



# ACTIVITY REPORT

University Mission  
*Research and Training*  
2022-2023



# A word from the Directors of the University Mission

Our University Mission Activity Report, which encompasses the areas of Research and Training, reflects the remarkable performance of Vitalité Health Network's important Research and Training team. The number and quality of research and evaluation projects carried out, the number of papers published, the knowledge translation activities conducted, the grants obtained, the agreements reached with postsecondary institutions, and the number of secondary and postsecondary educational placements offered accurately reflect the vision of the Network's University Mission, which is as follows:



*Vitalité Health Network's University Mission aims to develop knowledge, to support governance decision-making, and to acquire, maintain and develop clinical expertise, including leading practices, through research, evaluation, training the next generation, knowledge translation, and integration of the learning approach.*

Above and beyond these results, of which we are very proud, we would like to thank our CEO, Dr. France Desrosiers, and our Vice-President of Performance, University Mission and Strategy, Brigitte Sonier-Ferguson, for their unwavering support. We also wish to highlight the important role that our many key partners have played in bringing our activities to fruition, including the Atlantic Cancer Research Institute (ACRI), New Brunswick Centre for Precision Medicine, Centre de formation médicale du Nouveau-Brunswick, Université de Moncton and other postsecondary educational institutions and the Government of New Brunswick, to name only a few. Collaborating – together – keeps us moving forward! We are always striving to be part of the solution and to turn challenges into opportunities, and we congratulate and thank everyone who, like us, is looking to the future and driving change.

Let's keep working together!



**Martine Poirier**  
Regional Director  
Training and Teaching Partnership



**Erika Dugas**  
Regional Director  
Research and Health Evaluation

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# RESEARCH AND HEALTH EVALUATION



# Highlights

## Research and Health Evaluation

### Structure

The Research and Evaluation team of Vitalité Health Network has expanded this past year. Our new structure will meet the growing need for research and evaluation support.

Two new experts have also joined the team – in evaluation and in change management.

The employees in the new structure include:

- **Erika Dugas**, Regional Director of Research and Health Evaluation
  - ↳ **Breitner Gomes Chaves**, Health Evaluation Consultant
  - ↳ **Evens Datus**, Health Evaluation Consultant
  - ↳ **Isabelle d'Entremont**, Change Management and Implementation Consultant
  - ↳ **Sara Naam**, Research Consultant
  - ↳ **Dominique Comeau**, Research Consultant
  - ↳ **Jean Mamelona**, Research Consultant

Certain positions remain to be filled, including a research consultant position and a patient-oriented research consultant position.

In February 2023, the Medical Libraries joined the Research and Evaluation team. Their employees include:

- ↳ **M'hamed Belkodja**, Librarian
- ↳ **Araya-Yohannes Bekele**, Librarian

### Top 40

Vitalité Health Network is proud, for a second consecutive year, to appear on the prestigious ranking of Canada's top 40 research hospitals. Research Infosource Inc., a firm specialized in research and development information, produces an annual analysis of Canada's leading research hospitals working to strengthen Canada's global competitiveness in the knowledge economy. The Network is the only

organization in New Brunswick – and one of three organizations in the Atlantic provinces – to rank among the top 40 research hospitals, placing 38th.

This national recognition is shared with the Dr. Georges-L.-Dumont University Hospital Centre and its research partners, namely the Université de Moncton and its researchers based at the New Brunswick Centre for Precision Medicine (NBCPM), the Atlantic Cancer Research Institute (ACRI), and the Centre de formation médicale du Nouveau-Brunswick (CFMNB).



## **DUO Projects**

Vitalité Health Network, the Centre de formation médicale du Nouveau-Brunswick (CFMNB) and the New Brunswick Health Research Foundation (NBHRF) are three partners of the programme de financement de la recherche en santé DUO, which makes research funding available to facilitate collaboration between researchers and clinicians.

In all, six Université de Moncton research teams working in tandem with Vitalité Health Network clinicians obtained grants to conduct six research projects valued at \$25,000 each.



## **Third annual Rare Disease Day**

The third annual Rare Disease Day once again met with great success this year with over 50 participants attending.

On February 28, 2023, researchers, patients, health professionals and decision-makers from different regions of New Brunswick, Quebec and Ontario came together at this virtual congress. Two high-quality scientific presentations were given by New Brunswick researchers, namely Dr. Mouna Ben Amor and her team and Dr. Yves Thibeault and Professor Étienne Hébert Chatelain of the Université de Moncton.

# Summary of Research and Health Evaluation activities

10  
research  
professionals

In 2022–2023, Research and Health Evaluation conducted 199 research and evaluation activities.



Knowledge transfers  
**n=56**



Funding request  
writing support  
**n=10**



Research projects  
**n=44**



Change management  
projects  
**n=5**



Literature reviews  
**n=40**



Statistical analyses  
**n=2**



Evaluation projects  
**n=16**



Tool development  
**n=2**



Administrative  
feasibility of external  
projects  
**n=11**



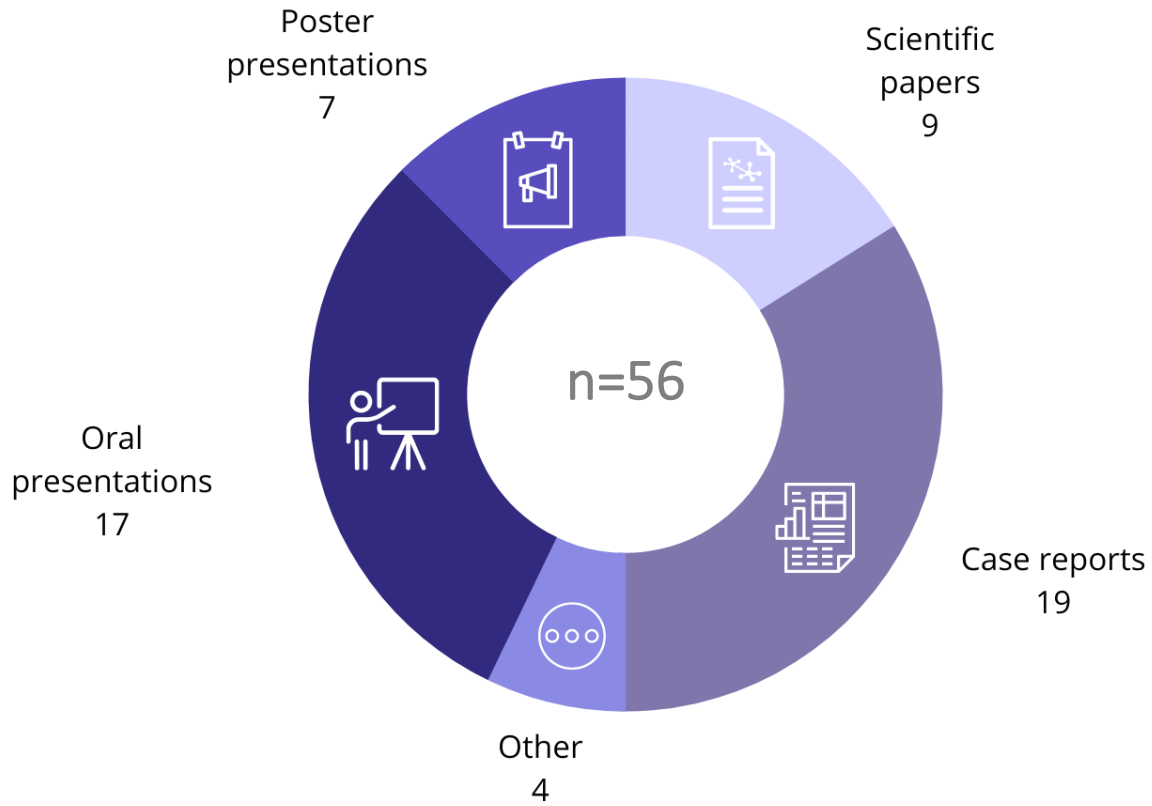
Other  
**n=2**



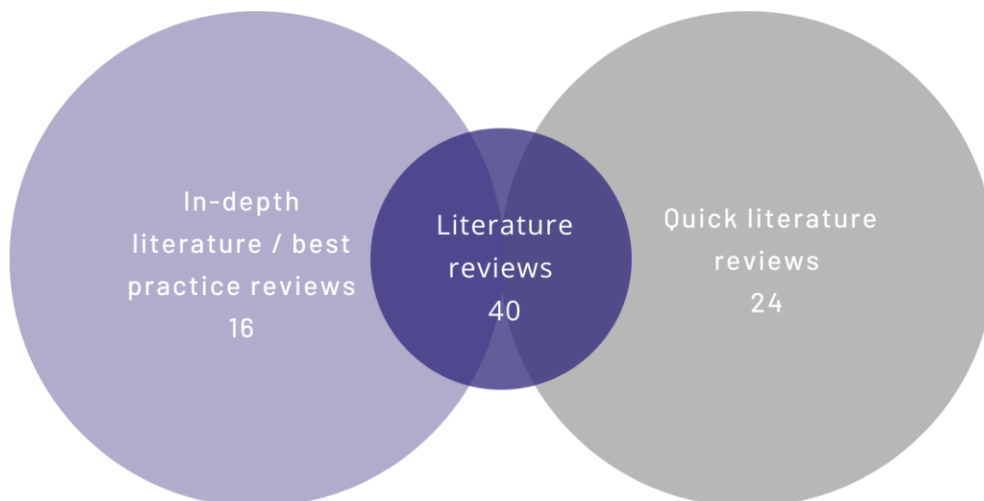
Supervision of  
research trainees  
**n=11**



## Details of Knowledge Translation Requests



## Details of Literature Review Requests





## Highlights

# Sponsored clinical trials

### Resumption of clinical trials

The year 2022–2023 was the first since the start of the pandemic to see an increase in the number of new sponsored clinical trials within Vitalité Health Network. With assistance from the Clinical Trial Support Unit, Network clinicians were able to undertake **six new clinical trials over this period**.

Four of these trials are being conducted by Dr. Marcel Mallet, respirologist at the Dr. Georges-L. Dumont UHC. For her part, Dr. Ludivine Witkowski, neurologist at the Dr. Georges-L.-Dumont UHC, began a new study on Alzheimer’s disease. And the sixth clinical trial is being conducted by Dr. Patrick Thibeault, internist at the Campbellton Regional Hospital, in the field of COVID-19 treatment.

In all, 12 new clinical trials are planned for the period 2023–2024.

### Non-interventional clinical research in collaboration with industry

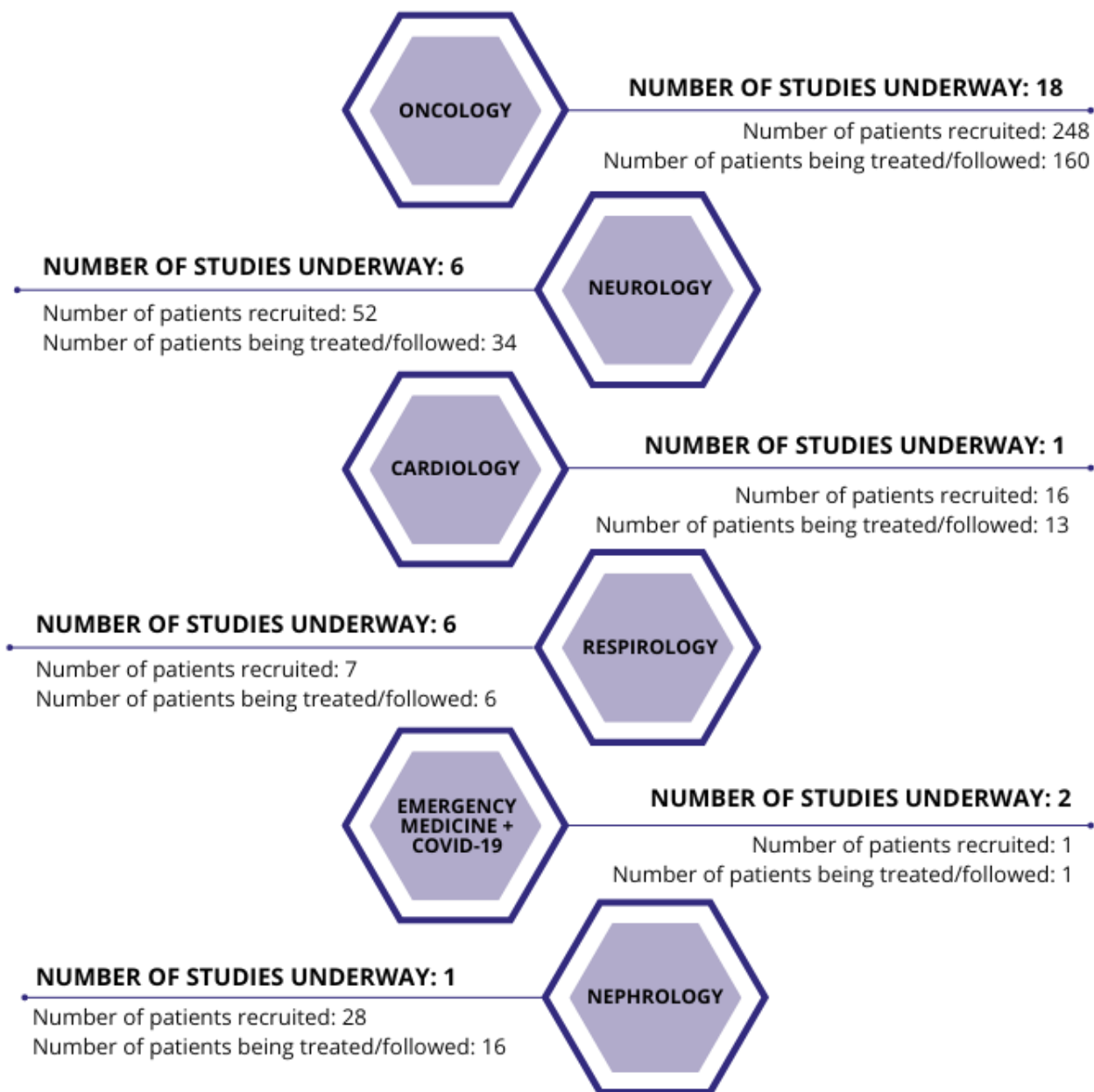
The Clinical Trial Support Unit also assists Network researchers in conducting non-interventional type projects in collaboration with industry. An example is the experimental method project developed by Breathe BioMedical to detect early-stage lung cancer through breath samples. Dr. Marcel Mallet, respirologist, is the principal investigator on this promising study launched in January 2023.

### Structure: Establishment of the Atlantic Clinical Trials Unit

In June 2022, Vitalité Health Network and Horizon Health Network joined the health authorities of **the Atlantic provinces to form the Atlantic Clinical Trials Unit**. This network will serve as a single entry point for partners wishing to participate in clinical trials and allow Atlantic Canada to become a leader on the world stage. This network will further benefit patients by providing a decentralized clinical trial framework facilitating greater access throughout the Atlantic region.

# Summary of sponsored clinical Trial activities

14 research  
professionals



Number of patients recruited = Since study began  
Number of patients being treated/followed = In 2022-2023

# Highlights

## Biobank

### Biobank activities

The Biobank of the Dr. Georges-L.-Dumont UHC continued to expand in 2022–2023 with a **31% increase in patient recruitment**. The total number of new participants in all cohorts increased from 754 in March 2022 to 989 in March 2023. This success flowed from the development of gynecological oncology and lung oncology cohorts, which recruited 127 and 80 patients respectively in one year.

### First formalin-fixed paraffin-embedded tissue blocks

Thanks to the efforts of Dr. Surette and his team in the area of sample collection, the first formalin-fixed paraffin-embedded tissue blocks were placed in the Biobank. As of March 2023, the Biobank held 126 FFPE block samples.












### Atlantic collaboration

Once again this year, it is important to highlight the strong collaboration between the Atlantic provinces' biobanks, as evidenced by their establishment of the Atlantic Cancer Biobank Consortium, or ACBC (Consortium des biobanques de l'Atlantique).

This consortium was officially designated a member of the Marathon of Hope Cancer Centres Network (Réseau des centres d'oncologie du Marathon de l'espoir) in December 2022. This designation will support advancement of cancer research nationally through the commitment to deliver precision oncology services to rural and underserved communities as well as indigenous communities.

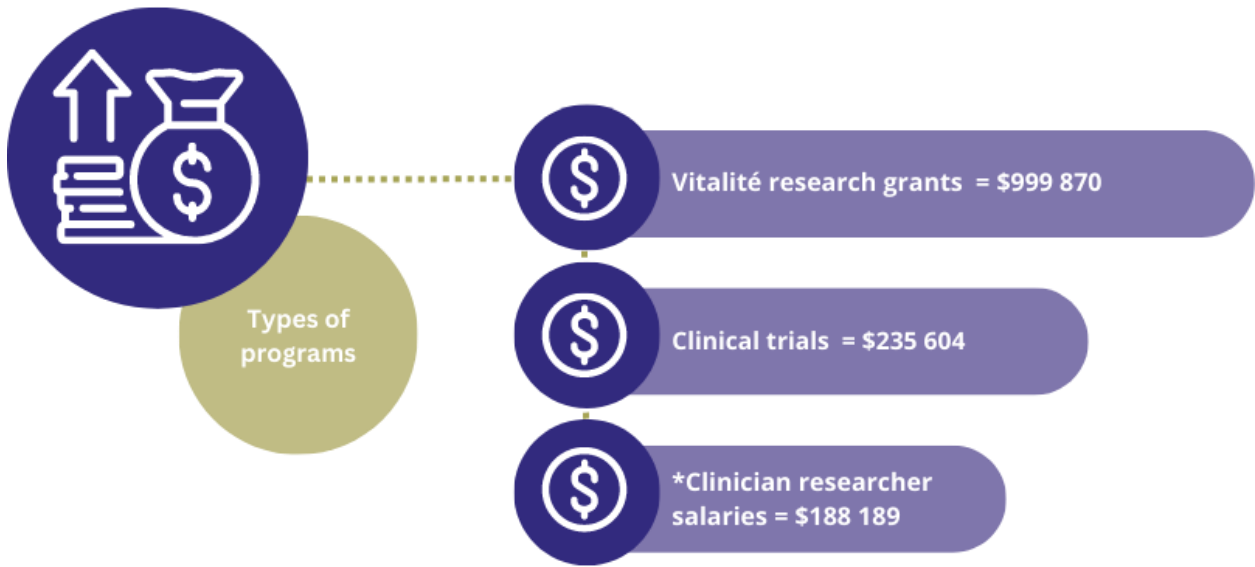
# Summary of Biobank activities

9  
research  
professionals

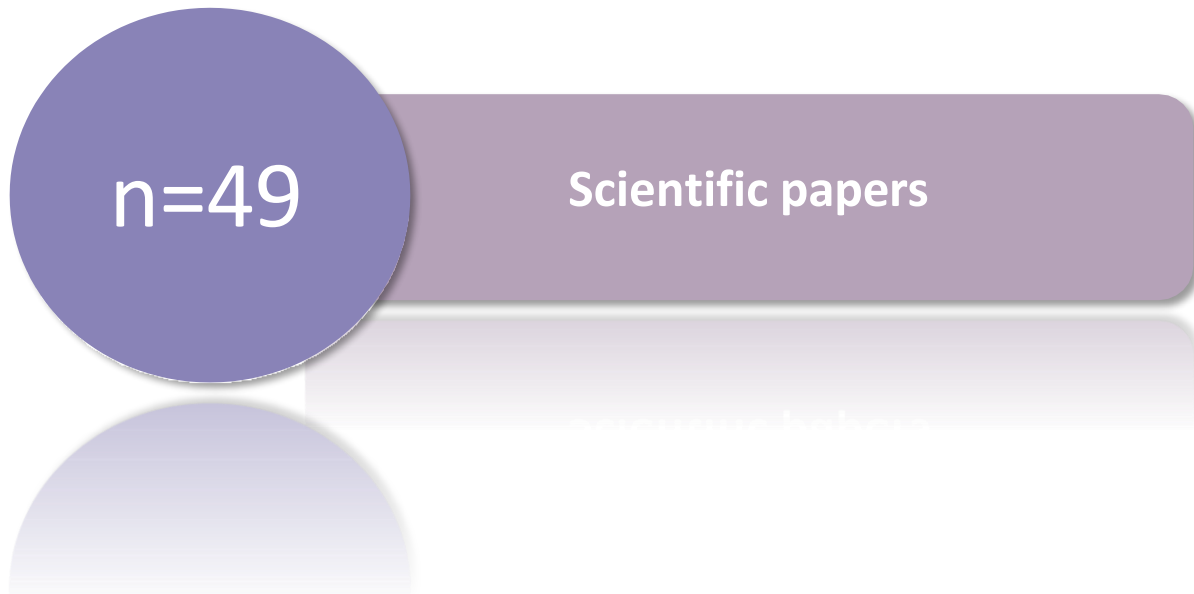
Fields		No. of Participants Recruited	No. of Samples	FFPE Blocks
COVID-19		393	3076	-
Oncology Lung		320	6956	51
Oncology Gynecological		149	1566	61
Oncology Leukemias + lymphomas		38	221	-
Oncology Breast		26	189	11
Neurological diseases		25	99	-
Oncology Melanomas		16	294	-
Cardiac oncology		12	60	-
Oncology Colorectal		6	80	3
Oncology Prostate		3	45	-
<b>Totals</b>		<b>989</b>	<b>12586</b>	<b>126</b>

\*FFPE=formalin-fixed paraffin-embedded tissue

# Summary of research grants and scientific papers



\*Salary grants awarded to Dr. Ludivine Witkowski and Dr. Mouna Ben Amor







# TRAINING AND TEACHING PARTNERSHIPS

# Highlights

## Training and Teaching Partnerships

### Structure

Training and Teaching Partnerships has, since 2021, had a new structure in order to provide trainees, educational institutions and Vitalité Health Network itself with enhanced services. This structure will better meet the mission of our university hospital centre and all its affiliated centres who, through the organization's University Mission, are focused on research and training. The employees in the new structure include:

- **Martine Poirier**, Regional Director of Training and Teaching Partnerships
  - ↳ **Marie-Ève Gingras**, Training Office Manager
  - ↳ **Annie-Josée Roussel**, Regional Training and Educational Placement Advisor
  - ↳ **Amélie Haché**, Regional Training and Educational Placement Advisor
  - ↳ **Micheline Boudreau-Pitre**, Regional Training and Educational Placement Advisor
  - ↳ **Louise Doucet**, Administrative Assistant

Certain positions remain to be filled, including learners' experience coordinators and a contract management consultant.

### Computerized placement platform

A priority initiative for the year 2022–2023 was to develop a **computerized student placement portal**. Through this portal, the Network will be able to manage the placements taking place in all its facilities, students will be able to register and meet requirements online, and educational institutions will be able to input their placement needs. The portal is expected to go live in 2023.



## Partnerships

The Training sector is particularly focused on improving and maximizing collaboration with our partners. A number of priority partners, including the Université de Moncton, Centre de formation médicale du Nouveau-Brunswick, Government of New Brunswick and CCNB, have been identified in order to plan information meetings. Many meetings have already been scheduled and others are being planned for next year to present our new department and the services we offer and learn more about our partners' needs.



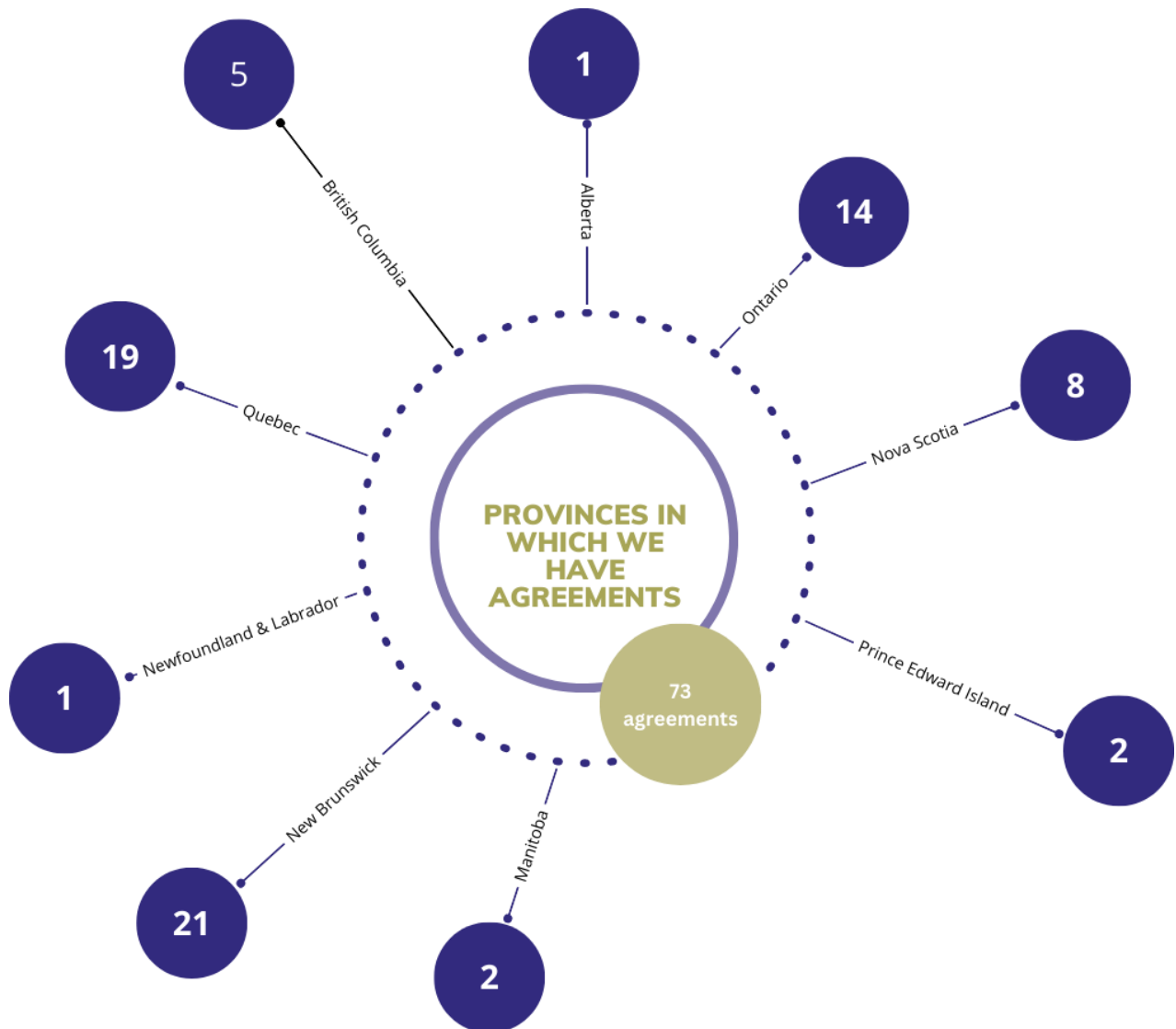
## Agreements

It's important to note that Vitalité Health Network has a number of affiliation agreements with Canadian postsecondary institutions. As of March 2023, **73 such agreements** were in place. In 2022–2023, three new agreements were developed and finalized, namely with:

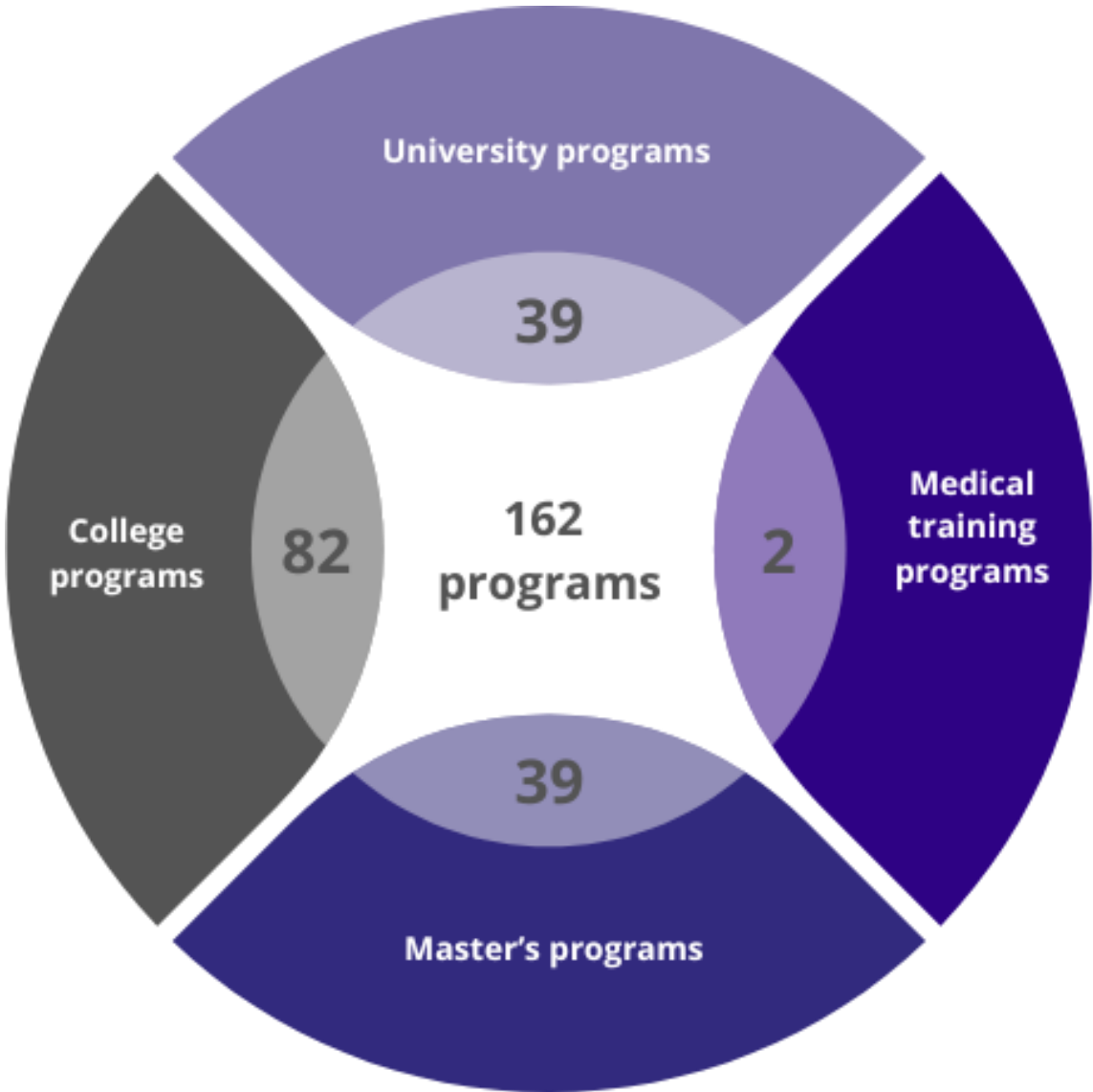
- **Trent University, Ontario** – new agreement to welcome trainees from the Nursing Science Program;
- **Michener Institute of Education, Ontario** – new agreement to welcome trainees from the Genetics Technology Program (laboratory technology);
- **Addendum to the associated ERSI agreement with the Université de Moncton** – finalization of an addendum to use a video monitoring system for educational purposes with Nursing Science students.

# Agreements and programs

Vitalité Health Network currently has 73 affiliation agreements with Canadian postsecondary institutions. The figure below shows the number of agreements by Canadian province:



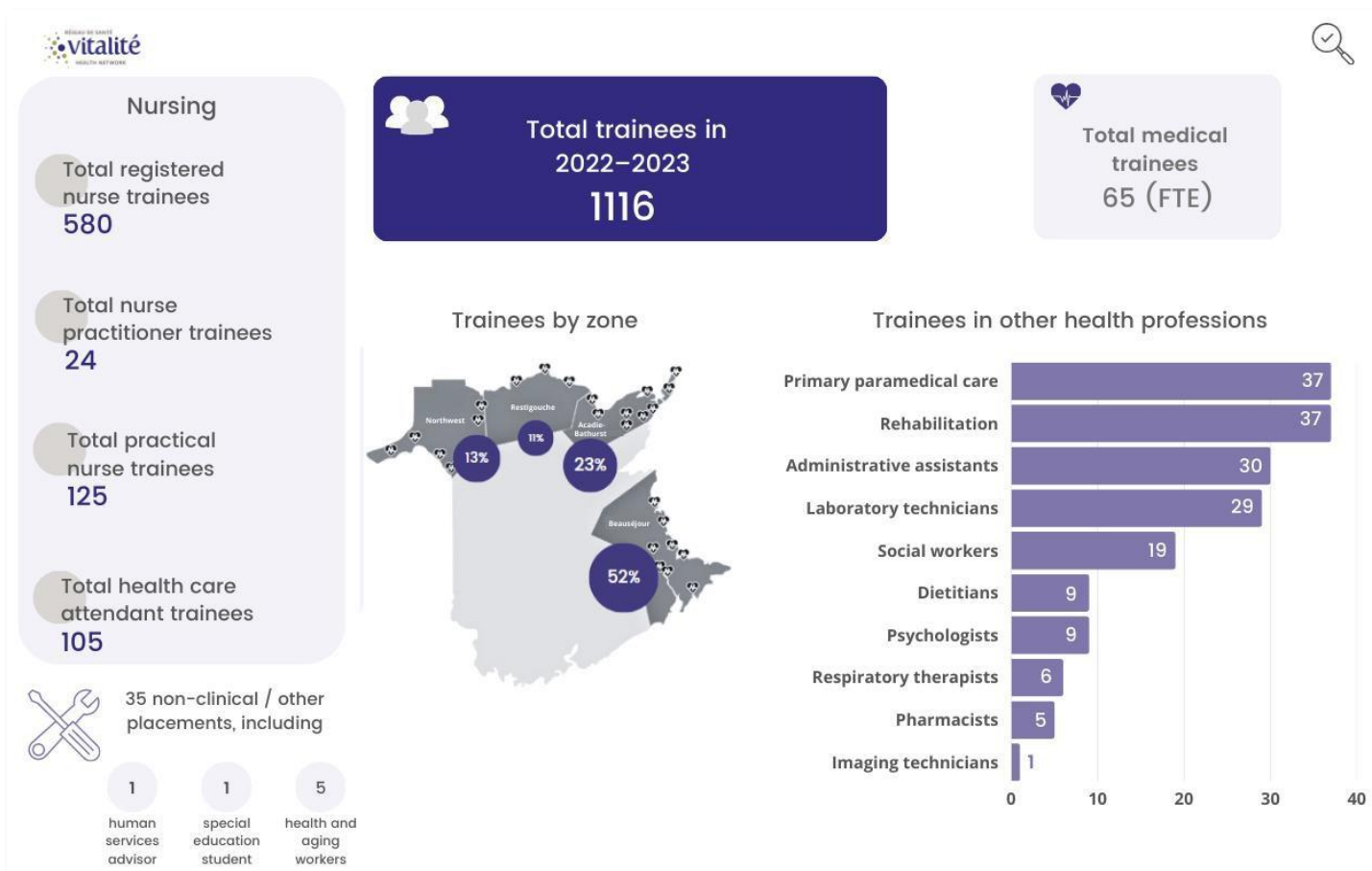
Some agreements with postsecondary institutions involve several programs. There are agreements at the college, undergraduate and graduate levels. We also have tripartite agreements with the Government of New Brunswick and other entities involving medical training and other areas.



# Summary of placement activities

This section summarizes our training activities and educational placements in 2022–2023. Our rehabilitation trainees include students in physiotherapy, occupational therapy, speech-language pathology and audiology. Note that our non-clinical placements include students in medical secretarial services, trades (courses at CCNB or other colleges) and in criminology, Master of Health Administration (MHA) or Master of Public Administration (MPA) programs.

## Summary of Postsecondary Trainees





## Summary of Shadowing Placements, Co-op Placements and Visits (Secondary Schools)



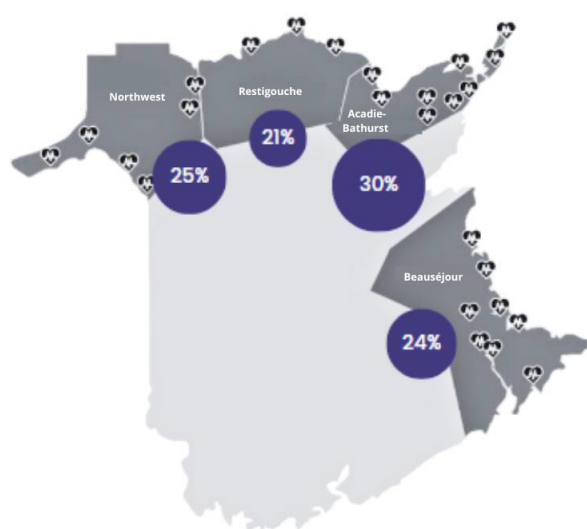
Total secondary school student placements and visits (grades 9–12)

**280**



\* From September 2022 to March 2023

## Summary of Shadowing Placements and Co-op Placements by Zone



# Appendix 1 :

## Research grants

### Summary of Vitalité Health Network Research Grants in 2022–2023

Project whose principal investigator is a researcher, clinician or health/research professional of Vitalité Health Network OR project whose funding is administered in whole or in part by Vitalité Health Network	Researchers	Nature of the funding, amount awarded, total received in 2022–2023
NB PALM (Projets Synergic@Home et BHSP)	Chamard-Witkowski L., Jarrett P., McGibbon C., Sexton A., Yetman L.	HSPP 2020–2023 Total: \$3,000,000 (\$249,100 for Vitalité Health Network) (\$77,131 in 2022–23)
Devenir un système de santé apprenant : la stratégie d'un réseau de santé au Nouveau-Brunswick. Projet pilote - Unité clinique apprenante Santé des aînés	Sonier-Ferguson B, Poirier M, Pelletier D, Lebreton F, Desrosiers F	New Brunswick Department of Social Development with funding from the Government of Canada 2020–2024 Total: \$2,047,359 (\$429,132 in 2022–23)
Marathon de l'espoir Terry Fox	Dr. Georges-L.-Dumont UHC Biobank	Terry Fox Research Institute Total: \$278,000 (\$37,839 in 2022–23)
Pilot study for genetic carrier screening in New Brunswick	Ben Amor M	Sanofi Genzyme – Pharmaceutical Compassion Financial Support 2020–2024 Total: \$63,000 (\$0 in 2022–23; entire funding received)

Utilisation de séquençage de génome entier chez des familles ciblées présentant une condition génétique dont les bases moléculaires demeurent non identifiées après une investigation clinique extensive non concluante	Ben Amor M, Dion Côté AM, Crapoulet N	DUO 2021–2023 Total: \$25,000 (\$12,500 in 2022–23)
Démontrer le potentiel thérapeutique de la kinase PIKfyve dans le cancer du rein	Surette A, Turcotte S	DUO 2021–2023 Total: \$25,000 (\$12,500 in 2022–23)
Rôles des microARNs éponnés par les ARN circulaires de Pax-5 dans les leucémies lymphocytaires chroniques (LLC)	Finn N, Robichaud G	DUO 2021–2023 Total: \$25,000 (\$12,500 in 2022–23)
FunConnectFam: La pleine conscience pour le soutien à la gestion du stress en famille	Deschênes E, Jbilou J	DUO 2021–2023 Total: \$25,000 (\$12,500 in 2022–23)
Développement, faisabilité et fiabilité d'une application pré-consultation pour les patients atteints de sclérose en plaques	Charmand-Witkowski L, Hervet E	DUO 2021–2023 Total: \$25,000 (\$12,500 in 2022–23)
Optimisation des tests de laboratoire et des transfusions sanguines au Réseau de santé Vitalité.	Bouhtiauy I, Douaré M	New Brunswick Medical Society funding program for care quality improvement initiatives (2022) Total: \$15,000 (\$15,000 in 2022–23)
Studentship Award 2022	Bouhamdani N	NBHRF (2022) Total: \$8,000 (\$8,000 in 2022–23)
Financement du stage coopératif 2022	Bouhamdani N	Bureau de l'enseignement coopératif de l'Université de Moncton (2022) Total: \$9,435 (\$9,435 in 2022–23)
CFMNB Clinical Scholarship Salary	Charmand-Witkowski L	NBHRF – CFMNB 2022–2026 Total: \$352,758 (\$88,189.50 in 2022–23)

CFMNB Clinical Scholarship Salary	Ben Amor M	NBHRF – CFMNB 2022–2026 Total: \$500,000 (\$400,000 salary award and \$100,000 in year 1 for Research Related Support Program) (\$200,000 in 2022–23)
Impact d'un traitement chronique au N-Acétylcystéine sur la fonction rénale et mitochondriale chez les patients atteints du syndrome Fanconi acadien et évaluation in vitro d'un protocole alternatif de traitement centré sur le patient	Thibeault Y, Chatelain E	DUO 2022–2024 Total: \$25,000 (\$12,500 in 2022–23)
Développent d'un essai de génotypage accéléré et abordable pour la classification des Leucémies Lymphoïdes Chroniques (LLC)	Allain E, Robichaud G, Maillet J, Boudreau L	DUO 2022–2024 Total: \$25,000 (\$12,500 in 2022–23)
Essai pilote d'un outil d'évaluation des risques pour promouvoir le changement de comportement dans une clinique d'enseignement de la médecine familiale	Babin L, Mekary S, Bélanger M, Beauchamp J	DUO 2022–2024 Total: \$25,000 (\$12,500 in 2022–23)
Canadian Consortium of Clinical Trial Training (CANTRAIN) platform: enhancing career preparedness in RCT research targeting different audiences across the continuum	Principal investigators: Bourbeau J, Anderson D, Batist G, Bell EC, Benoit BL, Collister D, Dasgupta K, F C, Fergusson DA, Fillion KB, Gahagan JC, Goos L, Khan NA, King M, Li LC, Mitra S, Morin SN, Pilote L, Reiman T, Richer LP, Saleh RR, Sapp JL, Tomblin Murphy GG, Yeh AE.  Co-Investigators: Sonier-Ferguson B, Jose C, et al.,	CIHR 2022–2025 Total: \$11,317,324 Total to be received by Vitalité Health Network: \$415,000 (\$138,333 in 2022–23)
Programme de recherche en neurologie	Charmand-Witkowski L, Jose C	Sunnybrook CIHR Subaward 2022–2024 Total: \$35,000 (\$35,000 in 2022–23)
Programme de recherche en génétique	Ben Amor M	CFMNB 2022–2023 Total: \$25,000 (\$25,000 in 2022–23)
Programme de recherche en neurologie – clinique MAPR	Charmand-Witkowski L	CFMNB 2022–2023 Total: \$25,000 (\$25,000 in 2022–23)

Project where a Vitalité Health Network researcher, clinician or health/research professional is a collaborator OR where the funding is not administered by Vitalité Health Network	Researchers	Nature of the funding, total amount
Sport participation through the transition from adolescence to adulthood	Principal investigator: Bélanger M  Co-investigators: Gunnell K, Doré I, O’Loughlin J, Brunet J, Sabiston C	SSHRC (Insight Grants) 2020–2023 Total: \$336,695
EXplorer les mécanismes des Inégalités Sociales liées au Tabagisme en population adolescente pour développer une stratégie préventive intégrative: le projet EXIST	Principal investigator: Minary L,  Co-investigators: Dugas EN, et al.	Institut National du cancer (INCa) et l’Institut de Recherche en Santé Publique (IReSP) 2020–2024 Total: €1,997,819
Coping strategies and mental health: quantitative and qualitative insight into the COVID-19 experience in young adults	Principal investigator: Sylvestre MP, Bélanger M, O’Loughlin J  Co-Investigators: O Ferlatte O, Gariepy G, Maximova K, Plourde V, Thombs B	CIHR Operating Grant 2021–2024 Total: \$457,422
Stratégies Nationales Innovantes pour l’Éducation en Recherche axée sur le Patient (INSPIRE)	Principal investigator: LeBlanc A, Bosma R, Goldowitz D, et al.  Co-investigator: Bélanger M et al.	CIHR Training Grant: Strategy for Patient-Oriented Research (SPOR) National Training Entity 2021–2025 Total: \$5,250,000
Maritime SPOR SUPPORT Unit Phase II	Principal investigators: Bélanger M, Hamilton M, McDonald T, et al.	CIHR 2021–2026 Total: \$7,327,627
Épidémiologie de l’activité physique	Bélanger M	NBHRF – Summer student funding 2022 Total: \$4,000

<p>Briser régulièrement une période prolongée de sédentarité améliore-t-il la flexibilité métabolique des personnes âgées sédentaires</p>	<p>Principal investigator: Dionne I</p> <p>Co-investigators: Bélanger M, Mekary S</p>	<p>Centre de recherche du Centre Hospitalier de l'Université de Sherbrooke and Centre d'excellence en diabète, obésité et complications cardiovasculaires de l'Uds 2022–2023 Total: \$10,000</p>
<p>CAN-DO (CANnabis research DevelOpment): A cells-to-society research program on cannabis and mental health in younger adults</p>	<p>Principal investigators: Sylvestre MP and O'Loughlin J.</p> <p>Co-investigators: Dugas EN, et al.</p>	<p>CIHR 2022–2027 Total: \$500,000</p>
<p>Maximize your Research on Obesity and Diabetes (My ROaD)</p>	<p>Principal investigator: Bélanger M</p> <p>Co-investigators: Tchernof A, Carpentier A</p>	<p>NBHRF 2022–2027 Total: \$125,000</p>
<p>Training platform in diabetes, obesity and cardiometabolic health</p>	<p>Principal investigator: Tchernof A, Blondin D, Brunt K, et al.</p> <p>Co-investigators: Bélanger M, et al.</p>	<p>CIHR Training Grant: Health Research Training Platform Total: \$2,400,000</p>
<p>Partnership for Equitable, Diverse and Inclusive Participation, Access, and Quality Experiences in Youth Sport</p>	<p>Principal investigator: Sabiston C</p> <p>Co-investigators: Belanger M, et al.</p>	<p>SSHRC Partnership Grant 2023–2030 Total: \$2,500,000</p>



## Appendix 2: Scientific papers

1. Abdelaziz, H., Cormier, N., Levesque, T., St-Yves, J., Habash, M. A., Diaz, O., Haberer, M. P., Calugaroiu, D., & Nashed, M. (2022). Rapid Onset of Ceftriaxone-Induced Cholelithiasis in an Adult Patient. *Journal of global infectious diseases*, 14(1), 31–34.  
[https://doi.org/10.4103/jgid.jgid\\_11\\_21](https://doi.org/10.4103/jgid.jgid_11_21)
2. Adams, B., Sansom, B., Doiron, N., Doucette, D., Gagnon, J., Landry, D., LeBlanc, M., Levesque, J., Louis, F., MacLaggan, T., Naylor, H. (2023). The New Brunswick Pharmacy Assessment Clinic: A Novel, Hospital Pharmacist-Led Collaborative Practice Hub. *Canadian Journal of Hospital Pharmacy*, 76, 163.
3. Bélanger, M., Goguen Carpenter, J., Sabiston, C.M., Vanderloo, L.M., Trono, C., Gallant, F., Thibault, V., Doré, I., O’Loughlin, J. (2022). Identifying priorities for sport and physical activity research in Canada: An iterative priority-setting study. *CMAJ-Open*. 10 (1) E269-E277; DOI: <https://doi.org/10.9778/cmajo.20210114>
4. Beriault, D., Rodriguez-Capote, K., Hauff, K., Kinniburgh, D., Langman, L., Mattman, A., Konforte, D., Olechuk, C., Beach, L., Chen, Y., Elnenaei, M., Parker, M., Leung, F., Arnoldo, S., Knauer, M., Kalra, J., Bouhtiauy, I., Abou, E.I., Hassan, M., Bailey, D., Catomeris, P., Simons, J. (2023). Reduce, Reuse, Recycle: Top 10 Choosing Wisely Canada’s Recommendations for Conserving Laboratory Resources. *Canadian Journal of General Internal Medicine*, 17(4):86-95. Available from: <https://cjgim.ca/index.php/csim/article/view/650>
5. Biam, R. S., Robichaud, P. P., Mbarik, M., Pineau, P., & Surette, M. E. (2022). Loss of detection of fatty acid-metabolizing proteins in Western blot analyses - Impact of sample heating. *Biochemical and biophysical research communications*, 607, 110–116.  
<https://doi.org/10.1016/j.bbrc.2022.03.130>

6. Black, P. C., Alimohamed, N., Kassouf, W., Gore, J. L., McCoy, K. D., Nelson, B. H., De Carvalho, D. D., **Ouellette, R. J.**, Devins, F., Cornacchia, T., Siemens, D. R., Berman, D. M., Sridhar, S. S., Kulkarni, G., & Canadian Bladder Cancer Research Network (2022). Building the Canadian Bladder Cancer Research Network (CBCRN): Progress during a pandemic. *Canadian Urological Association journal = Journal de l'Association des urologues du Canada*, 16(6), E307–E314. <https://doi.org/10.5489/cuaj.7810>
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