: 36747273; PMCID: PMC9903572.

Brennan, H.L., Kirby, S.D. Intraoperative video recording in otolaryngology for surgical education: evolution and considerations. J of Otolaryngol - Head & Neck Surg 52, 2 (2023). https://doi.org/10.1186/s40463-023-00620-1

Pearson P, Smith K, Sood N, Chia E, Follett A, Prystowsky MB, Kirby S, Belbin TJ. Kruppel-family zinc finger proteins as emerging epigenetic biomarkers in head and neck squamous cell carcinoma. J Otolaryngol Head Neck Surg. 2023 May 30;52(1):41. doi: 10.1186/s40463-023-00640-x. PMID: 37254212; PMCID: PMC10228066.

Julie LV Shaw, Saranya Arnoldo, Jennifer L Shea, Felix Leung, Vinita Thakur, Heather Paul, and Lori Beach, on behalf of the Canadian Society of Clinical Chemists Point of Care Testing Special Interest Group, Challenges with point of care glucose measurements for management of hypoglycemia in neonates, Paediatrics & Child Health, 2023, pxad018

Zern C, Tate A, Pirzada A, Burrage K, Grewal K, & Ikpatt O. Peripheral lymphadenopathy as initial presentation of hairy cell leukaemia. Canadian Journal of Pathology. May 2023, Vol. 15 Issue 2, p37-31

APPENDIX B - GRANTS

Barron, J

Co-investigator, Identifying Mechanisms of Inflammatory – Mediated Demyelinating Injury in Multiple Sclerosis. Investigators: Drs. C. Moore and W. Moore. 2019 – Present

Uncovering the mechanism and impact of novel genetic and epigenetic promoter alterations on tissue-specific mismatch repair deficient cancers

Sept 2022 – present (5 years)

Canadian Institutes of Health Research \$1,147,500

O'Rielly, D.

Centre for Translational Genomics Phase II Source(s): ACOA Regional Economic Growth through Innovation (ACOA-REGI), Department of Industry, Energy and Technology (IET; NL Government), NL Health Services (NLHS): \$1,426,357 (2023-2024)

Facilitate the early identification of individuals with SpondyloArthritis (SpA) project Source(s): ACOA Atlantic Innovation Fund; Innovate NL Leverage R&D: \$3,500,000 (2018-2023)

Support for the re-classification of the F5 gene c.6644G>A variant of unknown significance (VUS) to a pathogenic variant leading to Factor V Deficiency and bleeding symptoms in 3 Newfoundland families Healthcare Foundation Grant: \$20,000 (2020-2023)

Randell, E.

Assay development for measurement of B-vitamins and intermediates in biochemical pathways using biological fluids and tissues from a Murine animal model for stroke.

March 2022-present

Medical Research Fund \$30,000

Reid, S. Biobank NL Mitacs Grant \$96,000